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Designing a leadership development program for surgeons



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ABSTRACT

Background: Although numerous leadership development programs (LDPs) exist in health care, no programs have been specifically designed to meet the needs of surgeons. This study aimed to elicit practicing surgeons' motivations and desired goals for leadership training to design an evidence-based LDP in surgery.

Materials and methods: At a large academic health center, we conducted semistructured interviews with 24 surgical faculty members who voluntarily applied and were selected for participation in a newly created LDP. Transcriptions of the interviews were analyzed using analyst triangulation and thematic coding to extract major themes regarding surgeons' motivations and perceived needs for leadership knowledge and skills. Themes from interview responses were then used to design the program curriculum specifically to meet the leadership needs of surgical faculty.

Results: Three major themes emerged regarding surgeons' motivations for seeking leadership training: (1) Recognizing key gaps in their formal preparation for leadership roles; (2) Exhibiting an appetite for personal self-improvement; and (3) Seeking leadership guidance for career advancement. Participants' interviews revealed four specific domains of knowledge and skills that they indicated as desired takeaways from a LDP: (1) leadership and communication; (2) team building; (3) business acumen/finance; and (4) greater understanding of the health care context.

Conclusions: Interviews with surgical faculty members identified gaps in prior leadership training and demonstrated concrete motivations and specific goals for participating in a formal leadership program. A LDP that is specifically tailored to address the needs of surgical faculty may benefit surgeons at a personal and institutional level.

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1. Introduction

Enthusiasm is high for formal leadership development programs (LDPs) in health care. As health care delivery in the United States increasingly requires a team-based approach, the ability to work in teams and to lead is becoming recognized as a vital skill for physicians, including surgeons. Providing care in multidisciplinary teams and participating in quality improvement initiatives both require effective engagement across professional disciplines to optimize patient care. This is particularly important in the current health care policy climate, where hospitals and health systems are becoming more accountable—and assuming more financial risk—for their clinical performance [1].

Despite this emphasis on team-based care, specific strategies to teach leadership to practicing surgeons have been lacking. Some health systems and organizations are providing leadership training to produce physician leaders capable of taking on these challenges [2–4]. For any LDP to succeed, however, participants must be actively engaged and committed to the process of leadership development. To support sustained involvement and future success, organizational leaders must understand the motivations for physician engagement in LDPs. In addition, to craft an effective and comprehensive LDP that accurately addresses the needs of a surgeon population, it is essential to conduct a detailed needs-assessment of the participants to better characterize the skills one would desire to obtain from such a program.

Recognizing these gaps, the Department of Surgery at the University of Michigan has initiated a LDP for surgical faculty. We aimed to better understand practicing surgeons' motivations for leadership development and specific goals, they hoped to attain from enrollment in the program. To inform the design of this program, we conducted a series of semistructured interviews with participating surgical faculty.

2. Methods

To characterize the needs of practicing surgeons who would be candidates for the program, we conducted semistructured interviews of 24 surgical faculty members at the University of Michigan. The goal of these interviews was to elicit the content needed to develop a leadership curriculum that addressed the needs of a population of surgeons. This study was designated as exempt from review by the University of Michigan Institutional Review Board.

The study sample included surgeons who voluntarily submitted applications and were selected for participation in a newly formed LDP within the Department of Surgery. All surgery faculty members were eligible for participation. The program directors ultimately excluded three individuals: one because they could not adhere to the time commitment of the program and two others because they were early on in their careers and chose to focus their efforts on building their own clinical practices and/or research programs. The rank of the participants ranged from assistant professor to professor. There were participants from a broad range of clinical areas including the following sections: General, Vascular, Plastic,

Thoracic, and Transplant. Many but not all of the participants held current leadership positions including section heads, division chiefs, and program directors. Design and implementation of this leadership program was funded by the Department of Surgery.

All interviews were conducted in person and one-on-one by an independent nonsurgeon evaluator before the program began. A standardized interview guide was used, and each participant was asked the same questions, which explored the following topics: why the participant was interested in leadership development (motivations); their previous experiences as formal and informal leaders (perceived successes and failures); specific skills and knowledge they hoped to acquire in the program; and past activities that had either supported or challenged their leadership development. Participants were also asked to provide any other comments about their perceptions of leadership and the upcoming program. The interviewer took summative notes on all interviews, including salient quotes, which were collated by a research assistant.

The raw data consisted of transcribed interviews and were analyzed using the following qualitative techniques. Analyst triangulation was used among three members of the research team (C.H.L., G.A.J., and J.B.D.) to independently review all interview transcripts holistically and to perform thematic coding for each topic. Meeting as a team, an iterative review of the themes was conducted, and grounded theory was applied for the development of themes to saturation. The team's notes were then consolidated and grouped into an analysis table. One member of the research team subsequently verified the team's initial impressions by reviewing all transcripts and identifying phrases that characterized representative sentiments about each study question. Seven of the 18 identified themes were agreed on as representative and salient and were described here. This analysis focuses on surgeons' motivations for leadership training and their perceived needs for specific leadership skills and experiences.

3. Results

3.1. Motivations for leadership training

Through the interviews, three major themes emerged with respect to practicing surgeons' motivations to seek formal leadership training (Table 1). The themes included were as follows: (1) Recognizing key gaps in their formal preparation for leadership roles; (2) Exhibiting an appetite for personal self-improvement; and (3) Seeking leadership guidance for career advancement.

First, many participants acknowledged a deficit in their medical school and residency training with regards to leadership. One participant stated, "I have no leadership or management training... [We have lots of training in] science, but nothing on the people." Several participants had actually sought external leadership programs but had not been able to follow through because of time constraints, distance, and/or money. Others had attended external leadership programs but felt more enthusiastic about a program that focused

Table 1 – Surgeons’ motivations for seeking leadership training.

Theme	Explanation	Representative quotes
1. Recognize key gaps in preparation for leadership roles.	Many participants were acutely aware that traditional medical school and residency training did not prepare them well for leadership roles.	<p>“[I] desired to go to an outside leadership development program... [but it was] expensive, and I did not get any money.”</p> <p>“I have looked outside the university for leadership opportunities.”</p> <p>“[Leadership] is a learned skill.”</p> <p>“[I have] no training in business and leadership.”</p> <p>“I have no leadership or management training... [We have lots of training in] science, but nothing on the people.”</p> <p>“I firmly believe we don’t prepare leaders, we see the gaps in competencies...we want to improve.”</p> <p>“We need to learn the global rules, roles outside of surgery.”</p> <p>“I sort of fall into leadership positions...whether or not I’m effective, I don’t know.”</p>
2. Appetite for self-improvement	Participants find themselves in leadership roles and are seeking opportunities to grow their skills.	<p>“[I can] take great to even greater.”</p> <p>“It’s like golf...I want to take my game to a new level.”</p> <p>“You can always be a better leader, self-reflection is always good.”</p> <p>“[I want to] expand my tool set, I see the leadership arena as a good opportunity.”</p>
3. Seeking guidance while at a crossroads in their career	Participants find themselves at a point in their career where they must take on leadership responsibilities to continue to grow.	<p>“[This is] a key time in my life, my career...where do I go next?”</p> <p>“To get to the next level, I need more skills.”</p> <p>“[The program] times well for where I’m at. [It’s] time for me to have a clear avenue about what I want to do, create my own road.”</p> <p>“[The] timing is good for my roles as a...fetal program leader...higher leadership things need to be engaged.”</p> <p>“Curiosity [attracted me to the program]. I wanted to move up the ladder.”</p> <p>“I have been here since 2008, I am [one of] the youngest [faculty members]...I want to re-assess my goals...advance programs I work on.”</p> <p>“I want my people to have this, they are mid-career and I see them transitioning into leadership roles.”</p>

specifically on surgeons in the local environment where they worked.

A second major motivation theme was that many participants had found themselves in leadership positions and saw the program as an avenue to develop their personal skill set. Regardless of whether they self-identified as a “natural leader”, many surgeons recognized that they were in positions where others viewed them as leaders. “I sort of fall into leadership positions,” one participant said. “[I want to] expand my tool set; I see the leadership arena as a good opportunity.” Nearly every respondent expressed the self-improving desire to “get better at my job.”

Needing leadership training at a crossroads in their career emerged as a third theme that motivated surgeons to participate in the leadership program. Many participants felt that the timing of the program was particularly opportune, as they were at critical junctures in their careers where it was becoming necessary to take on leadership roles to continue to grow. According to one participant, “This is a key time in my career. Where do I go next?” Another reported that “to get to the next level, I need more skills.” The interviews revealed

that surgeons at various stages in their careers felt that they could benefit from formal leadership training.

3.2. Perceived needs for leadership knowledge and skills

Participants’ interviews revealed four specific domains of knowledge and skills that they indicated as desired takeaways from a leadership program (Table 2). The domains were as follows: (1) leadership and communication; (2) team building; (3) business acumen and/or finance; and (4) greater understanding of the health care context.

The first perceived essential leadership need was communication, such as how to “craft a common vision” and how to inspire others. One participant wanted to “be more effective in [his] personal interaction with people,” expressing a desire for “helping motivated people succeed.” Drawing on their initial motivations for learning leadership, nearly all participants shared examples in which they needed to move projects or initiatives forward but felt inadequately prepared to effectively communicate their ideas.

Table 2 – Surgeons' perceived needs for specific leadership knowledge and skills.

Theme	Explanation	Representative quotes
1. Leadership and communication	Learn effective communication and conflict resolution skills; and develop a compelling vision to motivate others.	<p>"[I hope to learn] how you talk to people when you want to get things done."</p> <p>"[I hope to learn to] craft a common vision."</p> <p>"[I want to be more] effective in my personal interaction with people, troubleshooting people problems, helping motivated people succeed."</p> <p>"[I hope to learn how to handle] conflict resolution"</p> <p>"How one handles difficult HR issues."</p>
2. Team building	Learn to create collaborative, effective, diverse teams.	<p>"Getting people to advance toward goals as a team"</p> <p>"[I want to learn to] empower others to drive the ship"</p> <p>"get them to want to do the right things, but don't report to me"</p>
3. Business acumen/finance	Learn about the basics of finance, marketing, strategy, and operations.	<p>"I have considered business school before, this is a 'Mini-MBA.'"</p> <p>"[I hope to learn more about] the business side, financial [side]."</p> <p>"[I am interested in] building the strategy for [a hospital setting], the business aspects, the economic forces."</p>
4. Greater understanding of health care context	Learn local context (e.g., organizational structure, and policies and procedures) and a greater understanding of health policy context.	<p>"[I want to learn] how the ACA will influence surgery."</p> <p>"[we can affect change] from the bottom up. From the clinics, to the department, to the hospital...But also from the top, those at the top can lead this health center."</p> <p>"[I hope to get] integration across departments."</p>

As part of enhancing their ability to lead, many participants acknowledged the importance for them to be able to rally others to foster effective, diverse, and self-sufficient teams. Participants reported a desire to learn how to "empower others to drive the ship," to get "people to advance toward a common goal as a team," and to "get [others] to want to do the right thing, but not report to me." One surgeon said, "In the operating room, I know exactly how to get everyone moving together to save the patient but put me in a conference room, and I have no idea how to do this."

Next, participants felt that to fully comprehend the demands on a leader in this health care system, they needed sound foundation in the economic forces and business aspects that influence hospitals. One participant referred to his interest in leadership training as obtaining "mini-MBA." Another reported wanting to "build a strategy for [a hospital setting]." A few participants recognized that "technical" business skills were what they needed most, admitting that they were frequently given financial statements and other documents but did not understand how to analyze or use them for decision making.

Finally, another major desire for participants was to learn how to integrate leadership into the greater health care context, both at the hospital level and at the larger policy level. One participant mentioned wanting to know more about "how the [Affordable Care Act] will influence surgery." Others mentioned learning "how to succeed in the [local] environment," where there are a "great group of people at all levels" at a given hospital that could learn to "[integrate] across departments."

4. Discussion

To design an effective LDP, it is important to understand both the motivations of individuals enrolling in such a program and the outcomes that the participants hope to achieve. From this

study's interviews with practicing surgeons, a need clearly exists for leadership training among surgical faculty. In this study, participants acknowledged a training gap regarding leadership knowledge and skills, and they expressed enthusiasm at the opportunity to fill those gaps. Many surgeons were motivated to seek leadership training because of desires to augment their personal and professional skill sets. Of a formal leadership development program, surgeons hoped to improve in the following domains: communication, team building, business acumen, and greater understanding of the health care context. These participant-identified leadership domains may be used as core concepts in the construction of curricula for future LDPs.

Outside of surgery, prior studies have also demonstrated perceived leadership needs of physicians. Taylor et al. sampled faculty across several specialties and levels of career experience at the Cleveland Clinic to identify key leadership domains [5]. With parallels to our findings, their domains included knowledge; people skills/emotional intelligence; vision; and "organizational orientation," or an understanding of the institutional environment [5]. In a population-based survey, Citaku et al. explored the leadership competencies that physicians and other health care professionals perceive to need, identifying several core factors: social responsibility, innovation, self-management, task management, and justice orientation [6]. These studies corroborate our findings regarding many of the core leadership competencies that physicians perceive as essential. However, our study goes above and beyond prior studies by exploring leadership development needs specifically in the context of surgical faculty, rather than physicians from varying medical specialties. Additionally, this study explored key motivations of practicing surgeons who were candidates for participation in leadership training, which may assist in the evidence-based design for future LDPs.

This study had several limitations. This study elicited perspectives from a small sample size of self-selected surgeon

participants. Thus, the results may not be generalizable to leadership training for surgeons who are not as proactive in seeking additional training. However, we believe that the individuals who elect to participate in such a program are exactly the type of individual for whom these programs are designed, that is, our study sample should be generalizable to other surgeons who desire to seek leadership training. This study was also conducted at a single academic center, and the results may not be generalizable to surgeons in other settings. However, it is reasonable to believe that many similarities exist across surgical practice settings regarding the organizational structures where surgeons work. Moreover, we believe that the process described in this article—that is, interviewing a targeted group of practicing physicians to develop an appropriate curriculum—is one that can be used in all settings to design a program that meets local needs.

This study has important implications for developing leadership programs that target surgeons. Most existing leadership programs are not tailored to surgeons' needs. The data from this study demonstrate an overview of surgeons' motivations and needs as they consider enhancing their leadership capabilities. Specifically, leadership programs should focus on the participants' reported needs to design the leadership curricula and their motivations to recruit and sustain involvement. At the University of Michigan, we intentionally structured and implemented this LDP using participating surgeons' input that was obtained before the start of the program. Table 3 lists the curricular content of this program, which was built around leadership skills and knowledge that surgeons indicated would benefit their real-world practice, including communication, team building, finance, and health care policy topics. This approach enabled the design of a leadership program that was directly informed by faculty member participants.

In conclusion, these interviews demonstrated the motivations and specific goals that surgical faculty members have for participating in a leadership program. This study can help to more clearly elucidate the gaps in leadership training encountered in medical school, residency, and early faculty appointments for surgeons, which can become core targets in designing leadership training strategies. Using the information gained from this study, we were able to create a LDP that is specifically tailored to address the needs of surgical faculty. A program focused on enhancing leadership abilities will benefit surgeons not only on a personal level of career success but also on a professional level of institutional success, especially in the face of a shifting health care policy landscape.

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Table 3 – Curricular design of the LDP at the University of Michigan.

Curriculum domains
<p>Leadership Objective: To learn effective communication and conflict resolution skills and to develop a compelling vision to motivate others. Curriculum elements:</p> <ul style="list-style-type: none"> ● One full day of didactics on “leading organizations.” ● Longitudinal independent reading assignments. ● All participants completed 360-degree evaluations. ● Two sessions with an executive coach to debrief on 360 evaluations and to generate a personalized leadership action plan.
<p>Team building Objective: To learn to create collaborative, effective, and diverse teams. Curriculum elements:</p> <ul style="list-style-type: none"> ● Two full days of didactics on “building diverse teams” and “innovation”. ● Longitudinal independent reading assignments. ● Longitudinal team projects with an 8-mo deliverable (at program conclusion) as well as a 2-y plan to integrate the project into the real world.
<p>Business Acumen/Finance Objective: To learn about the basics of finance, marketing, strategy, and operations. Curriculum Elements:</p> <ul style="list-style-type: none"> ● Three full days of didactics on “understanding financial statements,” “capital in health care systems,” and “introduction to operations management.” ● Group exercise with hospital Chief Executive Officer to teach how to interpret financial statements in health care. ● Case study on building a new ambulatory surgery center.
<p>Health care context Objective: To learn local context (e.g., organizational structure, policies, and procedures) and to acquire a greater understanding of health policy context. Curriculum elements:</p> <ul style="list-style-type: none"> ● Two full days of didactics on “health care policy” and “strategy in health care”. ● Multiple sessions with local leaders in health care related to many topics including the other domains (i.e. Leadership, team building, and business or strategy).

Disclosures

J.B.D. is a cofounder of ArborMetrix, a company that provides software for measuring hospital quality and efficiency. No other conflicts of interest are reported.

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