



Published in final edited form as:

*Surgery*. 2016 August ; 160(2): 255–263. doi:10.1016/j.surg.2016.03.011.

## A Leadership Development Program for Surgeons: First-Year Participant Evaluation

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### Structured Abstract

**Background**—In a dynamic healthcare system, strong leadership has never been more important for surgeons. Little is known about how to effectively design and conduct a leadership program specifically for surgeons. We sought to critically evaluate a Leadership Development Program for practicing surgeons by exploring the strengths and weaknesses of program components on surgeons' development as physician-leaders.

**Methods**—At a large academic institution, we conducted semi-structured interviews with 21 surgical faculty members who voluntarily applied, were selected, and completed a newly-created Leadership Development Program in December 2012. Interview transcripts underwent qualitative descriptive analysis with thematic coding based on grounded theory. Themes were extracted regarding surgeons' evaluations of the program on their development as physician-leaders.

**Results**—After completing the program, surgeons reported personal improvements in the following 4 areas: self-empowerment to lead, self-awareness, team-building skills, and business and leadership knowledge. Surgeons felt “more confident about stepping up as a leader” and more aware about “how others view me and my interactions.” They described a stronger grasp on “giving feedback” as well as “business/organizational issues.” Overall, surgeon participants reported positive impacts of the program on their day-to-day work activities, general career perspective, as well as their long-term career development plans. Surgeons also recommended areas for potential improvement for the program.

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**Conflict of Interest Disclosures:** Dr. Dimick is a co-founder of ArborMetrix, a company that makes software for profiling hospital quality and efficiency. Dr. Mulholland is the Chair of the Department of Surgery at the University of Michigan. No other conflicts of interest are reported.

**Role of the Funder/Sponsor:** The funding sources had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; and preparation, review, or approval of the manuscript.

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**Conclusions**—These interviews detailed self-reported improvements in leadership knowledge and capabilities for practicing surgeons who completed a Leadership Development Program. A curriculum designed specifically for surgeons may enable future programs to better equip surgeons for important leadership roles in a complex healthcare environment.

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## Introduction

In a dynamic and complex healthcare environment, strong leadership has never been more important for surgeons.<sup>1, 2</sup> Leadership is becoming increasingly recognized as essential for physicians,<sup>3–6</sup> yet these knowledge and skills are a major gap in today’s medical schools and residency programs. Nonetheless, many physicians will assume a leadership role at some point in their careers.<sup>5</sup> Surgeons in modern-day practice must lead operative teams of various healthcare providers, participate in multidisciplinary patient care, and engage in team-based quality improvement. Some may also find themselves in formal leadership positions at large institutions and healthcare organizations. In any of these situations, a need exists to engage practicing surgeons in formal leadership training.<sup>4, 6, 7</sup>

Little is known about how to effectively design and conduct a leadership development program specifically for surgeons. In particular, there is minimal guidance for surgery departments that desire to train surgical faculty to enhance their leadership abilities.<sup>6</sup> Best practices for leadership development identify “targeting the program toward a specific audience” to be critical for an effective program.<sup>8, 9</sup> In 2012 the Department of Surgery at the University of Michigan graduated the inaugural class of a surgeon-specific Leadership Development Program. The program curriculum was designed based on interviews with incoming surgeon participants, which identified the participants’ motivations and goals for completing such a program. Understanding which components resonated with practicing surgeons and which should be improved could better inform the evidence-based designs for future leadership curricula at other institutions.

To evaluate the strengths and weaknesses of this leadership program for practicing surgeons, we conducted a comprehensive program evaluation including a series of detailed interviews with surgeon participants upon their completion of the program. The exit interviews explored the effectiveness of specific aspects of the program, recommendations for improvements in subsequent iterations of the program, and its impact on the surgeons’ development as physician leaders. By critically evaluating the design and implementation of this program, future leadership programs may emphasize the most practical and beneficial components for surgeon leaders-in-training.

## Methods

### Study Population

The study sample included practicing surgeons who voluntarily applied and were selected for participation in the inaugural Leadership Development Program within the Department of Surgery at the University of Michigan, which reached completion in December 2012. All surgery faculty members were eligible for participation. Of the 24 surgeons who applied and were initially accepted to the program, 3 individuals were excluded by the program directors

because they could not adhere to the program's time commitment. In total, 21 faculty surgeons (15 men, 6 women) completed the program and participated in interviews. The average age of participants was 46.7 years (range 39–62 years). Participants' academic ranks were Assistant Professor (n=3), Associate Professor (n=13), and Professor (n=5). Clinical specialties of the participating surgeons included: General (n=11), Transplant (n=4), Pediatric (n=2), Plastic (n=2), Thoracic (n=1), and Vascular (n=1). Many, but not all, participants held formal leadership positions at the time of the program, including Section Heads, Division Chiefs, and Program Directors.

### **The Leadership Development Program**

The Leadership Development Program was designed based on a comprehensive needs assessment conducted by interviewing faculty surgeons who were selected for participation in the program, described in greater detail elsewhere.<sup>10</sup> Based on leadership skills and knowledge that surgeons indicated would benefit their real-world practice, the inaugural program curriculum was structured around 4 major domains: Leadership, Team Building, Business Acumen, and Healthcare Context (Table 1).

Surgeon participants gathered in-person for 1 full day per month for 8 consecutive months for didactic and experiential learning. Faculty from the School of Business and/or the Health Management and Policy program at the School of Public Health led these sessions, which were tailored to a surgeon audience. Examples of surgeon-specific curricular content included surgery-oriented business case studies (e.g., Harvard Business School case on building an ambulatory surgery center) and finance sessions where departmental and division administrators shared financial statements from the Department of Surgery. Participants also conducted longitudinal team projects that focused on improving clinical care, education, or research processes within the Department of Surgery.

Each participant underwent baseline 360-degree evaluations by colleagues, supervisors, and direct reports regarding their leadership performance. Participants then had 2 sessions with an executive coach to debrief, help them understand the feedback, and create a personalized leadership plan. Funding for the leadership program was provided by the Department of Surgery.

### **Interviews**

To evaluate the effectiveness of the Leadership Development Program, we conducted detailed, semi-structured interviews of the 21 participating surgery faculty members upon their completion of the program. The goals of these exit interviews were to explore the strengths and weaknesses of specific aspects of the program, to elicit recommendations for future improvements, and to understand its impact on the surgeons' development as physician leaders.

All interviews were conducted in person and one-on-one by an independent, non-surgeon evaluator (CHL) at the time of completion of the program. As a non-healthcare provider, this person was selected as the interviewer in order to facilitate genuine responses from participating surgeons and to avoid the potential effect of a peer surgeon-interviewer inhibiting participants' honest opinions. A standardized interview guide was used, and each

interview explored the following topics: new knowledge and skills that the surgeon gained as a result of the program (i.e., program effectiveness), specific aspects that the program should do differently in the future (i.e., potential improvements), and the impact that the program had on the surgeon's professional development (i.e., career impact). The interviewer took comprehensive notes on all participants, which were then collated and transcribed anonymously. Confidentiality of the participants' responses was ensured, and detailed personal responses were de-identified to the best of the team's ability during the transcription process.

## Analysis

The raw data consisted of transcribed interviews and was analyzed using qualitative techniques as described next. Analyst triangulation was employed among 4 members of the research team (JCP, GAJ, CHL, JBD) to independently and thoroughly review all interview transcripts for a qualitative descriptive analysis. A systematic and iterative approach was applied for thematic coding, a well-described method that is derived from principles of grounded theory.<sup>11-13</sup> This research method employs inductive reasoning to extract themes and construct theory based on qualitative or quantitative data. Using constant comparison principles, interview transcripts were first analyzed independently by 2 team members not involved with the program design or interview process. Emerging themes were coded and then repeatedly analyzed by additional team members. A different team member subsequently verified the team's initial impressions by reviewing all transcripts before consolidating the coded themes into a final representative model for each of the interview topics. Eleven themes (4 for program effectiveness, 4 for weaknesses, and 3 for career impact) were agreed upon as representative and salient. This analysis focused on practicing surgeons' critical evaluations of a surgeon-specific leadership development program. This study was designated as exempt from review by our university's Institutional Review Board.

## Results

### What Surgeons Gained from the Program

Reflecting on the curricular design during their exit interviews (Table 1), surgeon participants discussed what they had gained from completing the Leadership Development Program. In particular, their comments on the effectiveness of various aspects of the program revolved around 4 themes: self-empowerment, self-awareness, team building skills, and leadership knowledge (Table 2).

Many participants described self-empowerment for leadership roles as a strength of the program. Faculty surgeons across levels of academic rank felt not only enabled, but also capable of affecting change in their local environments. One participant reported, "I'm more confident about stepping up as a leader," demonstrating an empowered perspective. Another commented that the program inspired faculty to "to generate projects and ideas for the Department of Surgery."

Surgeons also reported an increased level of self-awareness after participating, particularly referring to the 360-degree personal evaluations they underwent. One surgeon said the

program “helped me understand how others view me and my interactions.” Surgeons identified certain aspects of their behavior in leadership roles that they previously did not recognize, such as one participant who realized that they “appear busy, frazzled... unapproachable.” These “self-revelations” were considered an effective portion of the program, enhancing surgeons’ understanding of their own strengths and weaknesses as leaders in surgery.

Improved team building skills—within individual clinical services as well as across the Department of Surgery—was another effective theme of the program. In line with the Team Building curricular domain, participants reported an improved ability to foster collaborative relationships among team members. Some reported specific behavior changes, such as “giving feedback, both positive and negative,” and exercising patience. Other comments focused on the collegial environment that the leadership program created among the participating surgeons themselves. For example, one participant perceived the program to be a “morale-boosting event, bringing people together to bond over a common goal.”

Lastly, the program helped faculty surgeons become more knowledgeable regarding leadership concepts such as business acumen and organizational structure. Surgeons acknowledged a better understanding of “business/organizational issues” and “marketing and innovations concepts.” The program also placed leadership into perspective for surgeons, with participants recognizing the importance of needing to “understand the higher purpose first” and the contribution of these skills “in service to the mission of the organization.”

### **Surgeons’ Recommendations for Improving the Program**

Several themes emerged when surgeons described areas for improvement with the leadership program, revolving around the presence of current departmental authorities, gaps in the curricular content, the implementation of coaching, and the inclusion of participants with differing levels of career experience (Table 3).

Participating surgeons expressed differing opinions on whether or not current departmental leadership should have been present for curricular activities. Those who supported the involvement of an authority figure felt that they got “more face time and [could] develop a relationship with him.” One faculty member thought it was “beyond symbolic” that an authority figure “took the time to be there.” On the other hand, those opposed were concerned that departmental authorities might “stifle conversation” or “retaliate” in response to faculty comments during curricular activities. It was suggested that these authorities may “not [be] needed for every session.”

Building on the existing curricular content, participants indicated a desire to learn additional leadership concepts involving business concepts, mentoring, and time management. Surgeons wanted more detailed coverage of “confrontation, difficult questions, conflict resolution,” as well as going “deeper on the finance piece.” Others suggested including “mentoring and how to be a mentor” in addition to “burnout and work-life balance.”

Next, the satisfaction of having a coach to assist participating surgeons in developing a personalized leadership plan appeared to depend on both the individual coach and the individual participant. We found that a few surgeons perceived their coach to be less effective and felt that “the coaching was expensive and did not pay off.” Some of the coaches with less experience tended to not “make an impression, [and were] too generic.” On the other hand, surgeons who had more experienced and reputable coaches found the coaching sessions “insightful and...nice to have [an] objective person to go over 360 [evaluations].” Having a thoughtful outside perspective provided a “reality check” for participating surgeons.

Regarding the participants themselves, recommendations varied from adding certain individuals who were not initially included to restricting the class to fewer people. It was suggested to add “alumni involvement in the next one” and to expand the curriculum to the medical school. While some thought that “mid-level [faculty] got a lot out of it,” others thought that for “senior [faculty] it had no impact.” Several comments indicated a preference to not include surgery residents in the same leadership program as faculty, with some believing that “residents would dilute the impact” and that “residents would change the dynamic.”

### **Impact of the Program on Surgeons’ Professional Development**

In exploring how surgeons perceived the leadership program to impact their professional development as physician leaders, responses focused on 3 major themes: impact on surgeons’ daily activities, impact on their general perspective on their career, and impact on their future career development (Table 4).

First, faculty surgeons commented on how participating influenced their daily routines at work. One faculty member reported “[thinking] about it all the time on a practical level.” Another stated, “I have learned to interact better in our environment,” indicating a positive influence on a surgeon’s busy work life. Others were still “trying to implement [the Leadership Development Program in] how I do my work...not sure it has happened yet.” Regardless of their stage of incorporating lessons learned, surgeons reported a meaningful impact of the program on how they approach their daily work.

Next, surgeon participants indicated how the program generally benefitted their careers in the short-term. Surgeons appreciated how the curriculum gave them “dedicated time to think about issues and interact with experts.” Looking back, they “enjoyed the days in the room with smart people” and felt that the “subject matter/content opened my eyes.” Participants commented that the program had an overall positive impact on their general career perspective.

Finally, participating surgeons reflected on how they expected this experience to impact their career development in the future. One stated that the program “[helped identify] books and where to go next” in their careers. Another participant felt that their own department “trusted me, and I’m going to take the next step.” Overall, the responses suggested that the leadership program helped surgeons in charting a course for their professional development as physician leaders.



## Discussion

Through detailed interviews with surgeon participants upon their completion of the Leadership Development Program, this study characterized the strengths and weaknesses of a leadership program specifically designed for faculty surgeons. From this program, surgeons acquired a greater sense of self-awareness and felt more confident in their abilities to develop and lead diverse, productive teams. In future iterations, surgeons recommended that further consideration be given to the inclusion of current departmental leaders as well as surgical trainees, the quality and training of selected leadership coaches, and additional curricular content regarding business and time-management skills. Overall, surgeon participants reported positive impacts of the leadership program on their day-to-day work activities as well as their long-term career outlook.

Several institutions have developed leadership development programs for physicians.<sup>3, 6, 14-16</sup> Although surgeons were included as participants in some of these studies,<sup>6, 14</sup> many leadership programs have been broadly designed for physician leaders across many clinical specialties. By nature of their clinical duties, surgeons have time demands and a work culture that differs from non-surgeon physician peers, which may affect the way that surgeons approach leadership responsibilities. This study differed from prior evaluations of physician leadership programs because it detailed the design and implementation of a leadership development program that was created specifically for practicing surgeons. Furthermore, existing literature on leadership programs primarily describes the positive effects of a dedicated leadership curriculum on physician participants, including increased commitment to the parent organization, improved team building and interpersonal skills, and enhanced perspectives of leadership in their personal careers.<sup>6, 14, 15</sup> These prior studies did not present a detailed discussion of aspects of the program that participants found unhelpful or even wasteful. The results of the present study are corroborated by many of the positive findings from prior investigations. However, this study intentionally elicited criticism in order to provide institutions with a context for designing their own leadership programs based on our surgeons' experiences. Participating surgeons recommended specific curricular content that could be included in future programs, such as management techniques and work-life balance, they pointed out vulnerabilities with selecting effective coaches to help develop their leadership plans, and they noted important considerations regarding the composition of the participating group. Thus, this study enhanced its value to other program pioneers by presenting surgeon-identified areas for improvement in teaching leadership to faculty surgeons.

However, this study has several limitations. First, the interview responses reflect perspectives from a small number of self-selected surgeon participants and may not represent the views of surgeons who are not as proactive in seeking leadership training. Nevertheless, the individuals who elect to participate in such a formal leadership curriculum do represent the type of professional for whom these programs are designed. In other words, this study sample may be generalizable to other surgeons who actually desire to practice and enhance their leadership skills. Next, these findings reflect the experience of a surgery department at a single academic center, which may not be representative of surgeons' experiences in other practice settings. However, the themes that emerged from this

leadership program—such as self-awareness, team building skills, and long-term career perspective—are broadly applicable to professionals in a variety of settings.<sup>5</sup> Moreover, many surgeons regularly work with multi-disciplinary teams in the operating room, and many practice settings have an institutional hierarchy consisting of department chairs or service-specific administrators. This process was unique in that it highlighted generalizable themes of leadership from a practicing surgeon's perspective. Lastly, protecting the confidentiality of the participants' interview responses was a challenging yet essential aspect of this study. However, departmental leadership never had access to the de-identified; the only person that knew the sources of comments was a non-surgeon interviewer who was not affiliated with the Department. Our method of de-identifying the responses effectively ensured confidentiality for the surgeon participants.

Teaching leadership to busy clinicians can be a challenging task. Surgeons, in particular, have uniquely limited and valuable time due to operating room and clinic schedules, research endeavors, and educational efforts, in addition to life at home with family. As part of the exit interviews, participants were asked to rank the leadership program based on its use of their time on a scale of 1 (complete waste of time) to 10 (excellent use of time). The average rating was 8.7 (range 6–10), indicating an overwhelmingly positive perception of the use of their own valuable time. Furthermore, the decision was made to re-launch this program every other year at our institution. While this leadership program was entirely voluntary, we were oversubscribed for our second program in 2014, further supporting that the participants found this program worthwhile.

The second iteration of the leadership development program was changed in several ways based on feedback from the inaugural program described here. These immediate changes mainly focused on reformatting the curriculum to enhance the integration and delivery of information. Speakers who were thought to be less effective based on participants' responses were replaced. An effort was also made to more explicitly mix theoretical and applied instructors. For example, during the didactic session on Finance, we started with a professor from the School of Public Health discussing how to read financial statements. Then, Department of Surgery administrators taught using financial statements of the Department with the participants, followed by breakout sessions for Division administrators to review financial statements within individual clinical groups. Future programs at our institution will continue to evolve based on participant feedback and enthusiasm.

Developing a leadership training program is a personalized and iterative process for individual institutions, and participant feedback is critical to exploring the program benefits and weaknesses in detail. According to Kirkpatrick's model for evaluating training programs,<sup>17</sup> this study evaluated the leadership program on the reaction and learning levels. Future evaluations might assess higher-level, longitudinal outcomes to determine the long-term impact of these courses on surgeons' professional environments. Furthermore, this leadership program was aimed at mid-career surgeons. While leadership skills are necessary at all stages of a surgeon's career, our findings suggested that formal leadership training may not be as helpful for senior faculty who are nearing the end of their operative careers (and may not have a vested interest in formal leadership positions). However, more information is certainly needed to establish the potential benefits of leadership training for senior faculty



and also for young surgeons just entering professional practice. While recommendations currently exist for selecting individuals for formal leadership positions (such as academic chairs),<sup>18, 19</sup> our study emphasizes that leadership takes multiple, often informal, forms as a practicing surgeon. This study intended to demonstrate feasibility and provide a template for surgery departments to construct and implement a leadership program specifically for surgeons at their own institutions, a dynamic and continual learning process in itself. Within a surgical practice environment, this leadership development program demonstrated that it is realistic to transfer practical knowledge and skills about leadership to busy surgical clinicians and researchers.

## Conclusion

These interviews detailed the immediate effectiveness and potential career impact of the Leadership Development Program on practicing surgeons. Specific areas for improvement were also delineated in order to assist institutions that plan to design their own programs. This critical evaluation of a curriculum for surgeons may enable future leadership development programs to incorporate the most beneficial components to better prepare surgeons for important leadership roles in a dynamic national healthcare environment.

## Acknowledgments

**Funding:** Mr. Pradarelli is supported by a grant from the National Institutes of Health (2UL1TR000433) through the Master of Science in Clinical Research program at the University of Michigan. Dr. Dimick receives grant funding from the NIH, the Agency for Healthcare Research and Quality, and the BlueCross BlueShield of Michigan Foundation.

## Abbreviations

<b>CHL</b>	Christy Harris Lemak
<b>GAJ</b>	Gregory A. Jaffe
<b>JBD</b>	Justin B. Dimick
<b>JCP</b>	Jason C. Pradarelli
<b>MWM</b>	Michael W. Mulholland

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**Table 1**

Curricular design of the Leadership Development Program.<sup>1</sup>

<p><b>Development of the curriculum:</b> The curriculum was designed based on input from participating surgeons regarding their motivations and desired goals for a leadership program. From this information, acquired before the start of the program, 4 major domains emerged on which the Leadership Development Program was structured and implemented.</p> <p><b>Timeline for the curriculum:</b> In-person sessions took place 1 full day per month for 8 consecutive months. Longitudinal team projects were coordinated outside of the 8 core sessions over the duration of the program.</p>			
Domain	Description	Elements in the Program	Real-World Examples
<b>Leadership</b>	Learn effective communication and conflict resolution skills. Develop a compelling vision to motivate others.	<ul style="list-style-type: none"> <li>1 full day of didactics on "Leading Organizations."</li> <li>Longitudinal independent reading assignments.</li> <li>360-degree evaluations completed by all participants.</li> <li>2 sessions with an executive coach to debrief on 360 evaluations and to generate a personalized leadership action plan.</li> </ul>	<ul style="list-style-type: none"> <li>Enhancing Regional Collaboratives – Interviews conducted with physicians to understand their engagement with quality collaboratives in Michigan.</li> </ul>
<b>Team Building</b>	Learn to foster collaborative, effective, and diverse teams.	<ul style="list-style-type: none"> <li>2 full days of didactics on "Building Diverse Teams" and "Innovation."</li> <li>Longitudinal independent reading assignments.</li> <li>Longitudinal team projects with an 8-month deliverable (at program conclusion) as well as a 2-year plan to integrate the project into real-world activity within the Department of Surgery.</li> </ul>	<ul style="list-style-type: none"> <li>Reducing Coordination Failures – Video ethnography used to better understand failures with care coordination.</li> </ul>
<b>Business Acumen/Finance</b>	Learn about the basics of finance, marketing, strategy, and operations	<ul style="list-style-type: none"> <li>3 full days of didactics on "Understanding Financial Statements," "Capital in Healthcare Systems," and "Introduction to Operations Management."</li> <li>Group exercise with hospital Chief Executive Officer to teach how to interpret financial statements in healthcare.</li> <li>Division administrators reviewing financial statements from the Department of Surgery.</li> </ul>	<ul style="list-style-type: none"> <li>Case study on building a new ambulatory surgery center.</li> <li>Focused business plans for expanding clinical programs, such as a hand surgery program.</li> </ul>
<b>Healthcare Context</b>	Learn local context (e.g., organizational structure, policies, and procedures) and acquire a greater understanding of health policy context.	<ul style="list-style-type: none"> <li>2 full days of didactics on "Healthcare Policy" and "Strategy in Healthcare."</li> <li>Multiple sessions with local leaders in healthcare related to many topics including the other domains (i.e., Leadership, Team Building, and Business/Strategy).</li> </ul>	<ul style="list-style-type: none"> <li>Didactic session on surgeons' roles in accountable care organizations.</li> </ul>

<sup>1</sup>Content of Table 1 was adapted from Jaffe et al., 2015.<sup>10</sup>

**Table 2**

What surgeon participants gained from the Leadership Development Program.

Theme	Explanation	Representative Quotes
1. Self-empowerment	Participants felt enabled and capable of affecting change locally.	<p>“My department actually saw me as a leader.”</p> <p>“I’m more confident about stepping up as a leader.”</p> <p>“Ability to generate projects and ideas for the Department of Surgery.”</p>
2. Increased self-awareness	Participants increased their understanding of how they are viewed by others. Personal blind spots were identified.	<p>“I appear busy, frazzled. I appear unapproachable.”</p> <p>“Didn’t realize other people knew how shy I was; how valued my opinions are.”</p> <p>“Helped me understand how others view me and my interactions.”</p> <p>“Trying to be more transparent.”</p> <p>“Self-revelations were helpful.”</p>
3. Improved team building skills	Participants felt they improved their own ability to develop productive teams. The program also enhanced collegiality among surgeons enrolled in the program.	<p>“[I can work on] giving feedback, both positive and negative.”</p> <p>“Be patient with others who do not catch on as fast.”</p> <p>“Morale-boosting event; bringing people together to bond over a common goal.”</p> <p>“Bonding experience; seeing, knowing colleagues better.”</p>
4. Leadership knowledge	Knowledge was gained in context of leadership definitions, business acumen, and organizational structure and purpose.	<p>“Can now recognize leadership.”</p> <p>“Business/organizational issues.”</p> <p>“Marketing and innovations concepts.”</p> <p>“Part-time psychiatrist” (regarding the value of different perspectives for leadership)</p> <p>“...in service to the mission of the organization.”</p> <p>“Understand the higher purpose first.”</p>

**Table 3**

Surgeon participants' recommendations for improving the Leadership Development Program.

Theme	Explanation	Representative Quotes
1. Presence of departmental authorities	Faculty surgeons had mixed feelings on whether or not current departmental leadership should be present during program activities.	<p><i>Positive reactions:</i>            "I saw changes in [authority], more approachable and listens more."            "[Authority] took the time to be there, which is beyond symbolic."            "[We get] more face time and can develop a relationship with him."</p> <p><i>Negative reactions:</i>            "[Authority] did not stifle conversation, but some participants did perform for him."            "Will people worry that [authority] will retaliate?"            "Not needed for every session."</p>
2. Gaps in curricular content	Participants noted a desire to learn additional leadership skills that were not covered in depth in this curriculum, including more time on concepts regarding business, mentoring, and time management.	<p>"Confrontation, difficult questions, conflict resolution."            "[Would like to go] deeper on the finance piece...expand the content."            "Add mentoring and how to be a mentor [or] find a mentor for you."            "Burnout and work-life balance could be addressed."</p>
3. Coaching	Support varied for coaching to develop a personalized leadership plan, depending on the quality and experience level of the individual coach.	<p><i>Positive reactions:</i>            "Helped me in my new role."            "It was insightful and...nice to have objective person to go over 360."            "Useful [to have a person] out of the circle. Moderate reality check."</p> <p><i>Negative reactions:</i>            "The coaching was expensive and did not pay off."            "Didn't make an impression, too generic."</p>
4. Participant inclusion	Comments on who should be considered for inclusion in the program ranged from medical students and residents to alumni faculty members.	<p><i>Include more people:</i>            "Alumni involvement in the next one."            "Roll out to the medical school."            "Mid-level [faculty] got a lot out of it."</p> <p><i>Include fewer people:</i>            "Junior [faculty] it had reasonable impact; senior [faculty] it had no impact."            "Residents would dilute the impact."            "Residents would change the dynamic...would be a different program."</p>

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**Table 4**

Reported impact of the Leadership Development Program on surgeons' professional development.

Theme	Explanation	Representative Quotes
1. Day-to-day activities	Participants commented on how the program has impacted their daily routines.	"I have learned to interact better in our environment and how to incorporate that into my work." "Think about it all the time on a practical level." "Trying to implement how I do my work...not sure it has happened yet."
2. General perspective on career	Participants reported general benefits that the program had on their immediate careers.	"Enjoyed the days in the room with smart people...some of those guys were geniuses." "Subject matter/content opened my eyes." "Dedicated time to think about issues and interact with experts." "Best thing I've done since I've been here."
3. Future career development	Participants reflected on how the program would impact their future career development.	"[Helped identify] books and where to go next." "[My department] trusted me and I'm going to go the next step."

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