Leadership for All: An Internal Medicine Residency Leadership Development Program

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ABSTRACT

Background Developing effective leadership skills in physicians is critical for safe patient care. Few residency-based models of leadership training exist.

Objective We evaluated residents' readiness to engage in leadership training, feasibility of implementing training for all residents, and residents' acceptance of training.

Methods In its fourth year, the Leadership Development Program (LDP) consists of twelve 90-minute modules (eg, Team Decision Making and Bias, Leadership Styles, Authentic Leadership) targeting all categorical postgraduate year (PGY) 1 residents. Modules are taught during regularly scheduled educational time. Focus group surveys and discussions, as well as annual surveys of PGY-1s assessed residents' readiness to engage in training. LDP feasibility was assessed by considering sustainability of program structures and faculty retention, and resident acceptance of training was assessed by measuring attendance, with the attendance goal of 8 of 12 modules.

Results Residents thought leadership training would be valuable if content remained applicable to daily work, and PGY-1 residents expressed high levels of interest in training. The LDP is part of the core educational programming for PGY-1 residents. Except for 2 modules, faculty presenters have remained consistent. During academic year 2014–2015, 45% (13 of 29) of categorical residents participated in at least 8 of 12 modules, and 72% (21 of 29) participated in at least 7 of 12. To date, 125 categorical residents have participated in training.

Conclusions Residents appeared ready to engage in leadership training, and the LDP was feasible to implement. The attendance goal was not met, but attendance was sufficient to justify program continuation.

Introduction

Increased focus on competency training beyond medical knowledge and patient care is being driven by shifts in how medicine is practiced. Physicians are increasingly called on to lead complex, multidisciplinary teams,[1–6] and a lack of leadership skills in the areas of professionalism, systems-based practice, and communication have been associated with patient harm.[7] Thus, the Accreditation Council for Graduate Medical Education (ACGME) has identified these areas as competencies that should be emphasized in physician training. At this time, it is not clear how to best integrate leadership training in residency programs.[8–10]

In 2012, The Ohio State University Wexner Medical Center Internal Medicine Residency Program implemented the Internal Medicine Leadership Development Program (LDP). The theme for the LDP is "Leaders From Day One," and it starts at the beginning of residents' first postgraduate year (PGY), occurs over the entire year, and targets all residents. The program is designed to help residents develop new leadership skills, cultivate natural leadership abilities, and recognize how effective leadership can improve patient care. Four guiding principles drove its development: all physicians are leaders,[4,5] strong leadership skills make us better physicians and improve patient care,[11–13] leadership skills can and should be taught,[3,14] and gaining acceptance of leadership training is a critical first step toward preparing physicians to lead complex, multidisciplinary teams.[15] This article reviews the structure of the program and the feasibility of creating a program that targets all residents.

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Editor's Note: The online version of this article contains the annual PGY-1 resident survey used in the program.

Methods

Setting

The internal medicine program at The Ohio State University comprises 41 PGY-1 residents and an additional 21 preliminary/rotating residents. PGY-1 residents in combined residency programs participate in the LDP only when rotating through internal medicine. Preliminary/rotating residents are encouraged to participate but are not included in this evaluation.

Curriculum

The design and implementation of the LDP occurred in collaboration with faculty from The Ohio State University Wexner Medical Center and The Ohio State University Fisher College of Business.

To date, we have implemented the PGY-1 portion of the LDP, which includes a 20-minute introduction during PGY-1 orientation and a series of twelve 90-minute modules. Modules occur once per a 4-week block, during times normally reserved for resident didactics.

Early modules explore concrete concepts like identifying leadership styles, and later modules focus on complex topics like conflict management (TABLE 1). Each module is designed as a stand-alone session, so future participation is not limited by past absences.

Modules are interactive and designed so classroom learning can be translated to a residents' daily work environment. Each module includes approximately 30 minutes of small group discussions. Depending on the content and presenter, modules may also incorporate interactive didactics, guided large group discussions, case-based learning, and/or panel discussions. Regardless of the format, in-person attendance is expected to promote an interactive learning format.[16]

Based on their skill sets and expertise in specific content areas, medical center faculty members and business faculty members were chosen to lead modules. Business college faculty members are compensated at a fixed rate. One of the authors (J.M.M.) met with presenters prior to each module to review expectations and content. An LDP Steering Committee, made up of volunteer residents, meets quarterly to review module evaluations and to make recommendations for change in content and content delivery. A 0.05 full-time equivalent position was initially assigned to implement the program; this is currently integrated into the associate program director role. The LDP receives administrative assistance from a chief resident and an assistant program manager.

What was known and gap
Physicians need leadership skills, and courses teaching leadership skills during residency are becoming an accepted response.

What is new
A leadership development program, consisting of twelve 90-minute modules, taught to all categorical first-year internal medicine residents at a single sponsoring institution.

Limitations
Single institution study limits generalizability; outcomes are limited to acceptance instead of a positive impact on leadership skills.

Bottom line
Residents considered training valuable, and the program is feasible. Attendance was below goal, but sufficient to justify program continuation.

Program Evaluation

Implementation of the LDP focused on 3 areas: assessing residents' readiness to engage in leadership

TABLE 1
The Leadership Development Program Curriculum

Module	Module Title	Module Presenter
PGY-1 orientation	Introduction to the Leadership Development Program	Leadership Development Program director
1	Introduction to Leadership in Medicine	Medical center faculty member
2	Leadership Versus Management	Fisher College of Business faculty member
3	Professionalism	Medical center faculty member
4	Emotional Intelligence	Medical center faculty member
5	Leadership Styles	Fisher College of Business faculty member
6	Authentic Leadership	Fisher College of Business faculty member
7	Panel discussion: Increasing Resident Awareness of Their Role in the Missions of the Residency Program and Medical Center	Medical center faculty members
8	What You Should Know About Your New Job	Fisher College of Business faculty member
9	Conflict Management	Fisher College of Business faculty member
10	Team Decision Making and Bias	Fisher College of Business faculty member
11	Communication in Multidisciplinary Teams	Medical center faculty member
12	Communication With Adult Learners	Medical center faculty member
13	Rising Resident Retreat	Chief residents and medical center faculty members

Abbreviation: PGY, postgraduate year.

training, determining the feasibility of implementing and maintaining the program, and measuring resident acceptance through module attendance.

Residents' readiness to engage in leadership training was assessed through focus groups and annual PGY-1 surveys. Focus groups were conducted in 2012 with second-, third-, and fourth-year internal medicine and internal medicine–pediatrics residents.

A human resources business graduate student worked with the program through a business college–funded internship and led all focus groups. Focus group responses were recorded and transcribed.

In 2012, we administered a PGY-1 resident survey at the beginning of the academic year. We did not survey PGY-1 residents in 2013. The revised survey was first used in 2014 (and is provided as online supplemental material).

Feasibility assessments for the LDP include the ability to administer through the implementation phase and to attract and retain module presenters.

We measured residents' acceptance through module attendance. Understanding that night float assignments, vacations, and emergent patient care needs may conflict with module attendance, we set the attendance goal for each resident at 8 of 12 modules. Further details about the program are available upon request from the corresponding author.

Approval to analyze data for study purposes was obtained from The Ohio State University Institutional Review Board.

Results

Resident Readiness to Engage in Leadership Training

Focus group survey data were provided by 13 residents, and 100% (13 of 13) felt that leadership is highly or very highly important in their role as a physician. One resident commented, "General medical knowledge and the ability to care for patients are more important, but leadership is important, too." Additionally, 85% (11 of 13) of residents recommended the program for PGY-1 residents to help them transition to a PGY-2 leadership role. One resident stated, "In comparison to the business world, in residency, we're not taught very well how to communicate with each other and give feedback . . . It's a good thing, teaching residents how to lead a group."

Despite this support for the concept, only 46% (6 of 13) of focus group residents expressed a high or very high level of interest in participating in leadership training. Some residents felt that leadership training should be a remedial course. One respondent said, "Some people get it and some people don't. So for the folks who don't, it would be helpful to sit down and formalize . . . how you run the ship; these are things that can be done." Other residents expressed doubt that leadership training could be applied to practice. "No, I don't want [leadership training] if it's like the leadership that they do at camp, where it's all about trust and you fall back and they have to catch you." And finally, others felt that training had the potential to be useful, but in their prior experiences, it had not been. "I've been to [leadership] workshops where I might as well have been in a coma for 3 hours, and it would have the same outcome," said a respondent.

Overall, residents felt that working with leadership mentors was of high value; however, they acknowledged that not all residents and faculty serve as models. "There are certainly times on service when leadership is lacking, and I question who is going to set the example of leadership and on-the-job training." Many residents recognized value in reflecting on leadership skills and learning new skills, but they felt that if leadership training was going to be added to the curriculum, it should occur during regularly scheduled educational time. "When you're an intern, it can be hard to think with that long view that, 'Oh jeesh, next year I'm going to actually have to lead people.'"

The PGY-1 survey was completed by 90% (112 of 125) of residents with 95% (80 of 84) completing the updated survey starting in 2014. Of these, 38% (42 of 112) indicated that they considered the availability of leadership training when they applied to residency programs (TABLE 2). In addition, 90% (101 of 112) expressed at least a fair level of interest in participating in leadership training. Additionally, they felt leadership training would be important in helping them become independent physicians, and they felt that leadership would be important for them in their careers (TABLE 3).

Feasibility of Implementing and Maintaining the LDP

The LDP is currently in its fourth year, and is part of the core educational curriculum for PGY-1 residents with plans to continue programming in future years. Nine of 11 modules have had the same faculty leader since implementation. The twelfth module is a panel discussion with a variety of participants.

Resident Acceptance

Over 4 years, 125 categorical residents have participated in the LDP. In the 2014–2015 academic year, 45% (13 of 29) of categorical residents met the goal for attending at least 8 of 12 modules, 72% (21 of 29)

TABLE 2
Categorical PGY-1 Residents' Leadership Experience

Category	Total, n (%)	Male, n (%)	Female, n (%)
PGY-1 residents who held a formal leadership position prior to residency[a]	45 (56)	25 (51)	20 (65)
PGY-1 residents who participated in formal leadership training prior to residency[a]	22 (28)	10 (20)	12 (39)
PGY-1 residents who considered availability of leadership training when applying for residency programs[b]	42 (38)	21 (30)	20 (48)

Abbreviation: PGY, postgraduate year.
[a] Academic years 2014 to 2015 and 2015 to 2016 (N Total = 80; n Male = 49; n Female = 31).
[b] Academic years 2012 to 2013, 2014 to 2015, and 2015 to 2016 (N Total = 112; n Male = 69; n Female = 42; 1 resident did not mark gender).

attended at least 7 of 12, and all residents attended at least 4.

Discussion

The Leadership Development Program has been feasible to implement with few new resources other than the partnership with the college of business. Most importantly, it has been sustainable due to continued engagement from residents as well as faculty.

Our residents' high level of interest in participating in leadership training was unexpected based on initial reservations shared in the focus group discussions; however, this level of interest is comparable to findings from another study.[17] While high interest levels may facilitate better attendance earlier in the year, it does not guarantee ongoing engagement throughout the year. Consequently, we attribute the success of implementing and sustaining the program, as well as engaging the residents, to strong support for the LDP from both departmental leadership and faculty, along with ongoing resident participation in curriculum development.

Continuity with faculty members, administrative assistance, and defined responsibility for directing the LDP within the associate program director role all contributed to program feasibility. We believe business college contributions have enhanced our LDP by providing content expertise; however, because residents identify the translation of content to practice as being most important, residency programs without access to business college partnerships could still create meaningful leadership training.

Despite falling short of attendance goals, the fact that a large percentage of residents either reached the goal or were within 1 module of it is encouraging, and because all residents attended at least 4 sessions, every categorical resident in our program received some level of training. We believe these numbers demonstrate high levels of resident acceptance. We do not have specific data for why some residents did not achieve the attendance goals. Going forward, we will continue to work with the LDP Steering Committee to create innovative curriculum to improve these numbers.

A limitation of our study is a lack of data demonstrating the program's effect on resident performance and patient care. To assess the effect of the program, we plan to administer annual PGY-2 and PGY-3 surveys. Milestone-based evaluations also may help with this evaluative process.

TABLE 3
Categorical PGY-1 Residents' Perception of Importance of Leadership in Medicine and Level of Interest in Leadership Training (N = 112)

	Not at All, n (%)	Somewhat, n (%)	Fairly, n (%)	Quite, n (%)	Extremely, n (%)
How interested are you in PGY-1 leadership training?	1 (0.9)	10 (8.9)	33 (29)	47 (42)	21 (19)
How important do you think PGY-1 leadership training will be in helping you to be an independent physician?[a]	1 (0.9)	6 (5.4)	24 (21)	58 (52)	22 (20)
How important do you think leadership is in your career as a physician?	0 (0)	0 (0)	7 (6.3)	43 (38)	62 (55)

Abbreviation: PGY, postgraduate year.
[a] For the academic year 2012–2013, this question asks residents how important they think leadership training will be to help them transition to the PGY-2 leadership role.

Conclusion

We have successfully implemented and maintained an LDP for all PGY-1 residents. The program has been feasible to maintain and residents have demonstrated interest in and acceptance of the training. Engaging residents in the design and implementation of the program is important to help create content that is meaningful and applicable to the residents.

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