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ACADEMIC INTERNAL MEDICINE INSIGHT

By the Numbers

62%

Sentinel events caused by poor communication among staff, physicians, and patients

Page 14

53%

Residents who reported no formal training on hospital follow-up visits

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Best practices for attendings to promote resident autonomy on the wards

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Also in This Issue

AAIM President's Update

Colleagues, all of us at AAIM hope you and your family had a terrific holiday season. Everyone is super busy and our world is tumultuous. I confess that throughout my career, and still today, I have those moments where it seems the wheels are about to fly off. At those times, I try to switch gears, take a moment to be grateful for being part of the medical profession, and ask myself, "What has happened that represents the essence of the profession?" I find that the list is long and satisfying. It helps me refocus and deprioritize those myriad things—in which we all get involved—that have little upside and that are time and emotional sinkholes.

This train of thought fits perfectly with a new initiative we are undertaking at AAIM—namely, health and wellness in its broadest sense, including burnout. At the highly successful Academic Internal Medicine Week 2015, we had several sessions on this topic, including "Recognizing Residents in Distress," "Innovative Strategies for Coaching Residents Who Struggle With Time Management, Organization, and Efficiency," and "'I'm Burned Out!' Helping Our Medical Trainees Develop Skills to Build Resilience." We plan to make wellness a continuing theme of all our meetings. As you know, other organizations, particularly the American College of Physicians (ACP), also are devoting substantial energy to this topic, so we are working closely with them to amplify our own efforts.

AAIM is busy working for you. We are collaborating with the American Board of Internal Medicine (ABIM), ACP, and subspecialty societies on the topic of maintenance of certification (MOC). AAIM recently shared its stance on various aspects of MOC. This position was the result of our survey of individual members as well as deliberations by leaders in all of our constituent organizations. If you have not reviewed this information, you can find it on the AAIM website in the Academic Affairs section (www.im.org). Please continue to share your comments and opinions. Deliberations about MOC are ongoing, and we are "at the table."

In November, we had a spectacularly successful Third Consensus Conference on the Physician-Investigator Workforce. It brought together a broad representation of government agencies, regulatory bodies, academic institutions, nonprofit organizations, young investigators, and experienced researchers. A summary of the results of the meeting is in development. Of particular interest was the broad discussion about how challenges in this area go well beyond funding issues, which have been an easy scapegoat. Indeed, funding is part of the problem, but it is by no means all of it. Elements addressed at the consensus conference include pipeline (including minority, gender, and generational issues), mentorship and fostering careers, collaboration with the biotechnology/pharmaceutical industry, role of Medical Scientist Training Program Institutions and ABIM Research Pathways, and team science. We will continue to focus on addressing these issues in addition to our sustained advocacy for better funding for physician scholars.

We also are doing a number of things to more effectively reach out to you, such as improving our website. You will see these initiatives and others roll out over the coming year. Please provide your feedback to let us know what is working and what is not.

An AAIM task force also is nearing the end of its work on a position statement on the Institute of Medicine report on graduate medical education (GME). I have taken an active part in a number of this task force's meetings, and I can tell you that the statement will be an incredibly thoughtful body of work that will guide future deliberations and GME policy. It is reflective of the talent of our volunteers and the strength of our collective voice.

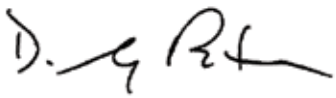
AAIM has carefully utilized ASP's unique ability to pull the subspecialty societies together to address two important issues: an "all-in" approach to the subspecialty match and the start date for fellowships. As I am sure many of you have experienced, some systems put pressure on new fellows to start before their residencies have ended. This time constraint creates all sorts of logistical problems and places our trainees in awkward, if not untenable, positions. Of

course, this issue is not unique to internal medicine, so we are also working with other disciplines to see if we can develop a more universal solution.

Lastly, one of our biggest challenges is ensuring that each of you, our individual members, is aware of all the things occurring through AAIM and how these activities impact you. Some are macro-level activities, such as the work on MOC and GME policy; their translation to your daily responsibilities will be indirect and occur over a long period of time. But the Alliance also strives to be involved in things that can impact your daily work and make it better and more satisfying. An example might be our committee that reviews new e-learning products or the collaborative learning community that is collating what is working well in terms of clinical competency committees. We also are doing a number of things to more effectively reach out to you, such as improving our website. You will see these initiatives and others roll out over the coming year. Please provide your feedback to let us know what is working and what is not.

You have a host of colleagues who are spending lots of time and intellectual energy to make our profession better. I circle back to my opening thoughts: every day at AAIM I see work that represents the very best of and the essence of our profession. That commitment mitigates a ton of the "other stuff" swirling around out there. Thank you for allowing me to be part of it.

Sincerely,



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AAIM Interviews Joseph Loscalzo, MD, PhD

Joseph Loscalzo, MD, PhD, is chair of medicine at Harvard Medical School Brigham and Women's Hospital. He previously served as chair at Boston University School of Medicine. Interviewer is Paul B. Aronowitz, MD, clerkship director in the Department of Medicine at University of California, Davis, School of Medicine. He is a past president of APDIM.

Tell me about your current position.

I am the chair of the department of medicine at Brigham and Women's Hospital, physician-in-chief at this hospital, as well as Hersey Professor of the Theory and Practice of Physics at Harvard Medical School. I've been in these roles for the past 10 years.

Tell me about your earliest leadership experiences.

I was chief resident here [at Brigham] in 1983.

What's your favorite thing about being chair of medicine?

It is a privileged position that I'm honored to have. It's unique in that it provides an opportunity to create a vision. It also can serve as a "bully pulpit," if that is your interest. I get to deal with some of the brightest people in medicine.

What's your least favorite aspect of being chair?

The drudgery of some of the committee work to which we are all exposed. Some of the very same problems I remember dealing with at Boston University years ago are the same problems we deal with here years later. I won't say that they're intractable, but in the current medical structure they are very difficult to address. Once you can sort problems into that category from those that you can do something about, you can begin to make more judicious decisions about the use of your time.

The administrative system is a complex structure, but there are too many variables over which you don't have control. The risk is far greater for the outcome of a decision you make, because you have far less data upon which to make that decision to base the likelihood of an ideal outcome. In the end, it requires far more risk-taking to administer than a scientific or even a clinical experiment would carry. This aspect intrigues me and keeps me going on the administrative side.

How do you keep a "finger on the pulse" of the people in the trenches, doing clinical care as well as research?

I try to be active in all spheres. My research lab continues at full throttle. I continue to see patients both on the inpatient service and in my weekly clinic in both cardiology and general medicine. I also oversee the Undiagnosed Disease Network, a NIH-funded program that we have. I take Morning Report each Friday with the internal medicine residency as well as moderate the clinical pathologic conferences once or twice each month. I am involved with housestaff on multiple other levels.

What is the single thing you are most proud of in the positions of leadership you've held?

Among the outcomes that I'm most proud of, I'd say the success of my trainees and what they go on to do and to accomplish, as well as assisting in developing new educational strategies. I'm also very proud of my role in helping to develop the field of network medicine.

What's the biggest mistake you've made in a leadership role?

Where do I begin? One is that you can never overcommunicate with stakeholders. When there is a challenging issue at hand, you have to talk to as many individuals and build as much consensus as you can hope to achieve. So I've made the mistake of undercommunicating on a number of occasions.

Another mistake is that my wife tells me that the one lie I told her in our 41 years of marriage is that things would get better after internship. They're different, but the time commitment continues unabated.

The one other regret I have is that as a trainee and then as a young faculty member, I didn't spend as much time with my children as I see our trainees spending with their children. It was a different era, of course. So, even though our kids are grown now, I figure it's never too late so I spend as much time as I can with our grandchildren; my daughter calls me a "born-again grandfather."

Physicians go into medicine to help people, and so when they're in positions of leadership, they frequently seem to have a difficult time being "the bad guy"—and therefore tend to avoid conflict. Have you had this problem?

Yes, I had this problem when I was younger and in early leadership roles. In my first administrative job at the VA Hospital, I was younger than many of my colleagues whom I was in charge of. Many of them were my former teachers when I was in training. I couldn't be friends with them in the way that I once had been and that was difficult.

Over time, if you want to be effective in these types of jobs, you have to get past the tendency to not want to be the "bad guy." I have some patron saints in my job—right beside Mahatma Gandhi and Mother Teresa are Attila the Hun and Machiavelli. You have to choose your battles wisely and know

when it's important to push. If you don't draw a line in the sand at the right time, there's no way challenging decisions can be made, regardless of whether everyone is on the same page about the decision.

Who were the most significant mentors in your career?

A clinical mentor was Joe Perloff, who was chief of cardiology at University of Pennsylvania. I took a cardiology elective as a student. I remember how engaging, elegant, and eloquent he was in dissecting cases and putting them back together—he was a great clinical mentor. I've also had numerous research mentors throughout my career.

With your research, education, and clinical roles, you are the classic definition of the "triple threat"—someone who is highly successful in all three of these areas. I have often heard that triple threats are a vanishing breed in academic medicine. What are your thoughts?

It is true that many people say you should just try and be good at only one of these areas. Some people can only succeed in one area. But a good mentor can help someone succeed in more than one area. For some people, being involved in more than one area is essential to success. My analogy is the biologist who is versed in the biology of the tree in the forest—but that's only about the single tree. There need to be people in medicine who understand both the single tree in the forest and the whole forest. A clinician understands the forest; a physician-scientist understands both the tree and the forest. It's very important that we continue to foster the careers of these physicians.

Do you have any favorite leadership books?

I find these books only to be helpful to a point and that my own experience in leadership has been far more helpful to teaching me the finer points of leading. I just don't think there is any good substitute for experience.

What advice do you have for young faculty who aspire to be leaders?

I think that they should try to have an area of scholarly focus. They should all be contributing to their fields in some way—for example, helping to generate clinical pathways or doing research in education.

You have to know more than your area in order to be effective. It is one of the reasons I have tried to stay active in research, education, and clinical care. People simply can't sit across from me at a meeting and say, "You don't know what it's like to work in our clinic" or "You don't know what it's like to do bench research." They cannot say that to me because they know I am active in all of these arenas.

Credibility is vital to success. The more remote someone becomes from the people he or she supervises, the less credible and effective that leader is.

How do you balance all of your many competing responsibilities?

Time management is absolutely essential. You are either born with these skills or you are not. Courses and lectures will not help. It's an art form. It's also essential that you do not micromanage—you will not get anything done. It is essential to build a team you can trust and figure out the right working relationship with the members of that team. They need to be credible representatives of you as they carry through their roles.

How do you recruit the best people?

Part of it is intuitive. Part of it is how people respond to questions both in their verbal answers and in their body language. In interviews for leadership positions, I like to ask applicants whether they are able to put the interests of their subordinates ahead of their own—the sign of a truly great leader.

I like to ask applicants about what they are proudest of and about the biggest challenges they've faced in leadership positions.

What's the greatest misperception people have about you?

People who know about my research think that's where I spend all of my time, but people who know about my clinical work assume my clinical interests exclude research. So, depending upon their perspectives, people sometimes tend to misperceive and pigeonhole me.

What are the keys to being a great mentor?

Great mentors listen, offer opinions, offer options, and support a decision—no matter the decision and whether that decision was what they had recommended the mentee do. Great mentors support the mentee, no matter the bumps in the road of a mentee's career. Great mentors also know how to keep their distance and when to get involved.

What's it like being in a meeting you are running?

I always like to be familiar in advance with the material that will be covered at the meeting. If the meeting is scheduled for an hour, and we can finish in 15 minutes, I try to end it at 15 minutes. I'm respectful of how busy people are, and I don't draw out the meeting just because it was scheduled for a longer time.

I try and inject some humor into meetings—especially if there is some tension in the room. I also try and listen to every perspective. It's not just respectful; it's impossible for me to know all elements of the situation and possible solutions. Hearing people out can often provide refreshing solutions and insights.

What two words best encapsulate your leadership style?

Inclusivity and commitment.

A Safe and Effective Discharge Curriculum Implemented in 11 Internal Medicine Programs

Transition out of the hospital is arguably one of the most important components of a patient's stay and is a focus of the internal medicine milestones and entrustable professional activities (EPAs). This critical procedure requires explicit training to be performed correctly; however, formal observations of physicians-in-training performing a patient discharge are not traditionally part of residency instruction. In an effort to improve the discharge process, we implemented a discharge curriculum focusing on the competence of a "Safe and Effective Discharge (SAFE-D) from the Hospital." Our primary objective for SAFE-D was to assess the usefulness of direct observation and feedback in determining competence of discharging patients from the hospital. In addition, we assessed whether this intervention increased attending and resident awareness of core physician behaviors for a SAFE-D, if the quality of feedback from attendings improved when they observe residents in the SAFE-D behaviors, and if multisource feedback added to the determination of resident competency. Given the complexity of an inpatient medicine rotation, we also assessed the feasibility of using behavior-based direct observation in assessment for SAFE-D.

The SAFE-D curriculum was implemented at 11 internal medicine programs, encompassing 251 attending physicians and 299 postgraduate year (PGY)-1 trainees. Faculty and residents were oriented to the discharge curriculum in a one-hour interactive session led by the site principal investigator (PI). Use of the discharge curriculum was required for all attendings and residents on the wards as part of the educational requirements of the rotation. Site PIs collaborated on monthly conference calls, sharing barriers and successes throughout the year.

The discharge curriculum consisted of serial direct observations in the following domains: medication reconciliation, discharge summary preparation, patient communication, anticipation of post-hospital needs, collaboration, and team communication. Attendings observed interns during their usual work on the wards, most often focusing on just one or two domains per observation, and rated each resident on a five-point competence scale ranging from "resident cannot perform even with assistance" to "resident can act as an instructor on this skill." Attendings gave formative feedback to each resident until a level of competence defined by being "ready for indirect supervision" was reached. At the completion of the year, participating attendings and residents completed a voluntary survey to assess the objectives of the discharge curriculum.

A total of 119 attendings and 181 residents completed this survey. The greatest impact of the curriculum was on attending physician practice, with 79% of respondents agreeing that this innovative curriculum developed their understanding of an intern's competence at discharging a patient and 67% of attendings noting that the curriculum provided a structure for giving feedback. Additionally, 65% of attendings agreed that they were more confident in assessing resident competence using the discharge curriculum. Attending physicians and interns perceived that the curriculum enhanced their awareness of core discharge behaviors in a majority of attending physicians (60%) and interns (51%). Sixty-four percent of residents agreed that the curriculum helped them understand the requirements to progress toward independence.

While we were successful at increasing awareness of key behaviors related to hospital discharge and providing a structure for feedback, the SAFE-D multisite intervention was less successful in augmenting direct observation or enhancing the role of multisource feedback. Notably, only 53% of attendings agreed that they increased their direct observation using the curriculum, and 51% of attendings agreed that they gained confidence in assessing how well the resident engages with other health professionals. Logistical difficulties were noted by both attendings and residents, with only 46% of attendings and 57% of residents agreeing that the curriculum was easy to implement on the wards.

Overall, many positive messages can be taken from the survey results of the SAFE-D study. Nearly 80% of attending physicians improved their understanding about the component behaviors of a critical EPA. While it is hard to gauge with new interns whether the curriculum itself was responsible for their learning of these behaviors, it can be assumed that if teaching physicians are more deliberate in their observation and feedback, then this consideration will be of benefit to the trainees. Improvement in attending confidence and perceived ability to give structured feedback are important takeaways from the SAFE-D curricular study. This assumption could be generalized to other observation and feedback studies related to assessing independence in a variety of EPAs. Our group has shown previously that a similar curriculum focused on the "continuity clinic" EPA of performing essential ambulatory care increased resident and attending confidence in granting independence for this complex task (1).

As noted in the survey and in ongoing conference calls, difficulty in implementing this program was a primary barrier to its uniform success. Challenges expressed included engaging all teaching faculty and interns on busy inpatient services and maintaining momentum during team changes. Interestingly, interns felt the program to be more easily implemented than did the faculty, highlighting a potential future opportunity to allow trainees to take the lead in asking for and ascertaining observation and feedback.

These challenges aside, applying the educational method of direct observation and feedback for the purpose of advancing the resident by competence was shown to be useful to both the attending and the resident.

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Giving the Understudy the Spotlight: Promoting Resident Autonomy on the Wards

Autonomy in the Current Training Environment

Graduate medical education is built on providing trainees with graduated independence in clinical care, so that by the end of their training, residents will be prepared for independent practice (1). This graduated independence provides trainees with the opportunity to stretch the limits of their knowledge and clinical skills with adequate expert support, and also provides attending physicians with the opportunity to assess trainees' competence in managing increasingly complex clinical situations (2). A changing inpatient environment, fueled by duty hours restrictions and the patient safety movement, has led to concerns that increased supervision has encroached on trainee autonomy. Although previous models of autonomy and supervision suggested a dipolar relationship in which providing autonomy necessitated a lack of supervision, new models propose that autonomy and supervision are not mutually exclusive; rather, they are necessarily coexistent (3). In this framework, managing the dual tasks of supervising patient care and providing appropriate graded autonomy to trainees is a prominent challenge for medical educators serving as inpatient ward attendings (4-6).

Kennedy and colleagues described three types of oversight that attending physicians perform in the inpatient setting: routine, backstage, and responsive oversight (7). "Routine oversight" includes interactions between the attending and trainees that are planned in advance to review patient care decisions, such as morning walk rounds. "Backstage oversight" encompasses activities that attendings perform without the trainees' direct knowledge, such as "chart stalking" or seeing patients independently of the team. "Responsive oversight" describes unplanned encounters prompted by a clinical concern on behalf of the attending, resident, patient, or other member of the care team.

With the goal of promoting resident autonomy while maintaining adequate supervision of clinical care, University of Pittsburgh implemented a unique rounding system for the inpatient wards. In this article, we present this rounding model as well as lessons our attending physicians learned to promote autonomy on the wards. These lessons are applicable to educators in a variety of clinical and educational settings.

A Unique Approach to Rounding

Our inpatient teams are composed of a single attending who supervises the care of up to 14 geographically organized patient beds with a team of one resident, two interns, and two medical students. In our rounding structure, the resident serves as the leader of morning bedside walk rounds, independent of the attending physician, five days per week. Walk rounds consist of a multidisciplinary team including the resident, interns and medical students, the nurse case manager, and the bedside nurse. The team presents and discusses the patient at the bedside with the patient's input. In this setting, the resident is the primary clinical decision maker, teacher, and time manager for walk rounds. Attendings are available on site, but not physically present during morning walk rounds. The attending and resident then meet at 11:00 a.m. to review the plan the team made for each patient. The attending returns to the team in the afternoon for "teaching rounds," a one-hour teaching session with the entire team. Teaching rounds have a variety of formats, including topic-based "chalk talks," or case-based discussions of patients on the service. In this rounding model, the attending oversight of walk rounds shifts from that of routine oversight to backstage and responsive oversight. The attending joins morning walk rounds with the team only two days per week. On these days, either the attending or resident serves as the primary leader of rounds, and the attending does not conduct "teaching rounds" in the afternoon. Attendings also hear presentations of all new admissions by either the medical student or the intern, but these presentations often occur outside of formal morning walk rounds or afternoon teaching rounds. **Figure 1** provides an example daily schedule for days when the team rounds without the attending.

This model provides residents with increased autonomy and challenges them to advance their leadership and teaching skills, but it also requires attending physicians to develop nuanced skills in backstage oversight to ensure patient safety and appropriately evaluate trainees' skills. For this model to be successful, we found that we had to provide additional training for both residents and faculty. Our residents participate in two resident retreats aimed at developing leadership and teaching skills: spring of intern year focuses on team management skills and principles of leading bedside rounds, and fall of second year focuses on teaching skills. Faculty are trained in the skills of backstage oversight and learner assessment through a series of faculty development sessions.

To evaluate resident and faculty response to our independent rounding model, as well as to identify skills attending physicians need to promote autonomy when working in the inpatient setting, we collected feedback from clinician-educators at a faculty development seminar and conducted an informal survey of a random sample of 37 residents accompanied by a large group discussion. After compiling this feedback, we developed a series of recommendations for skills attendings can use to promote resident autonomy on the wards by shifting some routine oversight activities to backstage or responsive oversight.

FIGURE 1. Daily Rounding Schedule

<table>
<tr><th>Time</th><th>Interns</th><th>Resident</th><th>Attending</th></tr>
<tr><td>7</td><td rowspan="2">Pre-round, see new admissions</td><td>Receive sign out</td><td rowspan="4">See patients independently, review charts, perform non-inpatient duties</td></tr>
<tr><td>8</td><td>Attend morning report</td></tr>
<tr><td>9</td><td colspan="2" rowspan="2">Resident-led bedside walk rounds</td></tr>
<tr><td>10</td></tr>
<tr><td>11</td><td>Get work done</td><td colspan="2">Resident and attending meet independently to discuss the plan for each patient</td></tr>
<tr><td>12</td><td colspan="2">Noon conference</td><td rowspan="3">See patients independently, review charts, perform non-inpatient duties</td></tr>
<tr><td>1</td><td colspan="2" rowspan="3">Get work done</td></tr>
<tr><td>2</td></tr>
<tr><td>3</td></tr>
<tr><td>4</td><td colspan="3">Attending teaching rounds</td></tr>
<tr><td>5</td><td colspan="2" rowspan="2">Get work done</td><td rowspan="2">Touch base with resident, review charts, perform non-inpatient duties</td></tr>
<tr><td>6</td></tr>
</table>

FIGURE 2. Top 10 Best Practices for Attendings to Promote Resident Autonomy on the Wards

1. **Negotiate expectations in advance.** At the beginning of your time on the wards, discuss and agree on "ground rules" for your time with the resident (e.g., situations that warrant attending notification, preferred method of contact, preferences about teaching).
2. **Ask, don't tell.** If you are unsure of the team's plan for a patient, ask the resident about her plan before sharing your ideas.
3. **Create a safe space.** Meet with the resident away from the team on a regular basis, so that he can be open about his uncertainty and knowledge gaps.
4. **Batch small concerns.** Try to minimize contacting the resident for non-urgent matters; instead, make a list of small items and follow up when you see her later in the day to decrease her perception of "micromanaging" and give her an opportunity to address non-urgent matters before being told.
5. **Do your work away from the team.** Try to give your housestaff team room to work without you nearby, but make yourself available for any concerns and during planned meeting times.
6. **"Chart stalking" is okay.** If you are anxious about your patients' needs being met, looking at the orders and notes can be helpful ways to get updates. Avoid placing orders; consult your team about any plan changes or updates.
7. **Be tolerant of practice variation.** Try to let your resident develop her clinical style by following through on her decisions. If her decisions are justified and reasonable, accept her plan even if it is not what you had in mind. When you change the plan, make your reasoning transparent.
8. **Communicate concerns to the resident, not the interns and students.** Try to keep your resident central to the flow of care and decision making on the team; contacting interns directly about changes undermines the resident's leadership of the team.
9. **Let the resident lead rounds.** When you round with the team at the bedside, let the resident run the show. Have medical students and interns direct their presentations to the resident. Give the resident an opportunity to articulate his plan and make a teaching point. You can chime in if you disagree. This structure provides both autonomy for the resident and the opportunity for you to directly observe his teaching and management skills.
10. **Catch the resident doing something right.** Help promote the resident as the team leader by giving her positive feedback in front of the team when you notice model behaviors.

These skills are applicable to clinician-educators serving in the inpatient setting in a variety of rounding models.

Tips for Promoting Autonomy

All residents in our program stated they prefer the attending physician to join morning bedside walk rounds fewer than three days per week. Eighty-nine percent of respondents preferred the attending join rounds one or two days per week, and although not an option on the survey, two residents wrote in "zero" days per week. When asked who they prefer to be the leader of walk rounds when the attending is present on rounds, 89% preferred that the resident lead.

Residents and faculty offered recommendations on how the attending can promote resident autonomy during routine oversight of morning walk rounds as well as backstage and responsive oversight at other times of the day. A summary of these recommendations is included in **Figure 2.**

Conclusions

Our resident and faculty support for our independent rounding model suggests that residents gain comfort with rounding independently and feel up to the challenge of increased autonomy. We understand that our rounding model contrasts many programs' traditional attending-led bedside

rounding structure. We also recognize that a resident's competence development is an individualized process and that educators may not initially feel comfortable with the independent rounding model described here. Implementing a rounding system like ours requires attendings to rethink the way they teach and co-manage resident teams. However, even when attendings are present, they can use strategies to promote residents' perception of autonomy and to enhance residents' team management and teaching skills, while providing attendings an environment for enhanced evaluation of residents' clinical judgment. By giving the understudy the spotlight, we hope to simultaneously improve resident autonomy and maintain high-quality, safe patient care.

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It's Bigger Than Just the Visit: A Resident and Faculty Ambulatory Transition-of-Care Curriculum

Hospital systems are being challenged to reduce readmission rates and improve transitions of care. In many instances, care operates as separate silos without effective coordination and communication. Many elements of discharge planning have been examined in the literature, including medication reconciliation, involvement of a pharmacist, telephone calls from health care providers, and involvement of patient navigators (1-4). We observed that the initiatives primarily target transitions of care at the point of hospital care and hospital discharge; residents and faculty infrequently receive formal training on them. We recognized that our residents and faculty needed education and tools to help navigate and integrate these new initiatives. Therefore, we strove to develop a more comprehensive resident and faculty curriculum that examined the full scope of transitions of care—from the admission to the discharge, to the reintegration of the patient into his or her medical home and community.

In particular, our literature review revealed a paucity of articles on ambulatory transition of care and identified few curricula developed around transitions from hospital to the home with attention to the post-discharge follow-up visit (5-7). As educators, it is essential that we provide medical learners with the tools needed to reintegrate patients into their communities and medical homes and that we prepare them for new models of primary care delivery. As health care moves to a more holistic patient-centered approach, new models of primary care, such as the Patient–Aligned Care Team model developed through the Department of Veterans Affairs, are recognized for their patient-centered approach that improves quality, safety, and effectiveness (8). The hospital follow-up visit serves as a critical bridge for a successful transition, by identifying needs and linking to resources. In addition, the follow-up visit may not necessarily be provided by the patient's primary care provider and may be another intermediary or transition step along the continuum of care that the patient receives. Therefore, effective documentation and communication with the primary care team is essential. Within our transition-of-care curriculum, we developed an ambulatory focus for both resident education and faculty development to conduct more standardized, comprehensive, and patient-centered hospital follow-up visits.

Our aims for the project were threefold. The first was to integrate a resident ambulatory transition-of-care curriculum and provide associated faculty development. Our second was to actively engage residents in clinic through a preceptor prompt tool that improves hospital follow-up visits. The third was to utilize a template to better standardize hospital follow-up visits and incorporate use of transitional care management (TCM) billing codes.

Targeted Needs Assessment

A pre-intervention survey administered to residents and general internal medicine faculty precepting in the resident continuity clinic identified the development of a hospital follow-up component as an area of need in the curriculum. Among residents, 53% reported no prior formal training on hospital follow-up visits, and 47% reported having received little prior formal training. When asked to rate their skill level regarding key components of a hospital follow-up visit on a five-point Likert scale, 5% of residents rated themselves a 5 (very skilled), 47% rated themselves a 4 (skilled), and 48% rated themselves a 2 or 3 (moderate or limited skill). Likewise, 69% of faculty reported having received no prior training on how to teach learners about hospital follow-up visits, and 46% rated themselves as a 3 or below (moderate or limited skill) with regard to how skilled they felt in their ability to teach learners about hospital follow-up visits.

Educational Strategy and Implementation Framework

Tool Development

We developed an educational support tool in the form of a pocket card, with the dual purpose of educating learners while enhancing patient safety and preventing readmissions **(Figure 1).** Preceptors and residents receive instruction in the seminars on how to use the card in clinical practice as a prompt, rather than a checklist, and to identify key transitions of care pitfalls as well as patient and family needs when presenting for hospital follow-up in the clinic. On the card's reverse **(Figure 2)** is a strategy to enhance and standardize hospital follow-up visit documentation and support use of TCM billing codes.

Resident Ambulatory Transitions-of-Care Curriculum

Interns and residents participate in STAR (Safe Transitions Across caRe) educational seminars, which examine the full scope of transitions of care: from admission to discharge to reintegration into the medical home and community. The ambulatory sessions introduce the hospital follow-up prompt tool for use in clinic, inform residents about issues that may prevent readmissions, and ensure that patients have safely transitioned to their homes. The workshops incorporate a combination of presentations, large group discussion, and small group breakout sessions to examine strategies that can improve hospital follow-up care. Learners also explore use of a visit template to improve patient safety and quality of the hospital follow-up visit.

Faculty Seminars

Faculty need to be proficient in engaging and training residents, therefore similar seminars are offered to faculty who precept in the outpatient continuity clinics. The ambulatory sessions introduce a hospital follow-up preceptor prompt tool

FIGURE 1. STAR Hospital Follow-Up Visit Tool/Preceptor Prompt Tool

Safe Transitions Across Care — Hospital F/U Visit

What happened during the hospitalization?

Medical Management

- What occurred during the hospitalization?
- Was the patient in the ICU during hospitalization? (may consider sending to Pulm walk-in clinic for PFT's)
- What key studies or labs were ordered?
- Are there any follow-up labs or pending results?
- Have key appointments and referrals been made?
- Any anticipated risks for the patient?
- Have goals of care/end of life been discussed?
- Have you communicated with the PCP/Key providers?

Medication Management

- Was the patient able to obtain the medications?
- Does the patient understand medication changes?
- Are there any barriers to medication adherence?
- Have you updated/reviewed list in the EMR?
- Is the patient's pharmacy aware of the new list? (many patients' chronic meds are on automatic refill)
- Does the patient have a medication organization system?

How can we keep the patient home?

Self-Management

- Does the patient understand new diagnoses?
- Has the patient been trained on warning signs?
- Does the patient have contact information for the clinic?
- Is the patient aware of dietary guidelines or guidelines for chronic disease management?
- Does the patient need equipment at home?
- Is the patient able to do activities of daily living?
- Has the patient had a cognitive and/or physical function assessment?
- Has the patient been evaluated for depression?

Social Network

- Does the patient have family support during this illness?
- Do you think key family members need to be contacted with the plan of care?
- Is the patient tied into any community, pastoral care, or social networks?
- Does the patient have a case manager or mental health worker?
- Does the patient need Home Health Services?
- Is transportation an issue for the patient?

FIGURE 2. STAR Hospital Follow-Up Visit Tool/Clinic Note Template Tool

Safe Transitions Across Care — Hospital F/U Template

General Internal Medicine Clinic—Hospital Follow-up Visit

Preceptor:

Date of service:

Date of phone call:

HPI: This is a ## yo M/F with a medical history significant for ***

Hospital course:

Post-discharge course:

Additional concerns:

Resource/Needs assessment:

- Patient comes to the visit today {alone or with companion}
- The patient came to the appt by {ID transportation}
- The patient was discharged with the following services:
- Medical equipment in the home includes ***
- Patient is monitoring the following measurements at home:
- His/Her functional status is {GER functional status}
- He/She is independent in the following ADLs:
- Social support includes ***

Note: { } denotes a dropdown box

Advance directives:

Patient has a past medical history of ***

I have independently reviewed and updated the patient's past medical history, past surgical history, medication list, and social history as noted in the electronic medical record.

ROS:

Objective (vitals and physical exam)

Assessment and Plan

This is a ## yo M/F with a history of *** who presents for hospital follow-up.

Plan of care

Healthcare team coordination

– These individuals will be CC'd:

– Referral made to ***

Needs assessment (discuss items of concern)

... (Problem #1)

... (Problem #2)

Updated medication list:

Follow-up appointments:

FIGURE 3. Post STAR Hospital Follow-Up Visit Seminar Evaluation Results

Baseline	Post-STAR	Plan to address at hospital follow-up
55%	74%	• Assessment of equipment needs • Community and social networks • Transportation needs
45%	54%	• Goals of care • Cognitive and functional status • Barriers to prescription adherence • Family support
35%	44%	• Activities of daily living • Need for home health
25%	34%	• Assess patient's understanding of hospital course
15%	24%	• Confirm that key follow-up appointments have been scheduled

for use in clinic to engage residents on issues that would prevent readmissions and ensure that patients have safely transitioned to their homes. Faculty receive education about the note template that supports documentation and TCM billing codes.

Evaluation

The pre- and immediate post-evaluation demonstrated an increase from 43% to 96% of residents feeling highly skilled (4 to 5 on Likert scale) in the key components of hospital follow-up visits. Immediately following training, residents reported a number of domains that they planned to address in their hospital follow-up visits as a result of the seminar **(Figure 3)**. Specifically, in assessing whether key follow-up appointments had been scheduled, there was a 15% to 24% increase; in assessing a patient's understanding of hospital course, a 25% to 34% increase; in assessing activities of daily living and need for home health, a 35% to 44% increase; in assessing goals of care, cognitive and functional status, barriers to medication adherence, and family support systems, a 45% to 54% increase; and in assessing equipment needs, community and social networks, and transportation requirements, a 55% to 74% increase.

Conclusions

The hospital follow-up visit is a critical bridge for a successful transition and reintegration of a patient into his or her community. Learning to transition patients safely across clinical domains is a critical part of patient care. To date, there have been limited curricula developed that emphasize the ambulatory component of transitions-of-care management, and we identified a clear need for education among both learners and faculty. Because faculty members are leaders in resident education, they must be supported in those areas where they may not have received prior training or where they have little personal experience. Our tool is quick to learn and easy to implement in the clinic, where it can help standardize supervision and education. Brief resident and faculty development sessions facilitate integration into clinical practice and highlight the importance of this area of focus. As residents engage in an improved structure of hospital follow-up, there is the opportunity for early recognition of post-discharge problems and obstacles that can be effectively addressed in the clinic. Additionally, residents and attendings gain an improved understanding of essential elements that can be integrated into their inpatient care and discharge planning. Through the implementation of this care model—which incorporates a more standardized, comprehensive, and patient-centered approach to hospital follow-up visits—safer, more effective care that leads to reduced readmissions and improved clinical outcomes can be a reality.

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Team-Based Evaluation of Interprofessional Collaboration Skills Identifies More Deficiencies Compared with Individual Evaluations

Interprofessional communication plays an essential role in preventing medical errors in patient care. According to the Joint Commission, poor communication among staff, physicians, and patients contributed to 62% of sentinel events reported in 2012-2014. Communication is consistently in the top three most common root causes of sentinel events, along with leadership and human factors (1). Internal medicine residency programs must therefore assess resident communication ability in order to give formative feedback and ensure competence before graduation. The Accreditation Council for Graduate Medical Education (ACGME) formalizes this requirement by asking programs to assess residents using multisource evaluations and measuring their ability to work in interprofessional teams.

Most programs achieve this goal through individual multisource feedback (MSF), or "360-degree evaluations." MSF offers valuable information about resident performance when not under the direct supervision of an attending physician, but it may be difficult to administer and it can miss important deficiencies. A large number of observers or observations is required to generate accurate information. A recent systematic review (2) found that residents must be assessed by at least eight nonphysician coworkers to achieve acceptable reliability and generalizability. This number may be decreased to three observers if the physician can be evaluated over at least three different episodes (3). Furthermore, nonphysicians are generally less critical than attending physicians when filling out evaluations (2). Although it is possible that residents perform less professionally when directly supervised, it seems more likely that the 360-degree evaluations are simply not capturing unprofessional behavior.

In our residency program, we found that individual MSF did not provide adequate, reliable, or useful feedback for the majority of our residents. Fewer than one-third of residents were being evaluated. In six months (July-December 2014), we requested 1,325 360-degree evaluations for 111 categorical residents. Of those evaluations, only 189 (14%) were completed, assessing a total of 30 residents. Each evaluated resident received an average of 6.3 evaluations, with only 11 residents receiving the eight evaluations required for reliability. Additionally, the vast majority (93%) of evaluations did not identify any deficiencies. Even among residents under review by the competency committee regarding unprofessional behavior, 77% of evaluations found no areas for improvement.

As a part of an educational initiative to increase interprofessional education regarding transitions of care, we administered the Team Skills Scale (TSS) to nonphysician team members from November 2014-April 2015. For this pilot, we administered TSS on three rotations (cardiac intensive care unit, medical intensive care unit, and ward teams) at one of our five affiliated hospitals, where the teams are the most well-defined. TSS is a 13-item team-based assessment (**Figure 1**) that evaluates the degree of agreement with measures of communication, accommodation, and isolation (4). We added a single question regarding safe transitions of care. Eighty-four responses were collected over six months. The majority (57%) were completed by nurses, although pharmacists, respiratory therapists, case managers, and social workers made substantial contributions as well. In this sample, only 60% of evaluators reported that medical teams communicated adequately and 70% stated that teams safely transitioned patient care between different environments. Seventy-five percent agreed that the team they worked with accommodated for the needs of all team members and 63% agreed that teams avoided isolation among team members. On average, each team was evaluated by 5.6 coworkers per rotation. Even though we implemented the TSS for a minority of our rotations, we collected evaluations on 80% of our first-year residents during the six-month period, with 27.5% receiving at least two observations during that time period. Due to electives, only 54% of second- and third-year residents were assessed, with 23% receiving two or more observations. However, this was a substantial improvement from our experience with individual evaluations. Overall, team-based assessment identified major deficiencies in team skills among internal medicine residents, which were not detected through individual assessments.

Individual evaluations may inadequately detect weaknesses due to inherent sources of bias. For example, nonphysician staff members receive many individual evaluations and likely choose to evaluate residents who are more memorable, either due to exemplary or highly deficient interprofessional skills. Furthermore, team members may be concerned about evaluating a resident poorly based on limited interaction. These sources of bias are decreased in team-based assessments.

Team-based MSF faces many implementation challenges. Accurately assigning evaluations is difficult, especially in large hospitals where staff members interact with multiple medical teams. Although information from TSS is certainly useful in the formative evaluation of resident teams, it is unclear what role team-based evaluation should have on the summative evaluation of individual residents with respect to competency milestones. In an initial attempt to use the data gathered with TSS, we presented residency-wide aggregate data to

FIGURE 1. Modified Team Skills Scale

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. The team has a good understanding about their respective responsibilities. (Communication)				
2. Team members are usually willing to take into account the convenience of individuals when planning their work. (Accommodation)				
3. I feel that patient treatment and care are not adequately discussed between and among team members. (Communication)				
4. Individuals on the team share similar ideas about how to treat patients. (Accommodation)				
5. Team members are willing to discuss individual's issues. (Accommodation)				
6. Team members cooperate with the way care is organized. (Accommodation)				
7. Team members would be willing to cooperate with new, agreed upon practices. (Accommodation)				
8. Individuals are not usually asked for their opinions. (Isolation)				
9. Team members anticipate when they will need others' help. (Communication)				
10. Important information is always passed between and among team members. (Communication)				
11. Disagreements within the team often remain unresolved. (Communication)				
12. Some individuals think their work is more important than the work of others on the team. (Isolation)				
13. Some individuals would not be willing to discuss new practices with other team members. (Isolation)				
14. The team safely transitions patient care between multiple environments (emergency room to floor, floor to intensive care, ICU to floor, and floor to home). (Transitions)				

the residents during the planned seminar in interprofessional education and transitions of care. Residents found the low scores compelling, but information would be more useful if given to individual teams in real time during a month-long rotation. Team-based assessment is unlikely to replace individual assessments, especially in the remediation of residents who are struggling. However, it may address some of the challenges faced in eliciting useful feedback from nonphysician staff members in residency education.

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Got Empathy? Using Improv and a Theater-Based Workshop to Enhance Communication and Teach Empathy to Residents and Fellows

Background

Empathy is an essential skill for medical professionals to learn and build during training. Increased empathy has been shown to improve the effectiveness of patient care and the well-being of physicians (1-8). However, in the medical community there continues to be much debate about what behaviors constitute empathy in the clinical environment (9). Theater techniques are promising methods for teaching empathic communication skills to clinicians. Theater combines features from each of the following methods, which have been shown in the literature to successfully teach empathy: 1) interpreting of narrative, 2) simulation, and 3) emotion recognition (10-14). Because developing empathy skills during training is imperative, we implemented a theater-based empathy training workshop in internal medicine and its subspecialties. We studied the effectiveness of this intervention in equipping trainees with new empathic behaviors.

Methods

We conducted a six-hour workshop for all clinical staff in the Department of Medicine. All members of the department were required to attend a workshop. Each workshop session included up to 20 participants of varying roles and disciplines. The workshop began with a brief didactic segment, which covered the definition of empathy, communication mnemonics SPIKES (Setting, Patient's perspective, Invitation, Knowledge, Exploring/Empathy, Strategy/Summary) and NURSE (Naming, Understanding, Respecting, Supporting, Exploring), the meaning of empathy, and a demonstration of skills using a breaking "bad news" situation (15, 16). It was followed by an overview of a few principles of improvisational theater—such as "yes, and"—and a few improv games in the large group. These games focused on collaborative meaning making and mirroring. The "yes, and" principle framed the communication interaction as one of agreement and contribution. The participants were asked to agree with and build on what the other person said.

The group of 20 was then divided into smaller groups of five, who worked for the next four hours with a trained facilitator. Each participant spent 25 minutes with an actor within the small group, building empathic communication skills in the context of a case. Each session began with the learner articulating one to three goals on which he or she wanted to focus during the session. The sessions with the actor included facilitator- or participant-initiated timeouts, during which the entire group engaged in reflective dialogue to support the participant in achieving his or her goals. At the conclusion of each session, the participant articulated a take-home point. For example, a participant could say that she wanted to work on naming emotion and found anger particularly challenging. In this case, the actor was asked to heighten the character's anger, and the facilitator would find a moment within the case to concentrate on that skill. This moment could be rewound several times until the participant and the facilitator felt a successful strategy was uncovered, which would likely then be the participant's take-home point.

We defined empathy using deWaal's model of cognitive and embodied empathy and Davis's four domains of empathy: 1) perspective-taking, 2) empathic concern, 3) fantasy, and 4) personal distress (17-18) **(Figure 1)**.

We used items from the CARE (Consultation and Relational Empathy) Measure to assess perceptions of behavior prior to the workshop, immediately following it, and six weeks afterward (19). The pre- and post-surveys were completed using pen and paper at the training sessions. The post-six-weeks survey was sent by email. The questions we used focused on caring, understanding, listening, planning, and explaining. We also added one item on the pre- and post-survey to assess whether the participants felt they could change their communication plan in real time if things were not going well. This last item arose from the observations of many previous trainees who felt powerless to deviate from their communication

FIGURE 1. Davis's Four Domains of Empathy Within deWaal's Cognitive and Embodied Framework

Embodied Empathy	Cognitive Empathy
Empathic Concern and Personal Distress	Perspective Taking and Fantasy

plans once they were in a patient's room. Because empathy is necessarily an individual act—not something that can be codified and applied precisely the same way in every instance—this is an essential skill.

We conducted 26 workshops from October 14, 2013, to August 11, 2014. Along with faculty, we trained fellows from allergy and immunology, cardiology, endocrinology, gastroenterology, geriatrics, hematology/oncology, infectious disease, nephrology, rheumatology, and pulmonary/critical care as well as internal medicine residents in their second year of training. A total of 451 learners, 63 of them trainees, attended workshops during the study period of November 1, 2013, to August 4, 2014. Results were compared using paired samples *t*-tests.

Results

The trainee group consisted of 32 internal medicine PG2 residents and 31 fellows. Of the 63 trainees, 59 (94%) completed the pre-test and immediate post-test. Thirty-one (49%) trainees also responded to the survey given after six weeks. We found that after six hours spent in the theater-based training program, participants reported better ability to engage in empathic behaviors. Participants rated their empathic communication skills significantly higher in all seven areas after completing the course (N = 59) and in all areas at six weeks post (N = 31). Results are displayed in **Figures 2 and 3.**

We also ran independent samples *t*-tests to explore possible differences between males and females, MDs and RNs, or different medical specialties (that is, cardiology v. endocrinology). We found no significant differences in the overall change scores between these groups nor on any individual measure. The intervention was able to address the learning needs of a diverse group of trainees.

Discussion

One goal of simulation training is to approximate real-life situations and environments to teach transferable skills. While some have shown that attention to high-fidelity reenactments facilitates knowledge and skill transfer to the clinical environment, we intentionally took a different approach. In our training, we acknowledged the disconnect between real-life and theater-based training in order to encourage trainees to try new strategies. The use of improvisational and participatory theater techniques enabled us to move trainees from a space of comfort with their current level of skill into a learning space, a liminal space, in which to explore new skills. These skills addressed the cognitive and the embodied nature of empathy equally, something not often done in medical education.

Our results illustrate that a six-hour workshop has the capacity to improve trainees' self-report of empathic communication skills. Moreover, based on short-term follow-up (six weeks), this study suggests that as trainees reentered their real-world practice, they continued to work on these skills and to improve. They were able to translate the fictional situation from the workshop to clinical encounters in their everyday work. Interestingly, at

FIGURE 2. Assessment of Empathic Behavior Before and Immediately After Workshop

During patient encounter, how good are you at:	Pre	Post	Difference	p-value
Explaining things clearly	3.32	3.56	0.24	<0.05
Allowing patients to tell their story	3.31	3.93	0.62	<0.0001
Understanding patients concerns	3.25	3.83	0.58	<0.0001
Making a plan of action with a patient	3.36	3.64	0.28	<0.05
Showing care and compassion	3.59	3.86	0.27	<0.05
Changing the communication plan in real time	2.88	3.50	0.62	<0.0001

Poor = 1, Fair = 2, Good = 3, Very Good = 4, Excellent = 5

FIGURE 3. Assessment of Empathic Behavior Before and Six Weeks After Workshop

During patient encounter, how good are you at:	Pre	Post	Difference	p-value
Explaining things clearly	3.26	4.00	0.74	<0.0001
Allowing patients to tell their story	3.19	4.06	0.87	<0.0001
Understanding patients concerns	3.13	3.84	0.71	<0.0001
Making a plan of action with a patient	3.42	4.03	0.61	<0.001
Showing care and compassion	3.61	4.10	0.49	<0.01
Changing the communication plan in real time	2.87	3.48	0.61	<0.001

Poor = 1, Fair = 2, Good = 3, Very Good = 4, Excellent = 5

The strengths of this study include the participation of clinicians from different disciplines, as well as residents and fellows, suggesting that these methods are useful in education across the continuum.

baseline, the group rated themselves the lowest in the area of "reflection in action" or being able to change course during a conversation. The improvement in these scores suggests that the workshop heightened their ability to flexibly react in the moment. Again, since empathy requires that we treat each person as an individual, it is impossible to script a conversation perfectly before it happens. Therefore, the clinician must know how to reflect in the moment and adjust appropriately.

The strengths of this study include the participation of clinicians from different disciplines, as well as residents and fellows, suggesting that these methods are useful in education across the continuum. Limitations include the use of self-report to evaluate the effectiveness of the workshop and the use of a single center. Further work should focus on gaining observational data of trainee skills before and after the program, as well as studying the impact of this intervention at additional institutions.

Conclusions

The broad application of an intensive empathic communication workshop is feasible and effective, and was broadly accepted by trainees. Participants significantly improved their skills in empathic communication, as evidenced by the self-assessment. We saw a sustained effect six weeks after the learners reintegrated into the clinical environment. This study suggests that adult learners can improve their abilities to engage in empathic behaviors in as little as six hours. More work needs to be done in order to learn how we can equip our trainees with skills that will better connect them with their patients.

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