

Relationships as the Backbone of Feedback: Exploring Preceptor and Resident Perceptions of Their Behaviors During Feedback Conversations

Subha Ramani, MBBS, PhD, Karen D. Könings, PhD, Shiphra Ginsburg, MD, PhD, FRCPC, and Cees P.M. van der Vleuten, PhD

Abstract

Purpose

Newer definitions of feedback emphasize learner engagement throughout the conversation, yet teacher and learner perceptions of each other's behaviors during feedback exchanges have been less well studied. This study explored perceptions of residents and faculty regarding effective behaviors and strategies during feedback conversations and factors that affected provision and acceptance of constructive feedback.

Method

Six outpatient internal medicine preceptors and 12 residents at Brigham and Women's Hospital participated (2 dyads per preceptor) between September 2017 and May 2018. Their scheduled

feedback conversations were observed by the lead investigator, and one-on-one interviews were conducted with each member of the dyad to explore their perceptions of the conversation. Interviews were transcribed and analyzed for key themes. Because participants repeatedly emphasized teacher–learner relationships as key to meaningful feedback, a framework method of analysis was performed using the 3-step relationship-centered communication model REDE (relationship establishment, development, and engagement).

Results

After participant narratives were mapped onto the REDE model, key themes were identified and categorized under the major steps of

the model. First, establishment: revisit and renew established relationships, preparation allows deeper reflection on goals, set a collaborative agenda. Second, development: provide a safe space to invite self-reflection, make it about a skill or action. Third, engagement: enhance self-efficacy at the close, establish action plans for growth.

Conclusions

Feedback conversations between longitudinal teacher–learner dyads could be mapped onto a relationship-centered communication framework. Our study suggests that behaviors that enable trusting and supportive teacher–learner relationships can form the foundation of meaningful feedback.

Newer conceptualizations of feedback describe it as a complex interpersonal interaction that should target recipient behavior change and growth, yet feedback in clinical education mostly emphasizes the skills of giving feedback.^{1–3} Experts recommend learner-centered or learner-initiated approaches situated within a conducive educational alliance and learning culture,^{1,3–10} but whether such approaches enhance seeking, receptivity, and incorporation of feedback is less well studied.^{11–13} Moreover, it is not clear whether teachers and learners have

similar perceptions of the same feedback conversations.^{14–18} Conflicting perceptions of the content and impact of the conversation may lead to defensiveness, anger, and possibly rejection of the feedback.^{19,20} Facilitated reflections of feedback conversations with teachers and learners could promote deeper understanding of and insights into their own behaviors and their opinions on factors that could enhance the impact of feedback.

Feedback initiatives have swung from unidirectional transmission to bidirectional models that advocate alliance building and coaching.^{1,2,21–23} Sociocultural factors, such as teacher–learner relationships, perceptions of credibility, and the institutional learning culture, may strongly influence feedback quality and impact on learners.^{7,24–27} The educational alliance model^{5,21} and R2C2 model (relationship building, exploring reactions to feedback, exploring content, and coaching for change)^{8,28} emphasize learner engagement in the entire process. Exploring feedback

through a sociocultural lens requires further understanding of the impact of relationships between providers and recipients on learner growth and factors that enhance the credibility of feedback and therefore its acceptance.^{16,17}

The R2C2 model suggests that feedback conversations begin by establishing relationships and rapport.^{8,9} In our previous research, residents and faculty indicated that trusting relationships between teachers and learners could facilitate honest bidirectional dialogue targeting learner growth, although they acknowledged that the current practice featured mostly unidirectional dialogues with a near absence of constructive feedback.^{27,29} Although a learning environment that fosters longitudinal relationships could enhance supervision, role modeling, and feedback, the challenges of establishing trusting relationships when contact time is limited cannot be underestimated.^{30,31}

Learners may reject feedback if they do not view the source or the content as

Please see the end of this article for information about the authors.

Correspondence should be addressed to Subha Ramani, Internal Medicine Residency Program, Brigham and Women's Hospital, 75 Francis St., Boston, MA 02115; telephone: (617) 732-6040; email: sramani@bwh.harvard.edu.

Acad Med. 2020;95:1073–1081.

First published online August 27, 2019

doi: 10.1097/ACM.0000000000002971

Copyright © 2019 by the Association of American Medical Colleges

Supplemental digital content for this article is available at <http://links.lww.com/ACADMED/A743>.

credible.^{16,24,32,33} Several factors influence the perceived credibility of feedback, including the relationship with the provider, manner of delivery, perceived intent (supportive versus threatening), data based on direct observation, congruence with self-assessment, and so forth.^{16,18,24,33} We have also previously invoked politeness theory³⁴ to suggest that the desire to project a positive self-image and need for autonomy can further affect feedback credibility perceptions.^{27,29} Thus, various factors pertaining to learners, teachers, relationships, and the learning culture need to be addressed in enhancing the credibility of feedback.

The recent emphasis on relationships and application of coaching principles to feedback^{7,20,21,24,35–39} necessitates further exploration of teacher and learner perceptions of the effectiveness and impact of behaviors that occur during feedback conversations. The purpose of this study was to use facilitated debriefing of dyads of residents and their faculty supervisors (preceptors) in continuity clinics immediately after formal feedback conversations to explore the following questions:

1. What do participants in each dyad perceive as effective behaviors and strategies during formal feedback conversations?
2. What behaviors could influence feedback seeking, acceptance, and incorporation of constructive (corrective) feedback, from the perspective of residents and preceptors?

Method

In this qualitative study, we explored perceptions of outpatient resident–preceptor dyads regarding the content and impact of their feedback conversations. We used the conceptual framework of sociocultural theory,⁴⁰ which states that learning occurs in a community shaped by the culture and relationships, to guide our study design.

Study setting and sampling

Brigham and Women's Hospital is a large, urban teaching institution and an affiliate of Harvard Medical School. The internal medicine training program comprises approximately 150 residents, who are assigned a continuity clinic preceptor for the duration of their training. The

program communicates expectations for regular feedback conversations, but no specific frequency or structure is recommended. The quality of feedback varies according to faculty teaching experience, and feedback training is not mandatory.

Using purposive sampling strategies, we targeted resident–preceptor dyads with longitudinal relationships as most appropriate to answer our study questions.^{41,42} We recruited 6 faculty preceptors and 12 residents (12 dyads total) from the largest residency outpatient training site. Sixty residents and 20 preceptors work together at this outpatient training site; each faculty member is the primary supervisor for 2 or 3 residents. Prospective participants were provided information about the study objectives via email and in person; voluntary participation and confidentiality of opinions were emphasized. No suggestions on feedback strategies or faculty development were provided, and no training in models such as R2C2 or educational alliance was provided.

Study framework and data collection

Using an open-ended qualitative approach,^{42,43} we explored perceptions of resident–preceptor dyads regarding each other's feedback behaviors and factors that influenced provision and acceptance of constructive feedback during these conversations. Data collection occurred between September 2017 and May 2018, ensuring that each pair had worked together for at least 6 months (relationships ranged from 6 to 30 months according to the postgraduate year of the resident). Final selection was based on availability of investigator and resident–preceptor dyads to schedule observation and debriefing of feedback conversations. Each pair scheduled a feedback conversation after the preceptor observed a resident–patient encounter in clinic. The lead investigator (S.R.) observed each feedback conversation and conducted sequential but separate interviews with each member of the dyad after their conversation. Sample triggers invited preceptors to reflect on their behaviors that may have positively or negatively affected the conversation, as well as unexpected moments that arose during the encounter (for sample questions, see Supplemental Digital Appendix 1 at <http://links.lww.com/>

ACADMED/A743). Reflexive insights were encouraged by asking preceptors to recall behaviors that they might consider changing in future conversations. Resident interviews focused on their overall impressions of the conversation, their opinions on the effectiveness of preceptor feedback language and behaviors, and whether specific action plans had been discussed. Interviews lasted about 15 minutes and were audiotaped and transcribed for analysis. These steps are depicted in Figure 1. The data for this study were transcripts of the interviews between S.R. and participants. Investigator observations and field notes guided interview questions and ensured accuracy of event recall. The trigger questions were modified as appropriate for future interviews.

Reflexivity is integral to rigor in qualitative research to explain authors' relationship to the subject and participants.⁴⁴ S.R. practices and supervises residents at the same practice but has no role in faculty evaluation, hiring, or promotion. Although a core educator in the residency program and a supervisor of residents (not included in this study), S.R. is not responsible for resident remediation or graduation decisions. Participants were aware that S.R. was exploring the process of feedback within the department and leading efforts to improve its quality. S.R.'s knowledge of the practice and the educational environment allowed for exploration and questioning of aspects of feedback practices with participants using a shared language. The other authors (C.P.M.V., K.D.K., S.G.) are experienced educational researchers external to the institution. S.G. is also a practicing internist and clinical teacher of residents and thus knowledgeable of the setting in which clinical supervision occurs.

Data analysis

Data collection occurred concurrently with analysis and informed future data collection. We audiotaped and transcribed all interviews; no identifying information was retained in the transcripts. During open coding, each data unit referring to a specific issue was assigned a code consistent with participants' terminology; similar codes were grouped under coding categories.^{45,46} Analysis then moved from the categorical level (open codes

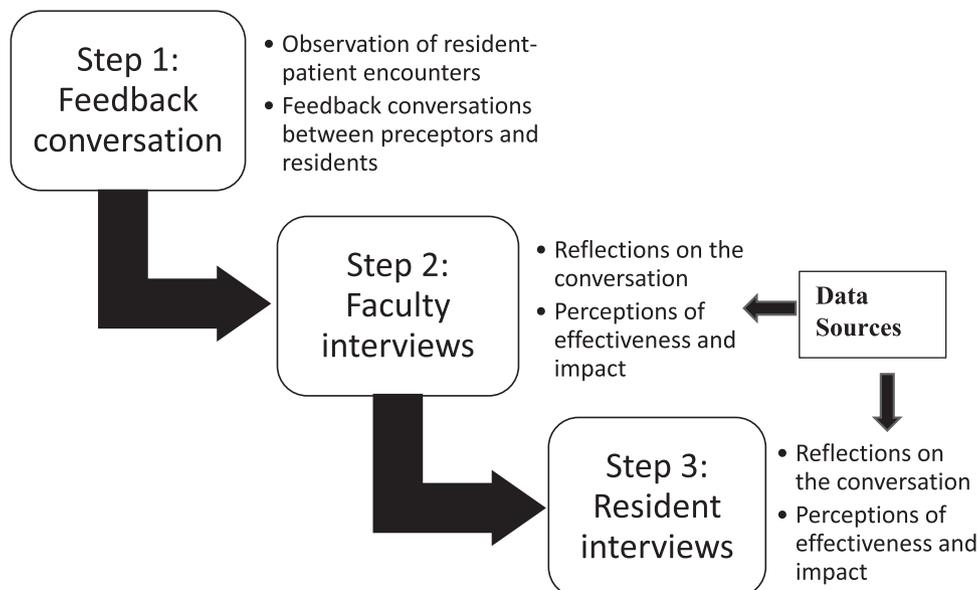


Figure 1 Steps of data collection for study on perceptions of resident and continuity clinic preceptors (12 dyads) regarding effective and ineffective behaviors during feedback conversations, Brigham and Women’s Hospital, September 2017–May 2018. In Step 1, feedback conversations were taped and investigator field notes were recorded. Steps 2 and 3 refer to faculty and resident interviews, respectively. Transcripts of these interviews provided the data sources for analysis.

and categories) to the conceptual level (relationships between codes and construction of important themes). Because the topic of teacher–learner relationships was raised repeatedly by all participants, we used a framework method for thematic analysis,^{46,47} through the lens of a relationship-centered communication model. The framework method is a type of thematic analysis that allows streamlined output from discussions of topics that could generate a variety of participant opinions.⁴⁸ After reviewing 2 relationship-centered communication models,^{48,49} we chose the REDE (relationship establishment, development, and engagement) model to frame our analysis. The REDE model, a 3-step approach developed at Cleveland Clinic, has been used to train health care providers in improving communications with patients through meaningful relationships.⁴⁹ The 3 core steps of relationship establishment, development, and engagement appeared very applicable to preceptor and resident feedback conversations. We did not use the substeps of this model because most were specific to patient conversations. The participant narratives were mapped onto the 3 steps of the model and further sorted into themes under each of the steps. All transcripts were reviewed in detail by S.R. The other investigators (S.G., K.D.K., C.P.M.V.) reviewed selected transcripts to ensure that assumptions by

S.R. did not drive the analysis. Through ongoing discussions, the team reached consensus on the coding scheme. The entire research team had several meetings to discuss overarching themes and to ensure that the study questions were addressed adequately. Manual coding was performed initially, followed by computer-assisted qualitative data analysis using NVivo 10 Pro software for Windows (QSR International Pty. Ltd., Melbourne, Australia) to organize codes, themes, and quotes and retrieve data for more detailed analysis.

We ensured methodologic rigor through triangulation in data collection (interview transcripts, investigator observations, and field notes), data analysis (independent data analysis by 2 investigators followed by team discussions and consensus), and member checking after each debriefing interview to ensure that interpretations of observations were accurate.^{50,51} Finally, S.R. maintained a journal of assumptions and opinions, discussed the assumptions and opinions during investigator team meetings, and obtained recommendations from the rest of the team on modifying interview questions as appropriate to ensure openness to varying perspectives.

Ethical approval

The study was granted exempt status by the Partners Institutional Review

Board, the review board for Brigham and Women’s Hospital (Protocol #2013P002270/BWH). Verbal consent was obtained from participants before observation and audiotaping of interviews.

Results

Each of the 6 preceptors scheduled feedback conversations with 2 of their clinic residents. A total of 12 dyads was observed and interviewed. Approximately 250 minutes of interview transcripts from 12 feedback conversations were collected. After participant narratives were mapped onto the REDE model, we were able to identify key themes, related to effective and ineffective feedback strategies, under the 3 major steps of the model. The themes are presented in Figure 2.

The description of each theme begins with investigator interpretations of participant reflections and comments during the debriefing interviews, backed by field notes of the investigator-observed conversation. Representative quotes from faculty (F) and residents (R) follow the interpretations.

Step 1: Relationship establishment

Because participants were preceptor–resident dyads who had worked together for at least 6 months, language and behaviors used to open the conversation frequently referenced

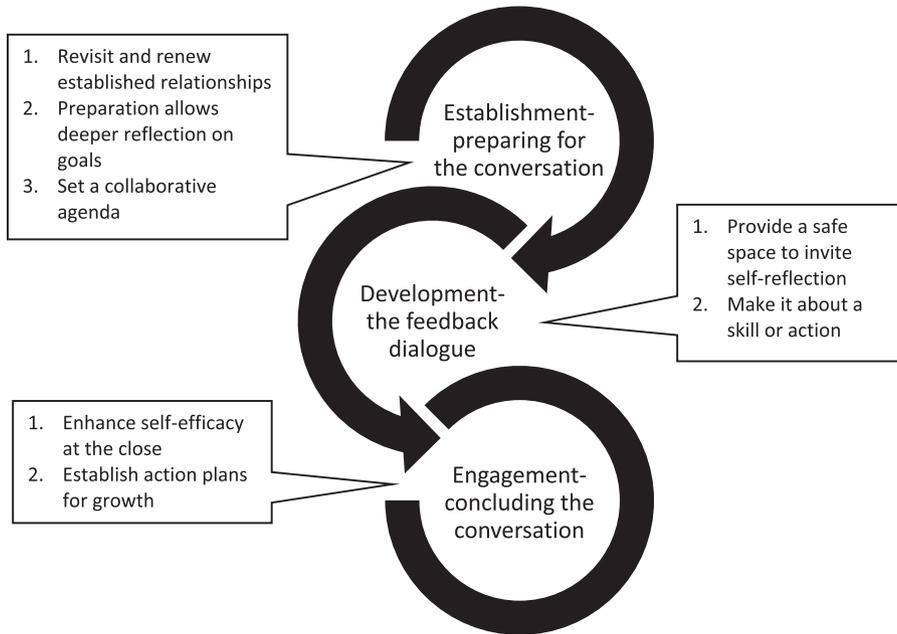


Figure 2 Results of a framework-based analysis of participant narratives in study on perceptions of resident and continuity clinic preceptors (12 dyads) regarding effective and ineffective behaviors during feedback conversations, Brigham and Women’s Hospital, September 2017–May 2018. Key themes were identified under each of 3 main steps of the relationship-centered communication model REDE (relationship establishment, development, and engagement).

previously established relationships and rapport. Some conversations began as a continuation of goal discussions started during a previous conversation. The 3 themes under this step pertained to renewing established relationships, preparing for the conversation, and setting a collaborative agenda.

Revisit and renew established relationships. Residents and faculty emphasized the value of longitudinal relationships that allowed them to get to know each other and establish a comfortable environment in which strengths and deficiencies in performance could be discussed in a nonthreatening way. Most of the pairs referred to previous discussions, linking them to the goals of the feedback discussion on the day of the interview, with language such as, “The last time we had discussed that we would work on . . .” Though the relationship had been established previously, participants referred to the strength of their rapport and appeared to renegotiate their relationship during this conversation.

We’ve worked together a lot, and that made it very easy for me to ask her to do this observation and, hopefully, made her feel more comfortable in doing it. I hope we will do it more even when you do not encourage it because I enjoyed just seeing her in clinic and unwrapping that mystery. (F4)

I very much respect her as a primary care physician. Also I think we have just developed a relationship where I’m very comfortable going to her when I don’t know something. I’m not afraid that she’s going to judge me . . . I don’t fear repercussion when I don’t know something and I ask her. (R8)

One resident stated that actionable feedback from someone the resident trusted would be definitely credible. However, the resident also wondered if it would be emotionally difficult to hear something constructive from a trusted faculty.

She knows me well, so I think the feedback is reliable. I think it might be hard to get something horrible coming from someone who knows you well and who you like. But, in terms of saying this is what you could do better, and giving actionable pointers, I think that it’s nice coming from someone who’s seen you do a lot of stuff and knows how you work very well. (R6)

Preparation allows deeper reflection on goals. All participants stated that preparing for the conversation enhanced the quality of the feedback. Preceptors observed a complete resident–patient encounter before their conversation and jotted down specific examples to frame their feedback. They stated that planning these conversations prompted

deeper reflections about the content and takeaway messages for residents. Residents formulated specific learning goals and challenges to discuss with their preceptors.

In a setting where we’re thinking more concretely about the feedback, what it forced me to do is to not fall into the trap, for residents who look very promising, of saying, “You’re doing great. Aren’t you great?” Pat, pat on the back and off you go. Because then they’re not building their skills. (F1)

It gave me an opportunity to critically think about my performance and ways that I can provide better care for patients, things that I am doing well, and areas that, as we all have, areas to improve in. (R1)

Set a collaborative agenda. Scheduling the feedback encounter in advance also allowed the preceptor and resident to select a patient for the direct observation and target types of patient challenges that would benefit the most from the observation and feedback.

Where it helped me is planning ahead of time, like picking a patient where she had specifically asked me to observe . . . it was the approach to a challenging patient because she knew going in that it may be a difficult encounter. It allowed me to pick up just those pieces. (F4)

Before we did that session where she observed me, we sat down and she asked

me what I wanted her to specifically focus on and get feedback on, and I shared that with her. She was able to give me feedback on the area that I wanted feedback on, that I sought feedback on. (R6)

Overall, a congenial relationship was considered essential in setting the stage for a feedback dialogue. Residents' reflections on their strengths, weaknesses, and challenges and data from direct observation of residents by preceptors were brought to the table for a useful discussion that could effect changes in practice. All dyads referred to rapport established at the start of their working relationship, which made it easier to engage in a meaningful dialogue. Finally, participants reaffirmed the benefits of direct observation of residents in framing a formal feedback conversation and stated that the conversations needed to occur more frequently.

Step 2: Relationship development

In this step, we included themes pertaining to development or maintenance of established relationships, such as the environment in which the conversation occurred and strategies used for shared decision making and to facilitate acceptance of constructive feedback. The 2 key themes in this step: a safe space for self-reflection and make it about a skill or action.

Provide a safe space to invite self-reflection. Residents stated that their preceptors were supportive, provided a safe environment, and posed questions that were a genuine invitation to express their challenges. Most preceptors initiated conversations with open-ended questions by asking residents to describe what they did well and what they found challenging. They typically used self-reflection to launch constructive feedback discussions as well as assess residents' insight into their performance. Residents used this opportunity to critically appraise their performance and reflect on their strengths and areas for improvement. Open-ended questions from preceptors allowed them to reflect on their overall performance and greatest challenges, articulate specific goals, and contribute meaningfully to the conversation.

You can learn something about where they think they are. People, especially highly accomplished people, are good at putting up a good front. Letting them talk first, letting them run a little . . . not cutting them off too early . . . could be very useful. (F1)

It was nice to start with an invitation for what I thought. I think it also helped prime her (preceptor) too; if I had basically agreed with everything she thought, then, maybe she'll feel more comfortable delivering it. (R2)

Not all preceptor–resident conversations had the optimal balance of preceptor talking (communicating their observation and opinions) versus reflective listening (allowing for resident narrative, using encouraging prompts to stimulate more resident perspectives). Two specific challenges expressed by preceptors included: not waiting long enough to allow a resident to speak and redirecting a resident who focused on a difficult patient encounter rather than critically reflecting on areas for improvement.

I should have spoken less and allowed more of the resident narrative. Next time, I need to ask the resident about their action plans rather than giving them my suggestions. (F5)

I think the resident ended up steering the conversation quite a bit. Which has ups and downs. I think maybe we ended up not being clear enough in terms of what I think the real issue was with the history taking. (F3)

Make it about a skill or action.

Preceptors stated that they used concrete examples from the patient encounter as a basis for providing constructive feedback. Most verified resident agreement and invited the resident's perspective on the context of the encounter.

You need to find a way to make it about a skill or an action. Then, you add more detail. "It seemed like Miss X was confused when you tried to explain how to change her insulin. Are there other ways to . . ." and trying to draw them out about those deficiencies. (F6)

I also really appreciate how she had constructive, very specific feedback, not just general comments, but exact moments that she captured in time, that supported things I could do better next time. I think it was gently delivered, which is nice. (R5)

Residents emphasized that constructive feedback was essential for their growth, even if it caused an initial negative emotional reaction. Supportive faculty, specificity of feedback with examples of their own words and behaviors during patient interactions, and the tone in which it was delivered promoted acceptance.

I think one of the things in feedback that is often missing . . . the general feedback that I've had is, "You're doing a great job," which is nice to hear, but I'm a 6-month-old intern. I know I have a lot of things I can improve on. (R1)

There's this visceral feeling when you want to do everything right, that all of a sudden you have this area of constructive feedback like, "Oh, I'm doing something wrong," but I think I've come to the realization, it's not a bad thing that I will always have things I need to improve in. (R2)

In developing the relationship, preceptors reported the importance of providing a safe space for residents to discuss challenges and deficiencies. Preceptors used residents' self-reflection not only to learn about residents' challenges and exchange feedback specific to those challenges but also to gauge residents' capacity to accurately self-assess.

Step 3: Relationship engagement

In this step, we categorized strategies used to consolidate key points and conclude the feedback conversation. Key themes identified under this step: enhancing self-efficacy and establishing action plans.

Enhance self-efficacy at the close.

Motivating residents in their professional growth seemed to be an important goal for all preceptors, and they raised this theme repeatedly. All preceptors indicated that they wanted feedback conversations to end on a happy note and conclude with emphasis on resident strengths to enhance residents' self-efficacy.

He has a very good skill set, a really good attitude and style. Very promising. I want to motivate him to say, how can he be getting more out of the experience? How can he be broadening what he's doing? (F5)

The compulsion to ensure resident self-efficacy sometimes prevented preceptors from a comprehensive discussion of constructive feedback.

I think she wouldn't have been ready for it. You are so fragile at that stage of training (I was) that I'm not sure I would have said more. Yeah. I think I don't know if I would have wanted to go further or be harsher about some of the gaps I perceived. (F3)

Establish action plans for growth. All conversations ended with discussion of action plans to change some aspect of behavior or practice. According to

residents, action plans for growth were a critical step in feedback conversations. Some preceptors were comfortable with allowing residents to initiate plans, while others provided recommendations first and then checked in with residents.

I felt like that was how the session with her (preceptor), which I think is the most useful, which is a small number of things are talked about, a plan is made on how to change them, and then what we're going to do moving forward with that plan. (R6)

I remember one thing I asked was, I felt overwhelmed when patients are really complex, and even though I prepare before clinic days, somehow they get in the room, and it's just really hard to make my plan go forward . . . we actually came up with a game plan together—why don't we do either an email or in-person huddle before these patients? We also enacted that plan. (R1)

However, both preceptors and residents reported that action plan language was not always specific, and they did not clearly discuss how and when to implement action plans.

I felt like I don't have a great framework for moving the conversation beyond just strengths and areas for improvement . . . in terms of coming up with any kind of action plan or any summary . . . I feel like I don't have a system for that. (F3)

It was discussed but not perhaps very concretely. I still think that the things she gave me as feedback were somewhat actionable items, but I don't know if I reset new goals for next session, though. (R3)

Pertaining to the engagement phase, all preceptors reported ending the conversation with a summary of performance areas that needed improvement and checking for resident agreement. However, not all of them effectively discussed the specifics of how and when to enact these plans. Only some pairs systematically coconstructed future learning opportunities to enact these plans.

Discussion

Using facilitated reflection, we explored perceptions of resident–preceptor dyads regarding effective and ineffective strategies during their feedback conversations and factors that promoted or impeded receptivity to feedback. Despite not receiving training on feedback models that emphasize

relationships,^{5,8,9,21} our participants repeatedly emphasized that longitudinal relationships allowed faculty and residents to interact in a safe space, thus facilitating exchange and acceptance of constructive feedback. Faculty stated that direct observation of resident–patient interactions helped them frame feedback that was credible to residents. Facilitating resident self-reflection on performance allowed faculty to be aware of residents' challenges and fears, target their performance observation, and calibrate residents' ability to self-assess. Residents and faculty acknowledged that action plans did not always feature clear language or concrete next steps to try new behaviors. Finally, although preceptors were keen to discuss areas for improvement, they were committed to concluding the conversation on a happy note and enhancing the self-efficacy of residents.

The results of this study advance previous knowledge regarding sociocultural influences on feedback by obtaining unique insights from preceptor–resident pairs into their actions and behaviors during real-life feedback conversations. The dyads were able to reflect on the match or mismatch between intentions of feedback providers and perceptions of recipients, the specificity or lack thereof of feedback language, and what behaviors needed to change in future conversations. They spontaneously focused on the value of longitudinal resident–preceptor relationships and how such relationships should be protected and leveraged to conduct meaningful feedback conversations. Our findings suggest that 3 key strategies could effectively enhance learner receptivity to and impact of feedback: relationships, performance observation that preserves learner self-efficacy and autonomy, and concrete action plans coconstructed by the teacher and learner. These findings shed further light on factors that enhance credibility of feedback as described by other investigators—credibility of feedback provider (relationships, perceived beneficence, framing of feedback) and the data they provide (based on performance observation, consistency with learner self-assessment).^{24,32,33,52–54} Previous studies have linked politeness concepts to evaluation narratives and feedback conversations;^{27,29,55,56} our results highlight the importance of attention to these concepts during feedback

conversations, even in the context of established longitudinal relationships. Below, we discuss further the impact of teacher–learner relationships on feedback conversations, the intersection of politeness concepts with direct observation and feedback, and action plans that target behavior change.

Conducive teacher–learner relationships were said to be critical to meaningful feedback conversations. Residents reported that their comfort in discussing challenges and receptivity to constructive feedback resulted from collegial longitudinal relationships with preceptors, trust in their judgment, and conviction about faculty investment in their growth. Relationship-centered feedback models, such as R2C2 by Sargeant and colleagues,^{8,9,28} educational alliance by Telio et al,^{5,21} and feedback tango by Bing-You and colleagues,²² place learners at the heart of a feedback conversation. Our findings add to this literature through the discovery of unique in-the-moment strategies used by preceptors to address learner self-efficacy and autonomy (politeness concepts),³⁴ thereby protecting their longitudinal working relationships. Specifically, faculty referred to established relationships, invited self-reflection, gauged learners' receptivity to constructive feedback, and used strategies that emphasized alliance (we are doing this together). Some studies have reported that clinical rotations with limited faculty–resident interactions could lead to infrequent performance observation,^{30,31} resulting in decreased credibility of feedback data.^{24,25} However, Farrell and colleagues argued that educational alliances can be developed even during brief encounters, if preceptors and learners negotiate learning goals throughout their interaction and practice goal-oriented feedback.⁵⁷ Continuity clinics could provide a unique setting to foster dyadic relationships; allow faculty and learners to create feedback loops comprising negotiation of learning goals, observation, reflection, and formulation of action plans; and create new learning opportunities to implement action plans.

Preceptors in our study indicated that direct observation of resident–patient encounters and using specific examples allowed exchange of meaningful feedback. Residents expressed receptivity to constructive feedback and willingness to

change future behaviors when preceptors provided examples from observed encounters. Despite these perspectives regarding the benefits of direct observation, both sides referred to the importance of resident autonomy even among novice residents. Though research suggests that direct observation of learner performance enhances the perceived credibility of the feedback,^{24,32} there are concerns that advanced clinical learners may view teacher presence during patient interactions as a threat to their autonomy.^{24,29,37,58} Our study provides additional data that even the dyads who had comfortable longitudinal relationships acknowledged that performance observation occurred infrequently. It is possible that this hesitancy to observe residents may be due to preceptors' desire to protect resident autonomy. Emphasizing autonomy as a developmental process, embedding periodic direct observation in clinical education, and training faculty to support autonomy while performing performance observation could be important strategies to ensure safe patient care and accurate feedback data.^{59,60}

Finally, a key step toward behavior change and performance improvement involves discussion and implementation of concrete action plans. Although some preceptors appeared comfortable in guiding residents' formulation of next steps, others provided vague action plans that left residents uncertain about the plan and the follow-up. Establishing educational alliances that foster bidirectional dialogue, application of coaching principles that emphasize specific steps for improvement agreed upon by teacher and learner, and coconstruction of the learning environment with opportunities to apply new behaviors could be successful strategies to navigate this step, while satisfying learner needs of self-efficacy and autonomy.^{5,8,9,21,28,61–63}

Limitations

This study has a few limitations that need to be discussed. The inquiry was based at a single residency program, and our interpretations may not be transferable to different specialty training programs or institutions that may vary in size, setting, location, or mission. Our participants were a small sample of a larger faculty and resident population, and we may not have captured a full range of feedback

behaviors or opinions. Nonparticipants may have contrasting viewpoints about teacher–learner relationships or variable feedback practices. All feedback conversations in this study were preceded by direct observations of full resident–patient encounters, but preceptors typically observe only short segments of resident–patient encounters. Thus, there was a change from their usual practice. Moreover, our study was limited to continuity clinic settings, and such conversations are bound to have a different scope and different challenges in other clinical settings. However, our context is typical of continuity clinic settings in large medicine residency programs, and the findings are potentially transferable to similar postgraduate education settings.

Suggestions for further research

Perceptions of preceptor–resident dyads provided interesting insights into how the participants viewed each other's behaviors during feedback conversations. They saw eye to eye on many aspects of the feedback conversation; therefore, it is possible that they have a shared mental model of the process and content. More research is needed using observational methods to examine verbal and nonverbal behaviors during feedback conversations and whether intentions of feedback providers match perceptions of feedback recipients. Similar research inquiries are needed to examine learner-centered feedback practices in a variety of primary care settings where teachers and learners have longitudinal relationships, clinical settings without longitudinal relationships, different departments, as well as different institutions, because the results of this study cannot be directly applied to all medical education settings. Finally, it is essential to study whether feedback initiatives that emphasize relationships lead to behavior change.

Conclusions

Extending the insights gained from newer feedback models, our findings support the premise that relationship-centered communication models are applicable to foster meaningful feedback conversations between clinical supervisors and trainees. It is very likely that trusting and supportive teacher–learner relationships form the backbone of feedback conversations and promote feedback seeking and acceptance.

Dedication: A major source of inspiration and guidance to the research team and a personal role model to S. Ramani was the late Karen V. Mann, PhD, whose mentoring, wisdom, and guidance are sorely missed.

Acknowledgments: The authors gratefully acknowledge the residents and faculty who enthusiastically participated in the study and shared their perceptions, challenges, and suggestions for best practices related to feedback, as well as the leadership of the Department of Medicine at Brigham and Women's Hospital for active support of educational research in general and this research in particular.

Funding/Support: This study was funded by the Department of Medicine Clinical Education Research Scholars Grant at Brigham and Women's Hospital.

Other disclosures: None reported.

Ethical approval: The study was granted exempt status by the Partners Institutional Review Board, the review board for Brigham and Women's Hospital (Protocol #2013P002270/BWH). The board deemed that verbal consent was adequate, provided that narratives were deidentified.

Previous presentations: The results of this research study were presented as part of S. Ramani's PhD defense at Maastricht University, Maastricht, the Netherlands, on October 31, 2018.

S. Ramani is associate professor of medicine, Harvard Medical School, director, Scholars in Medical Education Pathway, Internal Medicine Residency Program, Brigham and Women's Hospital, and leader of research and scholarship, Harvard Macy Institute, Boston, Massachusetts; ORCID: <https://orcid.org/0000-0002-8360-4031>.

K.D. Könings is associate professor, Department of Educational Development and Research and School of Health Professions Education, Faculty of Health, Medicine and Life Sciences, Maastricht University, Maastricht, the Netherlands; ORCID: <https://orcid.org/0000-0003-0063-8218>.

S. Ginsburg is professor of medicine (respirology) and scientist, Wilson Centre for Research in Education, University of Toronto, Toronto, Ontario, Canada.

C.P.M. van der Vleuten is director, School of Health Professions Education, and professor of education, Department of Educational Development and Research, Faculty of Health, Medicine and Life Sciences, Maastricht University, Maastricht, the Netherlands; ORCID: <https://orcid.org/0000-0001-6802-3119>.

References

- 1 Boud D. Feedback: Ensuring that it leads to enhanced learning. *Clin Teach*. 2015;12:3–7.
- 2 Molloy E, Boud D. Seeking a different angle on feedback in clinical education: The learner as seeker, judge and user of performance information. *Med Educ*. 2013;47:227–229.
- 3 Delva D, Sargeant J, MacLeod T. Feedback: A perennial problem. *Med Teach*. 2011;33:861–862.
- 4 Cantillon P, Sargeant J. Giving feedback in clinical settings. *BMJ*. 2008;337:a1961.

- 5 Telio S, Ajjawi R, Regehr G. The “educational alliance” as a framework for reconceptualizing feedback in medical education. *Acad Med.* 2015;90:609–614.
- 6 Watling C. Resident teachers and feedback: Time to raise the bar. *J Grad Med Educ.* 2014;6:781–782.
- 7 Watling C, Driessen E, van der Vleuten CP, Lingard L. Learning culture and feedback: An international study of medical athletes and musicians. *Med Educ.* 2014;48:713–723.
- 8 Sargeant J, Lockyer J, Mann K, et al. Facilitated reflective performance feedback: Developing an evidence- and theory-based model that builds relationship, explores reactions and content, and coaches for performance change (R2C2). *Acad Med.* 2015;90:1698–1706.
- 9 Sargeant J, Lockyer JM, Mann K, et al. The R2C2 model in residency education: How does it foster coaching and promote feedback use? *Acad Med.* 2018;93:1055–1063.
- 10 Ramani S, Könings KD, Ginsburg S, van der Vleuten CPM. Twelve tips to promote a feedback culture with a growth mindset: Swinging the feedback pendulum from recipes to relationships. *Med Teach.* 2019;41:625–631.
- 11 Perera J, Lee N, Win K, Wijesuriya L. Formative feedback to students: The mismatch between faculty perceptions and student expectations. *Med Teach.* 2008;30:395–399.
- 12 Branch WT Jr, Paranjape A. Feedback and reflection: Teaching methods for clinical settings. *Acad Med.* 2002;77(12 pt 1):1185–1188.
- 13 Mazor KM, Holtman MC, Shchukin Y, Mee J, Katsufraakis PJ. The relationship between direct observation, knowledge, and feedback: Results of a national survey. *Acad Med.* 2011;86(10 suppl):S63–S67.
- 14 Bing-You RG, Paterson J, Levine MA. Feedback falling on deaf ears: Residents’ receptivity to feedback tempered by sender credibility. *Med Teach.* 1997;19:40–44.
- 15 Finn AN, Schrodt P, Witt PL, Elledge N, Jernberg KA, Larson LM. A meta-analytical review of teacher credibility and its associations with teacher behaviors and student outcomes. *Commun Educ.* 2008;60:75–94.
- 16 van de Ridder JMM, Berk FCJ, Stokking KM, ten Cate OTJ. Feedback providers’ credibility impacts students’ satisfaction with feedback and delayed performance. *Med Teach.* 2015;37:767–774.
- 17 Watling C, Driessen E, van der Vleuten CP, Lingard L. Learning from clinical work: The roles of learning cues and credibility judgements. *Med Educ.* 2012;46:192–200.
- 18 Sargeant J, Mann K, Ferrier S. Exploring family physicians’ reactions to multisource feedback: Perceptions of credibility and usefulness. *Med Educ.* 2005;39:497–504.
- 19 Sargeant J, Mann K, Sinclair D, Van der Vleuten C, Metsemakers J. Understanding the influence of emotions and reflection upon multi-source feedback acceptance and use. *Adv Health Sci Educ Theory Pract.* 2008;13:275–288.
- 20 Mann K, van der Vleuten C, Eva K, et al. Tensions in informed self-assessment: How the desire for feedback and reticence to collect and use it can conflict. *Acad Med.* 2011;86:1120–1127.
- 21 Telio S, Regehr G, Ajjawi R. Feedback and the educational alliance: Examining credibility judgements and their consequences. *Med Educ.* 2016;50:933–942.
- 22 Bing-You R, Varaklis K, Hayes V, Trowbridge R, Kemp H, McKelvy D. The feedback tango: An integrative review and analysis of the content of the teacher–learner feedback exchange. *Acad Med.* 2018;93:657–663.
- 23 Myers K, Chou CL. Collaborative and bidirectional feedback between students and clinical preceptors: Promoting effective communication skills on health care teams. *J Midwifery Women’s Health.* 2016;61(S1):22–27.
- 24 Watling C. Cognition, culture, and credibility: Deconstructing feedback in medical education. *Perspect Med Educ.* 2014;3:124–128.
- 25 Watling C, Driessen E, van der Vleuten CP, Vanstone M, Lingard L. Beyond individualism: Professional culture and its influence on feedback. *Med Educ.* 2013;47:585–594.
- 26 Watling CJ. Unfulfilled promise, untapped potential: Feedback at the crossroads. *Med Teach.* 2014;36:692–697.
- 27 Ramani S, Post SE, Könings K, Mann K, Katz JT, van der Vleuten C. “It’s just not the culture”: A qualitative study exploring residents’ perceptions of the impact of institutional culture on feedback. *Teach Learn Med.* 2017;29:153–161.
- 28 Sargeant J, Mann K, Manos S, et al. R2C2 in action: Testing an evidence-based model to facilitate feedback and coaching in residency. *J Grad Med Educ.* 2017;9:165–170.
- 29 Ramani S, Könings KD, Mann KV, Pisarski EE, van der Vleuten CPM. About politeness, face, and feedback: Exploring resident and faculty perceptions of how institutional feedback culture influences feedback practices. *Acad Med.* 2018;93:1348–1358.
- 30 Bernabeo EC, Holtman MC, Ginsburg S, Rosenbaum JR, Holmboe ES. Lost in transition: The experience and impact of frequent changes in the inpatient learning environment. *Acad Med.* 2011;86:591–598.
- 31 Holmboe E, Ginsburg S, Bernabeo E. The rotational approach to medical education: Time to confront our assumptions? *Med Educ.* 2011;45:69–80.
- 32 Watling C, Driessen E, van der Vleuten CP, Vanstone M, Lingard L. Understanding responses to feedback: The potential and limitations of regulatory focus theory. *Med Educ.* 2012;46:593–603.
- 33 van de Ridder JM, McGaghie WC, Stokking KM, ten Cate OT. Variables that affect the process and outcome of feedback, relevant for medical training: A meta-review. *Med Educ.* 2015;49:658–673.
- 34 Brown P, Levinson SC. *Politeness: Some Universals in Language Usage.* Cambridge, UK: Cambridge University Press; 1987.
- 35 Eva KW, Armson H, Holmboe E, et al. Factors influencing responsiveness to feedback: On the interplay between fear, confidence, and reasoning processes. *Adv Health Sci Educ Theory Pract.* 2012;17:15–26.
- 36 Sargeant J, Armson H, Chesluk B, et al. The processes and dimensions of informed self-assessment: A conceptual model. *Acad Med.* 2010;85:1212–1220.
- 37 Sargeant J, McNaughton E, Mercer S, Murphy D, Sullivan P, Bruce DA. Providing feedback: Exploring a model (emotion, content, outcomes) for facilitating multisource feedback. *Med Teach.* 2011;33:744–749.
- 38 Sargeant JM, Mann KV, van der Vleuten CP, Metsemakers JF. Reflection: A link between receiving and using assessment feedback. *Adv Health Sci Educ Theory Pract.* 2009;14:399–410.
- 39 Dudek NL, Dojeiji S, Day K, Varpio L. Feedback to supervisors: Is anonymity really so important? *Acad Med.* 2016;91:1305–1312.
- 40 Lave J, Wenger E. *Situated Learning: Legitimate Peripheral Participation.* Cambridge, UK: Cambridge University Press; 1991.
- 41 Ramani S, Mann K. Introducing medical educators to qualitative study design: Twelve tips from inception to completion. *Med Teach.* 2016;38:456–463.
- 42 Creswell JW. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches.* 3rd ed. Thousand Oaks, CA: Sage Publications; 2013.
- 43 Starks H, Trinidad SB. Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. *Qual Health Res.* 2007;17:1372–1380.
- 44 Ramani S, Könings KD, Mann K, van der Vleuten CPM. A guide to reflexivity for qualitative researchers in education. *Acad Med.* 2018;93:1257.
- 45 Miles MB, Huberman AM. *Qualitative Data Analysis: An Expanded Sourcebook.* 2nd ed. Thousand Oaks, CA: Sage Publications; 1994.
- 46 Saldaña J. *The Coding Manual for Qualitative Researchers.* 3rd ed. London, UK: Sage Publications; 2016.
- 47 Gale NK, Heath G, Cameron E, Rashid S, Redwood S. Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Med Res Methodol.* 2013;13:117.
- 48 Laponis R. Feedback: A commitment to the relationship (Chapter 10). In: Chou C, Cooley L, eds. *Communication Rx: Transforming Healthcare Through Relationship-Centered Communication.* New York, NY: McGraw-Hill; 2018;105–114.
- 49 Windover AK, Boissy A, Rice TW, Gilligan T, Velez VJ, Merlino J. The REDE model of healthcare communication: Optimizing relationship as a therapeutic agent. *J Patient Exp.* 2014;1:8–13.
- 50 Sargeant J. Qualitative research part II: Participants, analysis, and quality assurance. *J Grad Med Educ.* 2012;4:1–3.
- 51 Sullivan GM, Sargeant J. Qualities of qualitative research: Part I. *J Grad Med Educ.* 2011;3:449–452.
- 52 Watling CJ, Ginsburg S. Assessment, feedback and the alchemy of learning. *Med Educ.* 2019;53:76–85.
- 53 van de Ridder JM, Berk FC, Stokking KM, ten Cate OT. Feedback providers’ credibility impacts students’ satisfaction with feedback and delayed performance. *Med Teach.* 2015;37:767–774.
- 54 van de Ridder JM, Peters CM, Stokking KM, de Ru JA, ten Cate OT. Framing of feedback impacts student’s satisfaction, self-efficacy and performance. *Adv Health Sci Educ Theory Pract.* 2015;20:803–816.
- 55 Ginsburg S, van der Vleuten C, Eva KW, Lingard L. Hedging to save face: A linguistic analysis of written comments on in-training

- evaluation reports. *Adv Health Sci Educ Theory Pract.* 2016;21:175–188.
- 56 Ginsburg S, Regehr G, Lingard L, Eva KW. Reading between the lines: Faculty interpretations of narrative evaluation comments. *Med Educ.* 2015;49:296–306.
- 57 Farrell L, Bourgeois-Law G, Ajjawi R, Regehr G. An autoethnographic exploration of the use of goal oriented feedback to enhance brief clinical teaching encounters. *Adv Health Sci Educ Theory Pract.* 2017;22:91–104.
- 58 Watling C. The uneasy alliance of assessment and feedback. *Perspect Med Educ.* 2016;5:262–264.
- 59 ten Cate O, Snell L, Mann K, Vermunt J. Orienting teaching toward the learning process. *Acad Med.* 2004;79:219–228.
- 60 ten Cate O, Hart D, Ankel F, et al; International Competency-Based Medical Education Collaborators. Entrustment decision making in clinical training. *Acad Med.* 2016;91:191–198.
- 61 Armson H, Lockyer JM, Zetkovic M, Könings KD, Sargeant J. Identifying coaching skills to improve feedback use in postgraduate medical education. *Med Educ.* 2019;53:477–493.
- 62 Harrison CJ, Könings KD, Schuwirth LWT, Wass V, van der Vleuten CPM. Changing the culture of assessment: The dominance of the summative assessment paradigm. *BMC Med Educ.* 2017;17:73.
- 63 Rich JV. Proposing a model of co-regulated learning for graduate medical education. *Acad Med.* 2017;92:1100–1104.

Teaching and Learning Moments Fully Present



“Be productive and do something meaningful. But there’s no formula.”

As I pondered my dean’s words, I couldn’t help but think: A formula would certainly make things easier.

I had approached her about taking a year off from medical school to mentor a group of at-risk youth. The boys were a range of ages from elementary school to high school, were in the foster care or juvenile justice system, and lived at a group home in Taiwan. I had volunteered there for several weeks over the past few years.

My dean added, “Do it because you love it, not because you want to get gold stars or because you think it’ll be impressive.” In the end, I decided to go. Living at the home with the boys, I involved myself in nearly all aspects of their lives. I tutored them in English and math; led baking, piano, guitar, and exercise classes; helped them with college applications; and taught them about financial planning.

But beyond the formal programming, there were the subtle, in-between moments that I still think fondly of, although they were often overlooked in the busyness of life at the home: Playing competitive sock basketball with 3 of the boys using a single orphaned sock and a

cardboard box; one boy’s skyrocketing motivation to learn English when cookies or candies were on the line; and debating with the same boy every day about how much “3 bites” of vegetables actually was.

There was also the boy who left everything covered in flour when we made cookies; the boy who ran and hid for 2 hours to escape having to do his homework; and the boy I stayed with during his 5-day hospitalization—he laughed in glee when we had hospital wheelchair races but squeezed my hand in a death grip as he got stitches. There was the boy who thanked me for always supporting him and for helping him get accepted to his top-choice college; the one who quietly whispered “I love you,” before immediately running away after I gave him some chocolates; and the one who told me that I wasn’t just his friend but his brother. These moments continue to hold immeasurable value.

During my year in Taiwan, I was constantly reminded of the importance of being fully present. Staff members at the home often told the boys how big a deal it was that I took time off from school to spend the year with them. But the boys were uninterested in the degrees and accolades I possessed. They paid far closer attention to how I interacted with them. They observed how I listened to

and responded to their comments, keenly aware of whether I noticed their individual needs or simply made blanket statements. With more than 20 boys at the home, I could not spend large chunks of time with them individually every day. However, I learned I could be fully invested in each interaction, even if it lasted only 5 minutes.

Now back in medical training, I have found that, to provide whole-person care and effectively meet my patients’ physical, mental, emotional, and spiritual needs, I must be fully present. Like at the home in Taiwan, there is always more work that needs to be done. Given the practical constraints, it’s also often impossible to spend as much time as I would like with each of my patients. However, with the time I do have, I know I can provide holistic care and be fully present—to be attentive to my patients’ every word, silence, facial expression, and motion; to acknowledge and affirm the significance of it all; and to respond accordingly so that they know they are not facing their illnesses and circumstances alone.

Victor Hsiao

V. Hsiao is a third-year student, Keck School of Medicine of the University of Southern California, Los Angeles, California; email: victor.hsiao@usc.edu.

An Academic Medicine Podcast episode featuring this article is available wherever you get your podcasts.