# Barriers and Facilitators to Effective Feedback: A Qualitative Analysis of Data From Multispecialty Resident Focus Groups

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## Abstract

**Background** Despite the importance of feedback, the literature suggests that there is inadequate feedback in graduate medical education.

**Objective** We explored barriers and facilitators that residents in anesthesiology, emergency medicine, obstetrics and gynecology, and surgery experience with giving and receiving feedback during their clinical training.

**Methods** Residents from 3 geographically diverse teaching institutions were recruited to participate in focus groups in 2012. Open-ended questions prompted residents to describe their experiences with giving and receiving feedback, and discuss facilitators and barriers. Data were transcribed and analyzed using the constant comparative method associated with a grounded theory approach.

**Results** A total of 19 residents participated in 1 of 3 focus groups. Five major themes related to feedback were identified: teacher factors, learner factors, feedback process, feedback content, and educational context. Unapproachable attendings, time pressures due to clinical work, and discomfort with giving negative feedback were cited as major barriers in the feedback process. Learner engagement in the process was a major facilitator in the feedback process.

**Conclusions** Residents provided insights for improving the feedback process based on their dual roles as teachers and learners. Time pressures in the learning environment may be mitigated by efforts to improve the quality of teacher-learner relationships. Forms for collecting written feedback should be augmented by faculty development to ensure meaningful use. Efforts to improve residents' comfort with giving feedback and encouraging learners to engage in the feedback process may foster an environment conducive to increasing feedback.

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## Introduction

In traditional forms of learning, such as the apprenticeship model, and in new approaches, such as deliberative practice, the master teaches the learner his or her craft, correcting mistakes along the way. Without the critical step of feedback, progression to the level of a competent practitioner cannot occur.[1] Learning in medicine has long been an apprenticeship in which a student or resident learns from an experienced clinician, with practice modified based on feedback.[2] Despite widespread support in medical education for the importance of feedback, studies suggest feedback occurs infrequently and/or is of low quality.[3–7]

Over the past 30 years, the feedback process has come to be seen as a dialogue, with active participation of the teacher and learner.[8,9] Investigators have proposed a conceptual framework, in which learners and teachers bring their emotions, educational mindsets, and self-perceptions to seeking, receiving, interpreting, and using

feedback, to reduce barriers to giving and receiving feedback.[10–17] These factors come together in a teacher-learner relationship that is situated in a clinical educational context.[18]

The complexity of feedback in the clinical environment is demonstrated in a conceptual model of resident feedback-seeking behaviors that was developed by Delva et al.[18] In this model, residents weigh perceived costs and benefits to seeking feedback, taking into account the quality of feedback given and relationships between the deliverer and receiver, while managing their own emotions in a dynamic workplace environment. They conclude that measures "such as longitudinal experiences, use of feedback forms, and expectations for residents to seek feedback . . ." could support feedback-seeking in the workplace.[18]

In this study, we explored barriers and facilitators to feedback-seeking in residents in 4 specialties (anesthesiology, emergency medicine, obstetrics and gynecology, and surgery) at 3 distinct teaching institutions. We labeled these specialties "non-primary care" because the characteristics of the work differ from specialties, such as internal medicine, pediatrics, and family medicine.[19]

**What was known and gap**

Feedback from faculty and senior residents is important in allowing learners to acquire competence for independent practice.

**What is new**

The provision, quality, acceptability, and acceptance of feedback are influenced by teacher factors, learner factors, feedback process, feedback content, and educational context.

**Limitations**

Small sample size and qualitative analysis of focus group data reduce generalizability.

**Bottom line**

There is a need to change the culture of feedback in graduate medical education from a focus on judging to one on coaching.

## Methods

Residents were recruited from training programs affiliated with the University of Chicago Pritzker School of Medicine (UC), the University of Oklahoma in Tulsa School of Community Medicine (OU), and the Virginia Commonwealth University School of Medicine (VCU). These sites were selected for their geographic diversity and differences in education programs. Training at the UC primarily takes place in an urban teaching hospital affiliated with a large academic medical center in the Midwest. Training at the OU takes place at 3 community hospitals in the southern Great Plains, and training at VCU takes place at an urban teaching hospital in the Mid-Atlantic region. Participants were recruited by the principal investigators of each site (S.T.R., H.B.F., M.S.R., and S.A.S.) via e-mail solicitation, with a goal of having 8 to 10 participants in each group. Site investigators sent an e-mail to all residents in the 4 specialties at their respective institutions. Two investigators with experience in conducting focus groups (S.T.R. and H.B.F.) directed all of the focus groups. To facilitate truthful and candid focus group participation, site investigators and focus group facilitators had no evaluative responsibilities for the participants.

Focus groups were conducted using open-ended questions, which are provided as online supplemental material. Focus group questions were pilot tested with residents not involved in the study. Questions were used as a framework for discussion, but probes steered the conversation, as appropriate. With participant permission, focus group sessions were recorded and transcribed. All identifiers were removed.

The Institutional Review Boards at all participating institutions reviewed and deemed this study to be exempt.

Using grounded theory as the general design approach, focus group transcripts were analyzed using the constant comparative analytic method.[20–22] Two coders (S.T.R. and M.H.Z.) independently identified themes and subthemes based on a holistic review of all the transcripts. After initial review, a codebook for analyzing the data was created, and it was revised to obtain intercoder agreement of more than 80%. At that point, the 2 investigators divided and analyzed the transcripts, periodically checking each other's analysis to ensure consistency of document analysis.

## Results

### Demographics

All residents who responded to the e-mails were included in the study because the number of respondents fell within the maximum targeted number at each institution. A total of 19 residents participated across the 3 sites. The number of individuals in each focus group ranged from 4 to 8, with an average of 6 participants. Emergency medicine was the specialty represented by the greatest number of participants (n = 11), followed by residents from surgery, anesthesia, and obstetrics and gynecology. Men comprised the majority of participants by sex.

### Qualitative Analysis

A total of 5 themes were identified, with 2 to 4 subthemes related to each. Themes were teacher factors, learner factors, feedback delivery process, feedback content, and educational context. Residents talked about feedback from their vantage points of teacher and learner.

### Teacher Factors

***Approachability of the Teacher*** Residents commented about how "unapproachable" teachers can create an environment not conducive to feedback receipt: "So there's one attending who I'm sure I will never ask for feedback from, and will be very happy to not ever have a conversation—horrible person to work with, has a bad temper, does not want to teach, very uncomfortable OR situation."

***Type of Teacher—Faculty Versus Resident*** Faculty deliver feedback differently from residents: ". . . you ask whoever the other resident is . . . that's easier because we're sitting next to each other all day . . . a lot of our feedback comes from each other."

***Comfort With Giving Feedback*** Residents reflected on their discomfort with giving feedback. In this theme, residents primarily commented about their roles as teachers: ". . . you don't want to come off as . . . a mean person . . . but you want people to know their strengths and weaknesses." They also commented about discomfort with providing negative feedback to coresidents: "It's really difficult for senior residents to give feedback to junior residents . . . we're all . . . like a family. We are all going to be together for years; you want to make sure to be constructive in your criticism." Residents also reported a desire to be selective in their feedback due to fear of awkward future interactions.

An important factor that contributed to discomfort with providing feedback was fear of the consequences of written feedback on the learner's career: ". . . oftentimes comments will be included in the Dean's letter. Likewise, if fellowships are expecting comments from residency programs . . . I would rather have the more critical feedback directed to me, not written on paper . . .."

***Setting Expectations*** Residents talked about the importance of setting education goals and expectations at the beginning of a clinical rotation or experience. These goals and expectations would later serve as a starting point for giving or obtaining feedback: ". . . getting expectations up front . . . so that they are known and obvious, and if you fail them, you'll be reprimanded for that, and if you do well on that, you'll be praised for it . . .."

Residents also commented about being asked to reflect on their clinical experiences as a way to set their own expectations for clinical training: "Our adviser does these self-reflections which are really challenging . . . you go through the day, and you say what you did well, what you can do better on, what you want to work on, what you want to read about . . .."

### Learner Factors

***Learner Engagement in the Feedback Process*** Residents pointed out factors specific to learners that affected how they provided feedback. They commented that they were less inclined to provide feedback to a learner who appeared disinterested in learning: ". . . if you [the student] think I'm wasting your time, I'm going to think you're wasting my time . . . then it's kind of difficult to give you feedback on something you don't really care about."

While a negative attitude toward learning was a barrier to feedback, a positive attitude made it easier for residents to engage with learners in the feedback process: "They [students] don't text while you are speaking with them or going around to look at patients or run the list . . . they're engaged, they're asking questions. They go home, they read, and they ask thought-provoking questions . . . you can tell that that person is really interested in wanting to learn and what they are doing."

In their role as learners, residents talked about the need to purposefully ask in order to receive feedback, particularly in the context of performing a specific task: "After a specific procedure or incident, ask specifically, 'How would you have handled this?'"

Residents also commented on the need to proactively carve out time for teaching and feedback: "I've scheduled meetings with them [my learners] either during the rotation or during active patient care; just, can I meet with you some other time? To talk about what's going on."

***Learner Responses to Feedback*** Residents commented that their emotional reactions to receiving feedback occasionally limited their ability to accept the feedback: "When you . . . get defensive and feel like someone's attacking you personally . . . you don't want to do anything about it anymore."

Residents also emphasized that by using feedback effectively, they played a role in their own education: "We may have 3 cases in a row with the same attending . . . then you got a chance to take what they said on the first one and try and fix it for the second one, and maybe on the third one maybe it's working on the best form."

Even when feedback was presented in a manner that residents perceived to be poor, it was important to extract components that might be helpful: "I think that if you recognize that there's a kernel of truth there, if you don't completely shut down . . . if you realize at the end that, 'I understand the point you're trying to make but you could have gone about it in a much better way . . .'"

### Feedback Process

***Delivery*** The way feedback was delivered played an important role in determining whether residents found the process of delivery to be effective. Evaluation instruments were sometimes viewed as barriers rather than facilitators to delivery. Residents described challenges and advantages in using these tools: "It's very easy to fill out an evaluation

and put 'satisfactory' or 'good' all the way down because that's not controversial . . .." Thus, use of the form can result in feedback becoming a perfunctory task rather than a facilitator of a conversation between a teacher and a learner. Written feedback could also result in a temporal disconnect between a clinical experience and feedback, making it difficult for the learner to use comments to improve his or her practice of medicine: "If 1 thing occurs during the entire rotation that is to the dislike of 1 of your attendings, you actually don't hear about it until . . . the end . . . if they had come to you during the rotation . . . you could have fixed whatever issue they thought that you were having . . .." In contrast, some feedback tools were considered helpful by residents: "[it's] a tangible sheet . . . that helps to facilitate discussion about how you did that shift or how you're doing overall."

Residents talked about problems associated with having formal meetings with an individual who may not have directly observed the resident's performance: "You sit down with the program director and they go through your eval[uation]s . . . he can give you good feedback when he works with you, but it's definitely not representative . . .."

Feedback delivered through another individual also was poorly accepted: "A lot of times faculty give the feedback to the upper level resident who will give it to the lower level resident as opposed to talking directly with that person."

Residents described specific techniques they, as teachers, used to give feedback and ways in which feedback was delivered to them. Residents discussed the "sandwich technique" (offering a positive comment, followed by an area for improvement, and closing with a positive comment) as a method they were comfortable in using to give feedback: "I like the sandwich method. I think most people are receptive to it."

Residents desired feedback that was specific and delivered in a way that would help them grow as professionals: "The best feedback I've had from my attendings is when they say how to fix it, like . . . 'this is how I run my list . . .."'

### Content of Feedback

Nonspecific feedback was seen as a barrier to receiving effective feedback: "I mean, sometimes that feels good to get 'a good job,' but at the same time it's not very fulfilling in that I am unable to really see what really are my strengths and what are some areas that I could improve on."

### Educational Context

***Level of Learner*** Residents reported that attendings gave them increasing levels of autonomy as they proceeded through training, and that they concurrently decreased the amount and changed the type of feedback provided: "As an intern, I need my hand held on surgeries obviously . . . but as a third or fourth year, especially in the OR, they let you go until you need their help. . . . Usually at the end of the case they'll go over stuff with you . . . as you get further along, you know what you're doing so you don't need as much feedback."

***Time for Feedback*** Residents described the tension between managing the busy pace of clinical work and making time for feedback, thus limiting the availability of feedback: ". . . there are 35 people running around in all directions, we're surrounded by chaos and you're not going to sit down and have a long conversation . . .."

Another factor that limited the time available for feedback was the mismatch between the residents' and attendings' schedules. This often led to a resident starting a clinical encounter with one attending and ending with another: "Even if you wanted to go get specific feedback on a specific day, the attending's schedule and the resident's schedule don't match at all. . . . Even if you wanted to go up to them at the end of their shift and say, 'Hey, how did I do today?' . . . it's hard to do that . . .."

***Relationship Continuity*** Residents described the importance of continuity in fostering a productive learning relationship: "We work with a whole dozen attendings all the time, so our interaction is just in small parts . . . It's difficult at times to get consistency or continuity with 1 or 2 faculty [members], but then over the course of several months, that's where you kind of get to learn."

## Discussion

Many themes we identified are consistent with those identified by Delva et al[18] regarding determinants of feedback-seeking. The residents in our study discussed feedback-seeking from dual roles as learners and teachers. Consistent with prior studies, participants in our focus groups described the importance of teachers creating a safe environment for feedback.[18,23] Residents also described the importance of the learner in feedback-seeking; specifically, the learner who critically reflected on his or her performance, and demonstrated openness and engagement to feedback, facilitated effective feedback processes.[24,25]

While our residents described the importance of continuity in a teacher-learner relationship, they pointed out that logistics and the competing tasks of patient care and education often left little time for feedback. Duty hour restrictions and pressure for faculty to increase their clinical productivity challenge options for maintaining longitudinal relationships between teachers and learners.[26–32] In today's clinical learning environment, focusing on the *quality* of time spent together may be more feasible than increasing

the *quantity* of time.[18,33] Strong teacher-learner relationships may mitigate the negative effects of duty hour restrictions on time spent together.[34–36] The strength of these relationships may result in moving feedback from a series of one-time "sandwiches" to an ongoing dialogue.

Faculty development and residents-as-teachers curricula should include instructions on how to effectively use evaluation tools to provide feedback and facilitate discussions with residents or students.[37,38] The residents in our study used the terms "evaluation" and "feedback" interchangeably, suggesting a need to help teachers and learners understand the difference between formative feedback and summative evaluation.[38] The resulting utility of evaluation forms and feedback cards in supporting the feedback process was highly dependent on how they were used.

Our study has limitations. As with all qualitative studies, there are different ways to interpret the data, and other investigators may have drawn different conclusions from the data. While our sample size drew from geographically diverse programs, we sampled small groups of residents from 4 specialties in 3 institutions. Our focus groups were skewed toward male residents and emergency medicine. A larger sample size with more equal representation of specialties, and of women and men, may have generated different results.

## Conclusion

Residents identified teacher factors, learner factors, feedback process, feedback content, and educational context as attributes that increased or reduced the effectiveness of feedback. Our results inform curriculum development by pointing out modifiable factors that can be used to help teachers provide more effective feedback, to teach learners how to become more engaged in their education, and how to effectively ask for and use feedback, even in suboptimal conditions. The findings can help learners set educational goals based on reflections about their strengths and areas in need of improvement. They highlight the need to change the culture of feedback in resident education from one centered on judging to one focused on coaching.

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