Faculty Self-Evaluation of Experiences with Delivering Feedback to Trainees Across Academic Ranks

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Abstract

Background The ability to provide feedback is a developable faculty skill; however, it is unclear how academic rank impacts experiences with feedback delivery.

Methods A survey was distributed to 1258 physicians of all academic ranks at a large academic medical center. Questions explored the respondent's feedback delivery beliefs and barriers.

Results In total, 96% of respondents agreed feedback is important to resident education. Higher academic rank correlated with increased comfort with feedback delivery, and 89% of respondents experienced at least 1 barrier to feedback delivery.

Conclusion Feedback experiences vary across academic ranks, with full professors being more comfortable with feedback delivery and less likely to experience barriers.

Keywords Feedback · Feedback barriers · Residency education · Faculty development

Background

Decades of research have established that faculty feedback to trainees is an invaluable component of medical education [1–3]. Delivering feedback is a skill that can be taught, suggesting that it is possible for feedback delivery skills to improve over the course of an academic career [4]. There has been limited exploration into the impact of academic rank on the faculty experience with feedback delivery. It remains uncertain if being promoted correlates with changes in feedback delivery frequency, comfort with providing feedback, or belief in the importance of feedback. Similarly, research has not explored if academic rank affects the frequency of feedback delivery barriers.

One study explored physician characteristics that are associated with high self-assessed proficiency in feedback skills [5]. The survey found that having the rank of associate or full professor correlated with a 2.15 odds ratio of being a self-perceived high scorer on feedback skills assessment. The authors acknowledge that generalizability may be limited, as

respondents had participated in a faculty development program, and may represent a group motivated to develop expertise in educational competencies like feedback.

Commonalities have been found when exploring the relationship of academic physicians with feedback across specialties. Teachers in clinical settings acknowledge the importance of feedback but endorse several barriers to feedback delivery [6]. Residents frequently report not receiving sufficient feedback from attendings [7, 8]. Lack of time is often cited by attendings as the rationale for this failing [6, 9, 10]. Attendings endorse discomfort with feedback delivery due to perceived lack of training and experience. This occurs particularly when feedback involves reviewing areas needing improvement [11, 12].

With increased attention to feedback as a developable skill in an academic physician, assessing feedback delivery beliefs and barriers can be useful to explore differences across academic ranks.

Methods

This survey was conducted at The Ohio State University Wexner Medical Center (OSUWMC). OSUWMC is a large academic medical center with 1367 beds, over 1750 faculty and 861 residents and fellows (2019–2020 academic year).

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While there are no explicit requirements surrounding feedback, the medical center offers optional training opportunities through The Center for Faculty Advancement, Mentoring and Engagement (FAME) and residency training directors may opt to focus on feedback during faculty development programs.

A Qualtrics survey was developed and distributed to 1258 teaching physicians of all academic ranks via email. The survey was approved by the Institutional Review Board with exempt status and indicated participation was voluntary, and anonymous with no identifying information collected. No funding was utilized for this project.

The survey comprised 6 questions. After confirming they were attending physicians who supervised trainees at the medical center, the second question asked academic rank (assistant, associate, or full). Question 3 asked for frequency of feedback delivery: “I provide feedback to residents/fellows” (corresponding to “very rarely” = 1, “rarely” = 2, “occasionally” = 3, “frequently” = 4, “very frequently” = 5). Questions 4 and 5 solicited feelings on comfort providing feedback and importance of feedback in resident/fellow education (corresponding to: “strongly disagree” = 1, “disagree” = 2, “neutral” = 3, “agree” = 4, “strongly agree” = 5). The final question asked respondents to select any/all perceived barriers to providing feedback from a provided list (Table 1). There were also options to indicate “other” with a free-text response box or “N/A, I do not experience any barriers to my ability to provide feedback.”

For analysis, mean and standard deviation (SD) of scores on the Likert scales were calculated. For expression in percentage of response, 4 (agree) and 5 (strongly agree) were combined. Paired *t* test, ranked correlation, and Fisher’s exact test were used to compare values and generated with Stats iQ and GraphPad Instat.

Results

Of the 1258 attending physicians invited to participate, 223 completed the survey (18% response rate). The datasets

generated during the study are available from the corresponding author on reasonable request. Respondents included 133 assistant professors, 53 associate professors, and 37 full professors, a representative distribution of faculty in this institution.

As a group, 215 physicians (96%) agreed or strongly agreed that feedback is important to education with an average rating of 4.6 ± 0.57 . In total, 175 physicians (78%) reported delivering feedback frequently or very frequently with an average rating of 4.1 ± 0.71 . And 183 physicians (82%) agreed or strongly agreed that they are comfortable providing feedback with an average rating of 4.1 ± 0.78 .

There was a statistically significant correlation between the belief in the importance of feedback and frequency of feedback delivery ($p = < 0.00001$, paired *t* test, effect size (Cohen’s *d*) = 0.78) and between the belief in the importance of feedback and comfort with feedback delivery ($p = < 0.00001$, paired *t* test, effect size (Cohen’s *d*) = 0.69).

When accounting for academic rank, there was a statistically significant correlation between higher academic rank and comfort with providing feedback (ranked correlation, $p = 0.009$). There were no statistically significant relationships between academic rank and frequency of feedback delivery or belief in the importance of feedback.

Only 11% of physicians denied experiencing any barriers to feedback delivery. Among those endorsing barriers to feedback delivery, lack of time was most commonly cited. Frequency of feedback barriers is described in Table 1. Of respondents, 9% selected “other” and included free-text descriptions of barriers they experienced (Table 2).

Distribution by academic rank shows that 19% of full professors had no barriers to feedback compared with 10% of assistant professors. The feedback barriers of lack of time, resident resistance, poor comfort with feedback, and professional burnout were similar across groups. However, there was greater stratification across academic ranks for other barriers. There was a statistically significant difference in “fear of damaging rapport with resident,” which was endorsed by 44% of assistant professors as compared with 23% of full professors (Fisher exact statistic value = 0.0071, $p < 0.05$) (Table 3).

Table 1 Feedback barriers

Barriers	<i>N</i>	%
	Total = 223	
Lack of time	136	61
Fear of damaging rapport with resident/fellow	83	37
Resident/Fellow resistance to receiving feedback	56	25
Lack of comfort with providing feedback	46	21
Professional burnout	39	17
Fear of retaliation by resident/fellow	35	16
None, I do not experience any barriers to my ability to provide feedback	27	12

Table 2 Free-text feedback barriers

- Fear of retaliation by program directors
- Concerns about hurting opportunity for promotion
- Lack of private space to provide feedback
- Not having enough specifics to provide valuable feedback
- Having no formal mechanism for providing feedback
- Lack of confidence
- Feeling that their feedback is irrelevant

Table 3 Feedback barriers by academic rank

Barriers	Assistant professors <i>N</i> = 133	Associate professors <i>N</i> = 53	Full professors <i>N</i> = 37
Lack of time	81 (60.9%)	32 (60.4%)	23 (62.2%)
Fear of damaging rapport with resident/fellow	58 (43.6%)	18 (34.0%)	7 (18.9%)
Resident/fellow resistance to receiving feedback	32 (24.1%)	16 (30.2%)	8 (21.6%)
Lack of comfort with providing feedback	28 (21.1%)	11 (20.8%)	7 (18.9%)
Professional burnout	24 (18.0%)	9 (17.0%)	6 (16.2%)
Fear of retaliation by resident/fellow	20 (15.0%)	12 (22.6%)	3 (8.1%)
None, I do not experience any barriers to my ability to provide feedback	13 (9.8%)	7 (13.2%)	7 (18.9%)

Discussion

This survey was developed to assess the impact of academic rank on perception of feedback delivery and barriers experienced by faculty. The results show that nearly all faculty members recognize the importance of feedback, and many deliver it frequently. However, 89% experience barriers to providing it, confirming that feedback is a predominant actionable element of medical education, and the results of this survey can inform future faculty development.

In agreement with previous surveys [6, 9, 10], lack of time was the number one rated barrier, listed almost twice as often as the other barriers. Physician burnout, less explored as a barrier to feedback delivery, was endorsed by 17% of responders. The proportion of respondents endorsing this barrier remained similar over all three academic ranks, suggesting burnout serves as a feedback barrier over a career lifespan. Many of the other barriers, which can be grouped in resident/faculty interpersonal relations, were also present as previously described [6] and may reflect the culture of the academic environment.

Results of the survey show, as a whole, faculty who believe feedback is important are more likely to deliver feedback and feel comfortable with feedback delivery. While there was not a statistically significant difference in frequency of feedback delivery across academic ranks, there was a relationship between higher academic rank and increased comfort with feedback delivery. This suggests that the comfort with feedback is related to cumulative time spent delivering feedback, with assistant professors having spent less total time delivering feedback as compared with full professors. If “practice makes perfect,” encouraging assistant professors to deliver feedback early and often could accelerate the process of becoming comfortable with feedback delivery.

There is a stepwise increase in report of no barriers to feedback delivery as faculty progress through academic ranks, with nearly twice as many full professors reporting no perceived barriers as compared to assistant professors (although this correlation did not reach statistical significance). It may be

possible to close the gap on barriers across ranks by utilizing individualized faculty development approaches that address each assistant professor’s perceived barriers.

Exploration of barriers revealed that full professors are less likely than assistant and associate professors to be concerned about negative interpersonal effects of feedback; they endorsed less concern that feedback would damage rapport with residents or lead to retaliation. This finding has not been reported before and if replicated, faculty development for assistant professors may be more effective if it includes specific methods to overcome the interpersonal barriers to feedback.

Limitations of this survey include the lower response rate, possibly related to the timing of survey collection (prior to distribution of the final survey reminder, the COVID-19 pandemic struck). The survey was conducted at one academic medical center and there may be selection bias within respondents; those more interested in feedback may have been more likely to complete the survey. There are also known limitations to collecting information with Likert scales in educational research [13]. Given the cross-sectional nature of the survey, it is possible there were modifying variables not captured that affected the results.

Future directions for this research include expanding the survey to more medical centers and further exploration into the impact of faculty development programs on experiences with feedback across academic ranks.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s40670-020-01196-5>.

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Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval The research was approved by the Biomedical Institutional Review Board.

Informed Consent All respondents were informed of the nature of the research and provided informed consent by completing the feedback survey.

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