Resident Peer-to-Peer Observation and Feedback in the Primary Care Setting

Maryann K. Overland[1], Ximena Levander[2], Marissa Black[3], Ginger Evans[4]

Corresponding author: Dr Maryann Overland mko76@uw.edu
Institution: 1. University of Washington, 2. Oregon Health and Sciences University, 3. University of Washington, 4. University of Washington
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Abstract

Introduction: We performed a pilot study to improve self-efficacy with giving and receiving feedback among primary care Internal Medicine residents in the ambulatory setting.

Methods: We trained Internal Medicine residents to give and receive feedback, scheduled observation sessions, and protected time for feedback and reflection on the process. This pilot took place over four month-long ambulatory blocks over a two-year period at the University of Washington's primary care continuity clinic sites. Twenty-eight residents participated each year. We developed a survey question to measure self-efficacy with feedback and compared means using the Wilcoxin Signed-Rank test. We also collected qualitative data that was analyzed using Grounded Theory.

Results: The residents demonstrated a statistically significant and meaningful increase in their self-efficacy with giving feedback to peers.

Conclusion: Peer-to-peer feedback is a low-cost, high-yield way to increase feedback and feedback-seeking behavior without undermining resident autonomy. This educational intervention could be easily translated across clinical settings and specialties. Based on the initial success of the program, the University of Washington internal medicine residency program will provide expanded opportunities for structured, longitudinal peer observation and feedback.

Keywords: Post graduate medical education, Observation and Feedback, Peer Coaching, Primary Care Education
Introduction

Effective feedback promotes the learning and development of medical residents.\textsuperscript{1,2} Quality feedback helps residents self-monitor, and has been shown to improve clinical competence and self-efficacy among high-achieving learners.\textsuperscript{3,4,5} Yet, internal survey data of our large multisite university-based residency program reveal striking resident dissatisfaction with the amount and type of feedback they receive. This problem has been demonstrated throughout undergraduate and graduate medical education across the United States.\textsuperscript{6,7} The balance between resident independence and a culture of direct observation and feedback is delicate, but central to the core values of resident autonomy and excellent teaching. Barriers to providing and receiving feedback include faculty and resident time constraints, lack of training on how to give feedback, past negative experiences, concerns about impact on existing professional relationships, and perceptions that feedback may not result in suggested behavior change.\textsuperscript{8}

Effective feedback requires integration of several components, including mutual goals, a respected and respectful source, specific, objective suggestions for improvement based on observation, and timeliness. Developing tools and educational models that incorporate these components is challenging; however, a variety of experiential and educational interventions have shown it is possible to create and sustain a culture of feedback.\textsuperscript{9} As increased time is spent training in the outpatient setting, innovative models of direct observation and feedback need to be designed, implemented and evaluated.

Peer feedback has been shown to promote teamwork and communication.\textsuperscript{3} It aims to break down traditional barriers and alleviate the inherent hierarchy often encountered in medical education. Peer feedback is learner-centered and bidirectional as opposed to teacher-centered and unidirectional, thereby facilitating professional growth among residents and shifting institutional culture towards active appreciation and seeking of feedback.\textsuperscript{10}

With these tenets in mind we established the University of Washington primary care peer observation and feedback project. To our knowledge, no other similar trainee peer-to-peer observation and feedback curriculum has been published in the medical literature.

Intervention

There are fourteen primary care internal medicine residents per class within the University of Washington (UW) Internal Medicine Residency. The residency has nine resident continuity clinic sites, six of which house primary care residents. The Primary Care track residents at UW have an annual primary care immersion rotation. During this four-week rotation, all primary care residents work in their continuity clinic three days each week. In addition, they have one half-day per week of primary care didactics, one half-day to work on education or practice improvement projects, one program-wide academic half-day, and a half-day of panel management.

In 2014, we introduced a novel peer-to-peer observation and feedback curriculum during the second and third year primary care immersion blocks. We evaluated whether this curriculum improved the residents’ comfort level with giving and receiving feedback. We also collected qualitative data to assess for other effects of our intervention. Prior to starting the peer observation and feedback sessions, we received an educational exemption from the Institutional Review Board at the University of Washington.

At the beginning of the primary care immersion blocks, primary care residents participated in a workshop to learn the essential skills of giving and receiving feedback. This workshop included a large group ice-breaking activity,
guided role-playing, and a discussion of the rewards, barriers, and pitfalls of giving and receiving feedback. A variety of specific techniques of giving and receiving feedback, which had been drawn from the medical and business literature, were introduced and practiced. This workshop culminated in an agreement to be respectful observers, provide meaningful feedback to their peers, and receive the feedback graciously. After the workshop, mindful of these skills, each resident was scheduled to observe two peers for a half day in their each in primary care clinics other than their own and to be observed by two peers from other primary care clinics. The residents were provided with an observation form that included questions about clinic characteristics and an individual checklist of previously validated points of observation. The observed skills included: patient-centeredness, establishing rapport, agenda setting, active listening, shared decision-making, and evidence-based decision-making. The form also included questions about the resident's comfort level with giving feedback, lessons learned, and three open-ended questions about lessons learned, how to improve the experience, and other comments. During the observation half-days, residents had 30 minutes of protected time at the end of the day for reflection and feedback.

**Methods**

We developed a pre- and post-survey question to measure self-efficacy level with feedback and analyzed the responses using the Wilcoxin Signed-Rank test. We also asked three open-ended questions on an anonymous feedback form after each feedback session. The questions were (1) What did you learn today? (2) What would make this experience better? (3) What other comments do you have? The responses were analyzed using Grounded theory and grouped into overarching themes.

**Results**

**Quantitative**

Of the 28 participants, 25 completed both a pretest and a posttest. We compared means on the self-efficacy with feedback from pre-test to post-test and found improvement from 3/4 (standard deviation 0.76) before the pilot program to 3.58/4 (standard deviation 0.49) after. These results were statistically significant at p=0.006.

**Qualitative**

Three themes emerged from the qualitative feedback on lessons learned by the participants:

(1) Clinic characteristics and resources are variable and unequally distributed among resident clinics.

(2) Observing other providers’ in action is more educational than they had anticipated.

(3) Giving effective feedback is challenging.

**Clinic characteristics**

After observing different clinics, most participants commented on each clinic's relative abundance or lack of
resources, including nursing and medical assistant staffing, pharmacists, patient educators, case managers, and patient education resources. Those observations were coupled with others that noted how different clinic resources, physical layouts, and clinic workflows could profoundly impact a physician’s workday, and the resident’s ultimate desire to pursue a career in primary care. Residents who came from less well-resourced clinics commented frequently on the abundance of patient and provider resources at more well-resourced clinics. Those from the more well-resourced clinics felt this experience made them more appreciative of the resources that were available to them and their patients. Some residents noted this experience helped crystallize what resources and clinic characteristics would be important to them when searching for a primary care job.

**Provider characteristics**

Residents learned and solidified crucial patient care techniques and strategies during this intervention. These included patient-centered communication, rapport building, boundary setting, conducting difficult conversations, clinic efficiency, and physical exam skills. The residents found the art of medicine was abundant when they observed their peers, taking comfort in the notion that there are a lot of right ways to practice primary care medicine.

"I learned interesting ways of approaching "difficult" patients. It was great to see my peer’s approach and to hear the attending’s feedback."

**Giving high quality feedback is challenging**

Residents acknowledged that giving effective feedback can be difficult. Providing honest, constructive feedback to a peer is hard, and is made even more challenging when time is short. In general, they found it easier to provide feedback when the focus of the feedback was determined prior to the visit, rather than focusing on general clinical performance.

"Giving feedback is easier if you ask the person you’re observing what they’d like to work on first. I still am less comfortable giving feedback about areas that the person didn’t ask for help with (things that seem important to me but maybe I’m overstepping my role?)."

"It is difficult to give "just in time" feedback to an individual when they are feeling busy/occupied by the task at hand."

"Sometimes it’s more difficult to give feedback to close friends/people who you have an out-of-work relationship with."

"Different styles of practice work, but sometimes [make it] difficult to guide feedback."

**Discussion**

The University of Washington primary care residents regarded this intervention highly and reported a desire for more peer observation and feedback opportunities. Residents appreciated the chance to observe their peers delivering care in clinic, and exposure to different primary care delivery sites. We will therefore continue to offer
this training and protected time during upcoming annual primary care immersion blocks for our second and third year residents.

To improve the activity, we subsequently added same-clinic peer observation sessions, which the residents requested to gain more insight and skills around clinic efficiency and workflow. Many wished the intervention had extended beyond the one-month immersion block. To this end we have added a second primary care immersion block for all primary care track residents, which will provide opportunity to extend their peer observations and feedback. Additionally, we have further developed the introductory workshop to provide more concrete, evidence-based feedback techniques as well as skills from the positive psychology and coaching literature.

This pilot project is not without limitations. There is no control group for comparison. The residents learn and practice in close proximity throughout their training and particularly during their immersion blocks. With notably few exceptions, they tend to be a socially cohesive group. It is possible that the improvement in self-efficacy with giving and receiving feedback was due to relationship building over the course of the project rather than the feedback training itself. In addition, for this small pilot, we measured only affective outcomes and relied on self-report by the residents rather than objective measurements of feedback.

Conclusion

Despite the limitations, in this small pilot study, we found that training senior-level primary care residents to give and receive feedback, and providing protected time in a safe setting significantly increased their self-efficacy with giving and receiving peer feedback without undermining the core value of resident autonomy. Peer-to-peer feedback was a high-yield, low-cost, easily implemented intervention that could be translated to many clinical educational settings, both inpatient and outpatient, across both cognitive and procedural specialties.

Take Home Messages

- Internal medicine residents can be trained to provide peer feedback and coaching.
- Peer-to-peer observation and coaching improves self-efficacy with feedback
- Peer observation, feedback, and can happen across clinical settings and training programs
- Peer observation, feedback, and coaching can provide a unique view into the practice of medicine while enhancing learner autonomy

Notes On Contributors

1. Dr. Overland is Assistant Professor and Associate Program Director for Primary Care in the Department of Medicine, Division of General Internal Medicine at the University of Washington School of Medicine and a primary care physician at the VA Puget Sound Health Care System, Seattle, WA.

2. Dr. Levander is a recent graduate of the University of Washington Primary Care Internal Medicine Residency Program and is a hospitalist and Assistant Professor at Oregon Health and Sciences University in Portland, OR.

3. Dr. Black is a recent graduate of the University of Washington Primary Care Internal Medicine Residency Program and is a fellow in Geriatric Medicine at the University of Washington in Seattle, WA.
4. Dr. Evans is the VA Puget Sound Clinic Education Director and Clinical Assistant Professor in the Division of General Internal Medicine, Department of Medicine, University of Washington, Seattle, WA.

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Appendices

Declaration of Interest

The author has declared that there are no conflicts of interest.