



# Current Practices and Perspectives on Peer Observation and Feedback: A National Survey

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## ABSTRACT

**OBJECTIVE:** Peer observation and feedback (POF) is the direct observation of an activity performed by a colleague followed by feedback with the goal of improved performance and professional development. Although well described in the education literature, the use of POF as a tool for development beyond teaching skills has not been explored. We aimed to characterize the practice of POF among pediatric hospitalists to explore the perceived benefits and barriers and to identify preferences regarding POF.

**METHODS:** We developed a 14-item cross-sectional survey regarding divisional expectations, personal practice, perceived benefits and barriers, and preferences related to POF. We refined the survey based on expert feedback, cognitive interviews, and pilot testing, distributing the final survey to pediatric hospitalists at 12 institutions across the United States.

**RESULTS:** Of 357 eligible participants, 198 (56%) responded, with 115 (58%) practicing in a freestanding children's hospital. Although 61% had participated in POF, less than one half

(42%) reported divisional POF expectation. The most common perceived benefits of POF were identifying areas for improvement (94%) and learning about colleagues' teaching and clinical styles (94%). The greatest perceived barriers were time (51%) and discomfort with receiving feedback from peers (38%), although participation within a POF program reduced perceived barriers. Most (76%) desired formal POF programs focused on improving teaching skills (85%), clinical management (83%), and family-centered rounds (82%).

**CONCLUSIONS:** Although the majority of faculty desired POF, developing a supportive environment and feasible program is challenging. This study provides considerations for improving and designing POF programs.

**KEY WORDS:** faculty development; feedback; peer observation

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## WHAT'S NEW

Pediatric faculty desire formalized opportunities for peer observation and feedback in both clinical and nonclinical areas. Our study highlights key features of effective peer observation and feedback and provides considerations for physicians seeking to improve or establish formal programs.

PEER OBSERVATION AND feedback (POF), defined as direct observation of an activity performed by a colleague followed by feedback with the goal of improved

performance and professional development, has been well described in the social sciences and education literature.<sup>1</sup> However, peer observation historically has been underused in medicine.<sup>2</sup> Direct observation has important implications for enhancing patient safety, strengthening clinical skills, and improving teaching techniques,<sup>3</sup> yet can be viewed as intimidating, confrontational, and time-consuming if not conducted and managed appropriately.<sup>4</sup>

Although most junior faculty within hospital medicine start their careers with solid clinical backgrounds, fewer have advanced training in areas of teaching, leadership, quality improvement, and administration—areas recognized

as foundational for career longevity within hospital medicine.<sup>5,6</sup> Increasingly, the use of POF for the improvement of teaching skills is recognized as an opportunity for physician development,<sup>4,5,7-10</sup> yet there remains a lack of understanding regarding whether POF also can impact the development of other skills such as clinical skills, communication techniques, and even research or quality improvement skills.

Given the paucity of literature beyond observation of teaching, it remains challenging to compare POF programs and identify best practices. The aims of this study were to characterize the current practice of POF among pediatric hospitalists, to explore the perceived benefits and barriers, and to identify physician preferences regarding POF.

## METHODS

We conducted a cross-sectional survey of pediatric hospitalists at 12 university-based institutions across the country. Survey items addressed division POF expectations as well as personal practices, preferences, and perceived barriers. We defined POF as “the direct observation of an activity, including but not limited to, observation of a clinical, teaching, or patient safety related activity, performed by a colleague with subsequent feedback in order to improve performance and contribute to professional development.” We defined peer as “any colleague, hospitalist or otherwise, irrespective of the number of years in practice or supervisory status” whom survey participants viewed as peers.<sup>11</sup>

### CONCEPTUAL FRAMEWORK

Gosling<sup>11</sup> describes 3 distinct models for peer observation: the evaluation model, the development model, and the peer review model. For the purpose of our study, we specifically sought to elucidate the experiences of physicians using the peer review model—one in which physicians observe each other and engage in mutual reflection. This model is thought to be nonjudgmental, constructive, and to create an opportunity for mutual benefit between peers. The risks in this model are complacency and unfocused feedback.<sup>11</sup> Within the peer review model, there is an absence of a power differential so that the observation and feedback is meant to be a reciprocal growth process.<sup>12</sup> Although developed for peer observation of teaching, we sought to understand whether this model could be expanded beyond teaching into faculty feedback more generally.

### SURVEY DEVELOPMENT

Following Gehlbach et al's 7-step framework for survey development,<sup>13</sup> we undertook a rigorous process for survey design over a 2-year period, intentionally incorporating the establishment of validity evidence as described by Messick.<sup>14</sup> To define the construct of POF and to establish content validity, we began with a review of the literature to identify physician perspectives surrounding POF and to identify any existing instruments used to evaluate physician opinions or experiences with POF. The

original search was conducted in 2013 using SCOPUS and PubMed databases<sup>15</sup> and updated in January 2016 without identifying any published data surrounding pediatric physician perspectives regarding POF.

Using a cohort from the representative population of interest, we conducted two 60-minute telephone focus groups of interested members of the American Academy of Pediatrics Section on Hospital Medicine Subcommittee on Pediatric Educators to establish and refine the construct of interest. The American Academy of Pediatrics Section on Hospital Medicine Subcommittee on Pediatric Educators is a volunteer organization composed of pediatric hospitalists with self-identified interests in advancing medical education. The cohort consisted of 20 educators representing 14 institutions across the country.

Synthesizing the current literature with the focus group feedback, the research team designed a *de novo* survey focused on pediatric physician perspectives and experiences with POF. After drafting the preliminary survey, a nationally diverse group of medical education and survey methodology experts critically reviewed the survey for content and design.

To establish response process validity, 2 investigators (C.M., P.B.) then conducted individual think-aloud cognitive interviews with pediatric hospitalists from 2 institutions.<sup>16</sup> Interviews lasted 30 to 45 minutes each, focusing on refining the POF domains, honing included items and definitions, and structural design. They were completed in 2 rounds of 8 interviews with iterative revisions to the survey after each round, including the addition of the “research” domain for POF. Although not traditionally viewed as an “observable” activity, research and quality improvement efforts often benefit from input and feedback from concept development through implementation and eventual publication. Separate from mentorship, which is critical in guiding the development of a research project, POF for research, quality improvement or even billing and documentation target real-time, “on-the-ground” observation and feedback for a given activity.

We subsequently pilot-tested the survey with 32 pediatric hospitalists from 17 institutions and gathered feedback regarding item clarity and completion time.<sup>17</sup> The results informed edits to the survey to improve clarity. Following further revisions, the survey was reviewed and approved for distribution by the research team.

The final survey contained 14 items addressing 3 POF domains: 1) current practices, 2) perceived benefits and barriers for both the observed and the observer, and 3) preferences for future POF practice (Supplementary Data). Survey items within domains 1 and 3 were closed-ended or multiple choice—style questions. Items included in domain 2 were 4-point Likert-style questions, ranging from “not beneficial” to “extremely beneficial” or “not problematic” to “extremely problematic,” respectively. In addition, as POF involves both an observer and the person being observed, questions in domain 2 were specific to perceptions of benefits or barriers for each role. If a survey respondent had not participated in POF, for domains 2 and 3, they were asked to answer the survey questions

reflecting their individual perceptions and preferences as if they had the opportunity for POF.

### SURVEY ADMINISTRATION

We used a convenience sample of 357 pediatric hospital medicine physicians practicing at 12 institutions across the country represented by the study authors. The survey was conducted via REDCap, a secure, web-based data capture instrument,<sup>18</sup> and distributed in November 2017, with 3 subsequent e-mail reminders sent at 2-week intervals. There was no incentive for participation.

### DATA ANALYSIS

Statistical analysis was performed using SAS statistical software, version 9.4.<sup>19</sup> We characterized our study sample using descriptive statistics. For the 4-point Likert scale questions, we dichotomized responders as “endorsing” (moderately or extremely beneficial/problematic) or “not endorsing” (not or somewhat beneficial/problematic). For analyses of differences by demographic variables, we dichotomized responders by academic appointment as “junior” (Instructor, Assistant Professor) or “senior” (Associate Professor, Professor), years in practice as less than or equal to 5 years versus more than 5 years, institutional setting into children’s hospital versus community hospitals, and male versus female. Fisher exact tests were used to determine whether benefits, barriers, and preferences differed by factors potentially influencing a physician’s ability to engage or participate in POF, including academic appointment, years in practice, institutional setting, sex, completion of fellowship, whether the hospitalist worked more than 50% of their shifts overnight (nocturnist), if they practiced alone in the hospital, or if they had participated in POF previously.

The study was reviewed and approved by Seattle Children’s Hospital and Children’s National Medical Center Institutional Review Boards. All elements of consent were included within introduction paragraph, and participants provided consent through voluntary response to the survey. No individually or institutionally identifiable information was collected on the survey, and the final survey was distributed exclusively by the principal investigators (C.M., P.B.).

## RESULTS

Of a possible 357 respondents, 198 (56%) responded to the survey (Table 1). More than one half (58%) of the respondents worked in freestanding children’s hospitals, and the majority identified their main clinical focus as a ward hospitalist (90%). Most participants were in the early stages of their careers, with almost one half (49%) in their first 5 years of practice, and 70% with early academic appointments (Instructor or Assistant Professor). A minority of the survey participants worked as the only hospitalist each shift (27%) or were exclusively nocturnists (14%), and only a small proportion were fellowship trained in pediatric hospital medicine (12%). All respondents, except one, supervised at least one type of trainee (including medical students, residents, fellows, nursing students, or physician assistant or nurse practitioner students).

### CURRENT PRACTICES

Although the majority (60%) of respondents have participated in POF themselves, less than one half (42%) reported an expectation of POF by their division’s leadership. In addition, one quarter of hospitalists were unsure of opportunities for POF in their division or practice group. Among those who had participated in POF, the majority of these encounters focused on patient care

**Table 1.** Demographics of Pediatric Hospitalist Participants in the Peer Observation and Feedback Survey

Demographic	Specific Descriptor	Number (%) n = 198
Setting	Freestanding children’s hospital	115 (58)
	Children’s hospital within an adult hospital	36 (18)
	Community hospital	47 (24)
Primary clinical role	Floor/ward hospitalist	177 (90)
	Newborn nursery hospitalist	14 (7)
	Other: subspecialty, surgical co-management, pediatric consulting	7 (3)
Supervise trainees	Yes	197 (99)
Only hospitalist on at one time	Yes	54 (27)
>50% overnight shifts	Yes	28 (14)
Completed PHM fellowship	Yes	23 (12)
Years in practice	0–5	97 (49)
	6–10	53 (27)
	>10	48 (24)
Sex	Female	144 (73)
Academic appointment	Instructor	20 (10)
	Assistant Professor	118 (60)
	Associate Professor	31 (16)
	Professor	7 (3)
	Adjunct Professor	3 (1)
	No academic appointment	19 (10)

PHM indicates pediatric hospital medicine.

**Table 2.** Identified Domains in Which Peer Observation and Feedback Is Occurring Within Pediatric Hospitalist Divisions or Groups

Domain	Description	Number (%)
Patient care	Clinical management, evidence-based practice, procedural competence, family-centered rounds	76 (66)
Quality and safety	High-value care practices, quality improvement	24 (21)
Communication	Handoff proficiency, facilitating difficult conversations, facilitating family meetings	39 (34)
Administrative	Documentation, coding, billing	23 (20)
Teaching activities	Specific to medical students, residents, fellows, nursing or nurse practitioner students, physician assistant students	70 (60)
Leadership	Time management, efficiency, leading meetings	10 (9)
Research	Concept development, methodology, manuscript preparation	31 (27)

(66%) and teaching activities (60%) (Table 2). However, respondents identified participation in POF in all surveyed domains, including research, quality improvement, and communication (Table 2). More than one half (61%) of respondents who had participated in POF reported using a standardized feedback tool for POF activities.

### BENEFITS OF POF

The most common perceived benefits of POF included identifying areas for improvement (94%) and learning about others' styles and approaches (94%). Respondents also identified the creation of a mutually supportive relationship between physicians as a benefit regardless of whether they were the observer (85%) or being observed (84%). There was also a perceived benefit of modeling life-long learning for trainees both when being observed (79%) and when observing (75%) (Table 3).

### BENEFITS: DEMOGRAPHIC COMPARISONS

Although site of practice, hospital medicine fellowship training, and nocturnal work were not associated with

differences in the respondents' perceived benefits of POF, sex and seniority were. Female participants and junior faculty were more likely to identify that accumulating feedback for their promotion packet portfolio was beneficial (female = 58% vs male = 30%,  $P \leq .001$ ; junior faculty = 56% vs senior faculty = 27%,  $P = .003$ ). Early-career physicians (in practice  $\leq 5$  years) also reported a larger benefit of observing the styles and approaches of colleagues (99% vs 90%,  $P = .005$ ) when compared with later career physicians. Early-career physicians were also more likely to view POF as beneficial for the creation of mutually supportive relationships among faculty (91% vs 79%,  $P = .02$ ).

### BARRIERS TO POF

Sex, years in practice, seniority, or nocturnal work were not significantly associated with any differences in perceptions of barriers. For the observer and the one being observed, the greatest POF participation barrier was time (55% and 46%, respectively). Additional barriers to being observed included discomfort with receiving feedback from peers (35%), feedback being too nonspecific (34%), and lack of POF tools with validity evidence (33%).

**Table 3.** Perceived Benefits and Barriers of Peer Observation and Feedback by Pediatric Hospitalists When Being Observed and Acting as the Observer

	Being Observed, no. (%)	Observer, no. (%)
<b>Benefits</b>	n = 193	n = 193
Identifying areas for improvement	182 (94)	n/a
Receiving feedback that is less intimidating from peers than supervisors	138 (72)	n/a
Accumulating feedback for promotion portfolio	97 (50)	n/a
Creating mutually supportive relationships between faculty	162 (84)	164 (85)
Role-modeling lifelong learning for trainees	152* (79)	144* (75)
Learning about other's styles and approaches	n/a	181 (94)
Providing an opportunity to practice giving feedback	n/a	135† (70)
<b>Barriers</b>	n = 189	n = 189
Data could be used for high-stakes decisions	53 (28)	n/a
The feedback is too nonspecific	64 (34)	n/a
The culture of my division/hospitalist group is not conducive to participating in POF	24 (13)	30 (16)
The size of my division/hospitalist group is not conducive to participating in POF	47 (25)	44 (23)
Time is too limited to discuss/provide feedback	87 (46)	103‡ (55)
It is uncomfortable to receive feedback from peers	66 (35)	71 (37)
There are few valid peer feedback tools	62 (34)	51 (27)
POF is less valuable than other competing priorities	53 (28)	60 (32)
Behaviors change when being observed compared to "real life"	n/a	79 (42)

n/a indicates not available; POF, peer observation and feedback.

\*n = 192 due to nonresponse from the one respondent who does not supervise trainees.

†n = 192 due to a missing response.

‡n = 188 due to a missing response.

When acting as the observer, participants identified the perception that behaviors change when people are being observed (42%) and discomfort with providing feedback to peers (38%) as important barriers (Table 3).

### BARRIERS: DEMOGRAPHIC COMPARISONS

Fellowship trained respondents were less likely to identify time limitations as a barrier (23% vs 49%,  $P = .03$ ). Community hospitalists and solo practitioners were more likely to view the size of their group as being a significant limitation to participating in POF regardless of whether they were being observed ( $P = .003$  and  $P = .007$ , respectively) or were the observer ( $P = .004$  and  $P = .02$ , respectively).

The respondents who had not participated in POF before were more likely to report that their divisional culture was not conducive to POF (21% vs 7%,  $P = .007$ ) and that feedback could be used for high-stakes decisions (36% vs 22%,  $P = .05$ ). Participants who had not participated in POF also were more concerned that behaviors change when being observed (53%) in comparison to those who had participated in POF (34%,  $P = .01$ ). Sex, years in practice, seniority, and nocturnal work were not associated with significant differences in perception of barriers.

### PROGRAM OPPORTUNITIES

Most respondents preferred an official division POF program (76%), with interest across all domains (Table 4). The top 3 desired domains for observation and feedback were teaching skills (85%), clinical management (83%), and family-centered rounds (83%). Respondents preferred random pair assignment (38%) or pairings made by leadership (34%) over selecting their own POF colleague (24%).

Male physicians (male 50%, female 30%,  $P \leq .001$ ), junior faculty (junior 75%, senior 50%,  $P = .008$ ), and community hospitalists (community-based 86% vs university-based 66%,  $P = .009$ ) reported more interest in billing and coding POF. Physicians working at a

children's hospital were more likely to want feedback on family-centered rounds (90% vs 60%,  $P < .001$ ) and teaching activities (89% vs 73%,  $P = .008$ ) when compared with those working in community settings, and physicians practicing longer than 5 years were more interested than early-career physicians in POF in handoff coaching (74% vs 60%,  $P = .04$ ).

## DISCUSSION

This is the first multicenter study identifying the POF practices and preferences of pediatric hospitalists. Our study indicates that although the majority of perceived POF benefits are similar regardless of years in practice, academic rank, practice setting, or sex, past participation in POF significantly reduces perceived barriers. Although less than one half of the physicians we surveyed currently have any divisional expectation for POF, respondents overwhelmingly indicated that they want opportunities for POF programs in their hospital practice groups or divisions and that pediatric physicians find POF to be an informative and useful faculty development tool.

Our study confirms findings reported in the internal medicine and medical education literature that POF enhances opportunities to give and receive feedback as well as to improve teaching effectiveness.<sup>8,9</sup> For early-career physicians, POF provides an opportunity to learn about teaching and rounding styles of colleagues and creates mutually supportive relationships between physicians. In addition, building on existing literature around clinical and teaching feedback, our respondents desired POF in nonclinical pursuits, including quality improvement, research, and leadership skills, demonstrating not only a diverse interest in opportunities for growth but also perhaps representing the scope of practice for pediatric faculty.

Time was one of the biggest identified barriers. With competing personal and professional priorities for physicians, effective POF programs ought to maximize time efficiency and quality. Interestingly, in our study, fellowship-trained respondents were less likely to view time as a barrier. As fellowship training is an environment in which trainees experience ongoing structured feedback, their decreased perceptions of time as a barrier may reflect the perceived value of POF, especially as the initial apprehension towards POF fades with participation.<sup>15,20</sup>

Survey respondents felt uncomfortable both receiving and giving feedback to their peers and were concerned that feedback would be nonspecific. Encouragingly, previous studies on peer feedback in family-centered rounds and peer-to-peer coaching have shown that setting a comfortable learning environment is key to diminishing anxiety and that inexperienced hospitalists can be trained using structured tools to provide effective feedback on teaching.<sup>9,15</sup> In addition, we found that those who had not participated in POF were more likely to perceive their division as not conducive to POF, more afraid of feedback being used for high-stakes decisions, and more concerned that

**Table 4.** Pediatric Hospitalist—Preferred Domains for Peer Observation and Feedback

Domain	Respondents (%) (n = 189)
Teaching activities	160 (85)
Clinical management	156* (83)
Family-centered rounds	156 (83)
Communication skills	144† (77)
Billing/coding	135 (72)
Handoff proficiency	127 (64)
Documentation	119* (63)
Quality improvement and research activities	115* (61)
Meeting facilitation and leadership	114† (61)
Procedural competence	97† (52)
Time management	192* (49)

\*n = 188 due to a missing response.

†n = 187 due to 2 missing responses.

behaviors change when someone is being observed when compared with their peers who had participated in POF. This finding combined with the fact that fellowship training experience reduces the perception of time as a barrier suggests that active participation with POF reduces perceived barriers and that while a comfortable learning environment is important, having the opportunity to participate may be more valuable for addressing such barriers.

Our survey results also highlighted the preference for random or assigned pairing over personal selection of colleagues for POF. The use of random or assigned pairings may be another strategy for mitigating concerns regarding peer-to-peer feedback and to promote maximal physician interaction between both senior and junior faculty.

Similar to Gosling's conceptual peer review model, we found that physicians identify the strengths of POF as creating mutually supportive relationships, learning from one another, and identifying areas for growth. The risks, however, are nonspecific feedback, concern for behavior change, and discomfort between peers. As interest in using POF as a source for faculty development continues to grow,<sup>20</sup> this model can be expanded from teaching observations alone into a broader application for improving established POF programs and designing future programs.

The key features in building a POF program include mutually beneficial observations with specific, targeted feedback that is nonpunitive and not tied to promotion. Initial participation in POF could be voluntary, although our results show that the majority of respondents prefer a structured program. Programmatic efforts may target teaching skills, clinical management, and communication skills, although the diversified interests represented in our survey demonstrate that programs have the opportunity to tailor based on individual areas for growth. Deliberate consideration should be given to the inclusion of those working alone or at night. In starting a program, curricula should prioritize education regarding how to provide clear, concise, and specific feedback.

In building from the results of our survey, there are several next steps to consider. First, as multidisciplinary teams are central to patient care, understanding the impact of team dynamics involving trainees, nursing, social workers, pharmacists, and ultimately families on POF within faculty development remains an area to be explored. Next, as many programs across the country are smaller groups with few physicians, particularly those within community settings, there may be a greater role for the development of national POF programs. Similar to the success of exchange students within the undergraduate system, the pairing of programs nationally to learn from one another and to exchange ideas may counterbalance some of the limitations of size. Third, there remains a dearth of published tools with established validity evidence for consistent and reliable use within POF. Additional qualitative work around how peer observation is occurring may provide further depth of understanding for the development of such tools. Once such tools are established, understanding the frequency and context of POF (eg, within training or orientation vs a regularly schedule part of faculty development)

also may help to elucidate additional influences on the benefits and barriers to successful POF and if effective peer observation does lead to measurable behavior change. Lastly, as pediatric hospital medicine undergoes a transition to subspecialty status and more hospitalists complete fellowship training, further opportunities may arise to characterize this impact on the role of POF.

Our study has several limitations. First, we used a convenience sample, thus potentially limiting generalizability. We did attempt to account for this by having a national distribution of programs as well as a diverse population of represented hospitalists in years of experience, nocturnal work, and community versus children's hospitals. By doing this, we attempted to minimize the impact of potential institutional and geographic biases. We also did not collect data on race and ethnicity, which may impact perceptions of POF. In addition, we did not distinguish responses from division chiefs and, therefore, could not identify potential differences in perceptions between leaders and their division members. Lastly, we cannot exclude the possibility of selection bias. Although we collected no personally identifiable information of survey nonresponders, the demographics of those who responded to the survey are similar to the overall demographic characteristics of participating institutions and their hospitalist divisions. As such, we believe that the characteristics of the survey responders are representative of our sampling frame.

## CONCLUSIONS

Pediatric faculty desire formalized opportunities for peer observation and feedback in both clinical and non-clinical areas and view peer observation and feedback as an informative and useful faculty development tool. Participation within a POF program reduces perceived barriers. Our survey highlights key features of effective POF for physicians seeking to improve or establish formal POF programs.

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## SUPPLEMENTARY DATA

Supplementary data related to this article can be found online at <https://doi.org/10.1016/j.acap.2019.03.005>.

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