Calling Consults: A Workshop to Teach Trainees Using Both Didactic and Small Group–based Learning

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ABSTRACT

Background: Safe patient care includes effective communication. The Accreditation Council for Graduate Medical Education common program requirements include core requirements for trainees to act in a consultative manner and communicate effectively. However, trainees do not commonly receive formal education on this topic.

Objective: We created a 1-hour workshop to teach residents and fellows how to effectively call consults, including how to formulate a cogent and comprehensive consult question.

Methods: The workshop, delivered over a 1-hour noon conference, included a didactic portion and interactive small-group case-based learning. We used pre- and postworkshop surveys to assess learners' prior training, knowledge, and comfort levels in calling consults. Subspecialists answered a separate survey about the quality of consults received from trainees before and 30 days after the workshop.

Results: Seventy-three trainees attended the workshop (41.2% of total trainees invited). After the workshop, the percentage of learners who identified as very or somewhat comfortable with calling consults increased from 82% to 91%. Before the workshop, 87% of trainees could identify key elements in a consult, which increased to 100% after the workshop. There was not a statistically significant improvement in subspecialists' ratings of the overall quality of consults they received 30 days after the workshop.

Conclusion: Training learners on the key components and etiquette of calling consults is crucial for the development of effective communication among providers. This training is generally lacking from undergraduate medical education; thus, it is important to provide education in calling consults during residency and fellowship.

Keywords:
curriculum; calling consults; residents and fellows; workshop

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One of the pillars of safe and effective patient care is comprehensive and efficient communication between medical teams (1–6). The common program requirements published by the Accreditation Council for Graduate Medical Education list physician communication as a core component of residency training (1); however, few institutions incorporate a formal curriculum on calling consults (2, 7). Education about calling consults is largely left to observational learning as opposed to formal teaching (3), which can lead to perpetuation of inconsistent and ineffective communication methods between care providers. Phoenix Children's Hospital (PCH) is a freestanding children's hospital in an urban setting with a large pediatric residency program and 12 fellowship programs at the time of this workshop. In the summer of 2017, PCH division chiefs identified calling consults as an area for improvement because of the inconsistent quality of consults called by residents and fellows. Though some learners had previously received training in calling consults, the quality and depth of that training were highly variable.

Though there have been several published studies on teaching skills in calling consults, most interventions require a lengthy time commitment and extensive faculty involvement, and many are targeted toward medical students (2, 4, 5). This study is novel in that it condenses the learning to a workshop designed to be given over the course of 1 hour, is directed at all levels of graduate medical education learners, includes a mixture of didactic and small-group case-based learning, and incorporates a continuing education portion aimed at educating faculty about both calling consults and supervising trainees in calling consults. In addition, the didactic portions were devised and created entirely by two senior residents with faculty guidance.

The goals of this workshop were for learners to increase their self-reported comfort levels with calling consults and for them to identify correctly the key elements involved in calling consults. Through this project, we also aimed to improve faculty perceptions of the quality of the consults they receive from trainees.

METHODS

The PCH Graduate Medical Education Subcommittee on Professionalism, a group of residents, fellows, and faculty in various specialties, created and implemented a 1-hour workshop to train learners in calling consults. We used the resident–fellow forum, a quarterly meeting for all house staff at PCH, including pediatric residents, pediatric subspecialty fellows, and rotating residents from other specialties (general surgery, surgical subspecialties, and radiology). We held the workshop in a large conference center space suitable for more than 100 attendees. Tables and chairs were arranged in rows. A computer connected to a projector was used for the didactic portion of the presentation.

The day before the workshop, a one-question survey (*see* Appendix E1 in the data supplement) was sent to a selection of 60 subspecialty faculty at PCH with exposure to and experience with receiving

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consultation requests from trainees. We asked them to rate the overall quality of consults called by trainees at PCH on a numerical scale from 0 to 100. The day of the workshop, we gave each trainee a survey as they entered the room (Appendix E2) to evaluate their baseline knowledge, experience, comfort level, and understanding of the key components of effective consultation calls.

The workshop was facilitated by two third-year pediatric residents who were members of the PCH Graduate Medical Education Subcommittee on Professionalism. They worked with subcommittee faculty members from a variety of specialties, including hospitalists and subspecialists, to create a didactic presentation aimed at teaching trainees the crucial parts of a consult, etiquette when calling a consult, and common pitfalls. Because of the relative lack of studies in the medical literature addressing how to call consults effectively at the time, the didactic portion was created by this committee using expertise of those involved. The model created by the team at PCH mirrors closely other methods for teaching consultation skills that have been published since then (2, 3).

The workshop started with the resident members of our group giving a 20-minute didactic presentation (Appendix E4). For this presentation, we created an acronym (CONSULT: contemplate the clinical question, obtain background on the question, name and role, summary statement, ultrapertinent information, legitimate question, tell the consultant what you heard) to highlight crucial elements to include when calling a specialist. After the didactic portion, attendees were then divided into groups of three or four to role play two different case scenarios (Appendix E5). The groups were a mix of residents and fellows; the faculty facilitators moved between small groups to provide guidance and feedback as the trainees worked through the case scenarios. The cases were written to practice formulating an appropriate consult, discussing the specific consult question(s) with an attending, and calling the actual consult using the CONSULT acronym. The case scenarios also gave trainees the opportunity to practice receiving consults as they took turns role playing the consultant.

At the end of the workshop, we distributed a postworkshop survey (Appendix E3) to reassess attendees' knowledge and comfort levels in calling consults. We also repeated the one-question survey to subspecialty faculty 30 days after we delivered the workshop (Appendix E1).

After the completion of the workshop, we received feedback from trainees that supervising faculty, who were expected to role model proper procedures for calling consults themselves, did not always adhere to the prescribed guidelines and etiquette. Therefore, we adapted both the didactic and case-based portions into a faculty development snippet presentation (Appendix E6). We designed the presentation to be given at division meetings to teach faculty how to call consults and how to mentor trainees through calling consults.

RESULTS

Seventy-three residents and fellows (41.2% of total trainees invited) attended the workshop. Approximately half (52%; $n = 38$) of the trainees in attendance had not received any prior education on calling consults. Of those who had received previous education on calling consults, the setting of their training spanned the medical education continuum from medical school to elsewhere in residency. All learners in attendance agreed that it was important to

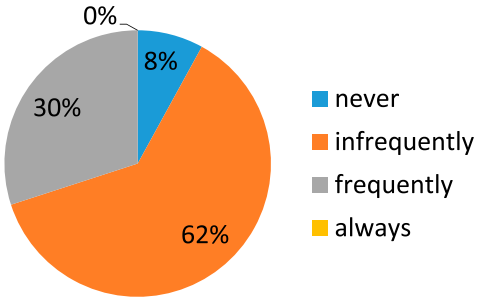

Figure 1. In the preworkshop survey, trainees self-reported the frequency of calling consults in the past without fully understanding the consult question.

receive formal training on how to call consults at some point in their training. A large majority (92%; $n = 67$) of the trainees in attendance admitted to having called a consult in the past without understanding the reason for the consult, and 30% of them said that this happens frequently (Figure 1).

The percentage of residents who rated themselves as "very comfortable" or "somewhat comfortable" with calling consults increased from 82% before the workshop to 91% afterward; notably, the percentage of residents who rated themselves as very comfortable increased from 29% to 44% (Figure 2). Before the workshop, 87% of trainees reported that they were able to identify the key elements of a consult; this number increased to 100% after the workshop. Ninety-six percent of attendees found the workshop helpful.

Qualitatively, attendees' reactions to the workshop were overall positive. The trainees indicated that they found the session helpful and particularly liked the interactive cases. Some constructive comments included making the presentation "more concise to focus on the key points." Another comment suggested that "it would be more beneficial to practice with an

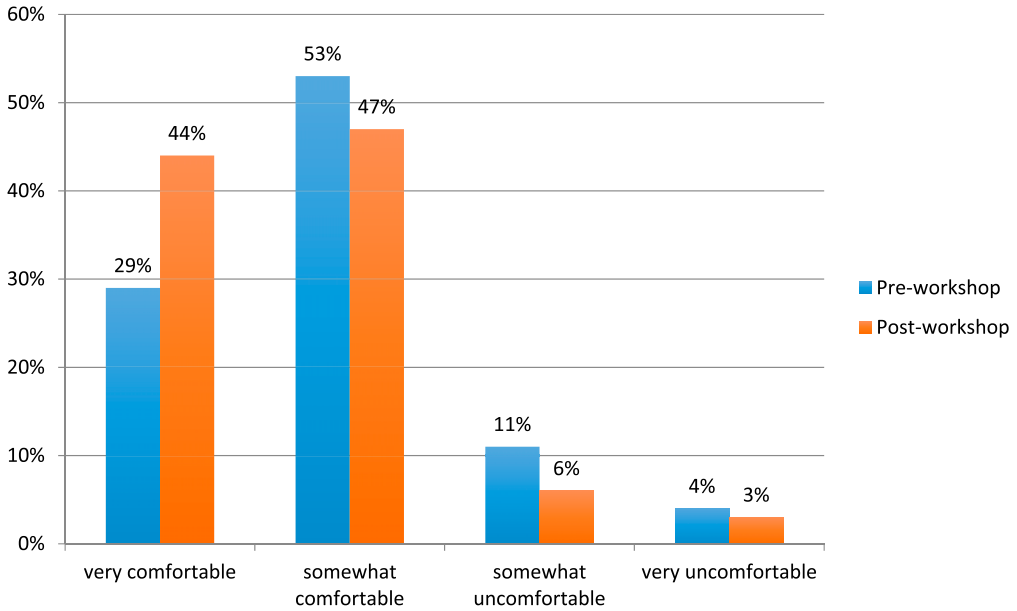

Figure 2. In the pre- and postworkshop surveys, trainees self-reported their comfort levels with calling consults.

attending or fellow than with fellow residents."

Before the workshop, 21 of 60 (response rate, 35%) subspecialist physicians rated the quality of consults called by residents as 56.7 on a scale of 0–100 (range, 15–96). One month later, 19 of 60 (response rate, 31.7%) physicians provided an overall rating that increased to 66.4 (range, 10–100). There was no significant difference in these values ($P = 0.24$).

DISCUSSION

Training learners on the elements and etiquette of calling a consult is important for effective communication among care providers. Currently, education on how to call consults is generally provided in an informal manner and is not typically included in a formal medical curriculum. Our workshop made an impact on learner comfort levels and understanding of key aspects of calling consults in spite of the fact that the workshop only took 1 hour to deliver. These results suggest that a combined didactic and case-based learning approach with trainee and faculty preceptors is an effective educational tool to teach learners how to call consults. We have since repeated this workshop in smaller learning sessions for subspecialty fellows in fall 2018 and fall 2019 as part of our institutional fellows curriculum, and we plan to repeat this workshop at the resident–fellow forum approximately every other academic year.

One important limitation of our study is the fact that it is a single-institution study. Although we had good attendance at our workshop, not all learners were able to attend, and dissemination of this information to those not in attendance was limited. Another limitation is that the impressions of subspecialty faculty who receive consults are subject to recall and recency bias. In addition, we did not have a validated tool to assess consultation quality objectively by those who received or observed consultation calls; thus, outcome measures are limited to trainees' self-reported comfort and understanding of calling consults and subspecialists' perceptions, as opposed to quality of consults called before and after the workshop. Further work should be completed to objectively assess how well residents call consults and how such a curriculum affects resident performance and, in turn, patient safety and outcomes.

One point of discussion that emerged during the workshop was that to improve the quality of consults called by trainees, we must also train attendings to follow best practices for formulating consults, receiving them, and using the encounter as an opportunity to give feedback in the moment. Because trainees often learn via direct observation of their attendings, teaching trainees is not sufficient to affect system-wide improvement in the quality of consults. We therefore created a faculty development snippet slide deck (Appendix E6) designed to be delivered to faculty across the institution. This "portable" snippet can be given in 15 minutes or less with the goal of educating staff physicians on issues related to calling and receiving consults so that they can role model ideal behaviors for learners.

Communication is a pillar of safe and effective patient care. This study demonstrates the feasibility of teaching an important communication skill during a 1-hour workshop to residents and fellows that helped improve trainees' confidence in calling consults as well as their ability to identify crucial elements of a consultation call.

Author disclosures are available with the text of this article at www.atsjournals.org.

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