

# Using Resident Focus Groups to Improve Subspecialty Consultations in a Pediatric Urgent Care Setting

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**Background:** In a pediatric urgent care center, patients requiring management by subspecialty consultants have average waiting times of two hours. Pediatric resident input was sought in order to identify problems and propose urgently needed solutions.

**Objectives:** 1) To define the dimensions on which residents measure quality of consultations; 2) To generate solutions for perceived problems.

**Setting and Design:** Mixed methods, including focus groups, survey questionnaires and an intervention, were used. Focus groups and questionnaires involved pediatric residents from a large public hospital that provides care to medically underserved African-American and Latino patients.

**Results:** Residents defined four dimensions of quality: waiting time, teaching, courtesy and overall quality of care. An intervention made with the service having the poorest ratings on the questionnaire consisted of a detailed discussion of focus group findings and recommendations. The overall effectiveness of the intervention was evaluated by analyzing pre- and postprogram measures. Postintervention ratings showed significant improvement of ratings along three of the four dimensions of concern.

**Conclusions:** At minimal-to-no cost to an institution, focus groups composed of residents can generate viable solutions to observed problems. This form of feedback could be beneficially incorporated into an institution's continuous quality improvement processes.

**Key words:** focus groups ■ pediatric residents ■ quality of care ■ education

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## INTRODUCTION

The medical literature has addressed the issue of patients' satisfaction with regard to various aspects of their healthcare, including waiting times.<sup>1-4</sup> Since prolonged waiting times may result from delays at any stage of care, we conducted a one-year review of medical records in the 16,000 visit-per-year pediatric urgent care center of a large public hospital providing care to medically underserved African-American and Latino patients. Our review revealed that the large majority of children having prolonged waiting times (up to 12 hours, with an average waiting time of two hours) had received subspecialty consultations.

While the impact of prolonged waiting times on patients has been discussed in the literature,<sup>4-6</sup> the parallel impact on the primary care providers, who serve as intermediaries between patients and subspecialty consultants, is less clear. Although studies have described the relationships between generalists and subspecialists,<sup>7-10</sup> an extensive review of the literature yielded no information about the impact of prolonged waiting times on primary care physicians' perceptions of subspecialists in the acute care setting. The present study was conducted in order to address this question and to generate possible solutions to perceived problems with obtaining subspecialty consultations in an urgent care setting.

## METHODS

### Overview

This is a mixed-methods research project, including focus groups, questionnaires and an intervention. The ini-

tial phase consisted of focus groups, a known qualitative research method. Qualitative research methods, particularly focus group interviews, were chosen because they are an accepted method of research in areas where little or no research has been conducted. Focus groups are widely used to examine people's experiences of disease and of health services.<sup>11</sup> Group interaction, inherent to focus groups, can help bring to light issues that may not come up in individual interviews.<sup>12</sup> Furthermore, the simultaneous and systematic questioning of several individuals is an effective means of eliciting the perceptions and experiences of a group. The group dynamic is a synergistic factor in bringing out information that is not available through individual interviews or surveys.<sup>13</sup>

Based on focus group findings, a questionnaire was administered in order to measure residents' perceptions of concerns about subspecialty consultations. The service having the poorest ratings was targeted for an intervention, consisting of detailed discussion of focus group findings and recommendations. Six months following the intervention, the identical questionnaire was used to measure residents' perceptions about the "targeted service."

## Setting and Participants

The setting was the Department of Pediatrics at the Martin Luther King, Jr./Charles R. Drew Medical Center (KDMC), a 200-bed, urban teaching hospital in south-central Los Angeles, CA. During the study period, the inpatient pediatric unit contained 26 beds and was staffed by 13 licensed nurses, 21 faculty members who served as attending physicians and 34 pediatric residents. The study was approved by the institutional review board.

## Focus Groups

All 34 pediatric residents at KDMC were invited to participate in a focus group discussion of subspecialty consultations in the pediatric urgent care center. The focus groups were conducted on weekends within a one-month period. Without respect to training level, race/ethnicity or gender, residents were selected in order of response until each of the three focus groups had reached its limit of 6–8 persons. Because of scheduling conflicts, not all residents were able to participate.

Each of the three groups met once in a quiet confer-

ence room outside the hospital. With informed consent, participants recorded their age, gender, education, certification and work experience on a demographic form. To reduce investigator bias, all questions were open-ended, and the experienced focus group facilitator had little prior knowledge of and no direct experience with the focus group participants.

**Focus group probes.** In focus groups, residents responded to a single "ice-breaker" question and seven open-ended questions related to their perceptions of the medical center, experiences with consultants, ways of improving consultations, perceptions of pediatric residents' responsibilities before the arrival of consultants, proposed explanations for the "negative" behavior of consultants, recommended questions to ask consultants in a focus group, and the definition of the ideal consultation (Table 1). Interviews lasting 60–90 minutes were audiotaped and transcribed verbatim. A research assistant checked the accuracy of all transcripts. Field notes were also recorded.

## Questionnaire

Based upon focus group discussions, a questionnaire was devised, assessing the four domains that residents perceived to affect the quality of subspecialty consultations in the pediatric urgent care center: time (lag time before a consultant responds to a request for consultation), courtesy (of consultant toward patients and the pediatric resident), teaching (quality of teaching by consultant), and quality (overall quality of the service provided by the consultant). The instrument had five-point Likert rating scales in the four defined domains for each of the 14 subspecialty services providing consultations to the pediatric urgent care center.

All 34 pediatric residents were invited to complete pre- and postintervention questionnaires. Thirty-one and 34 residents, respectively, completed pre- and postintervention questionnaires. Pre- and postintervention ratings were tallied and compared for each scale, each service and all services combined. Cronbach's coefficient alpha for all subscales indicated acceptable internal consistency (0.83–0.91). The service having the lowest ratings ("targeted service") was targeted for the intervention. Six months after the intervention, the identical questionnaire was redistributed.

**Table 1. Focus group probes**

1. Ice-breaker question: "What do you do in your leisure time?"
2. What do you like best about this medical center?
3. Tell us about your experiences (positive and/or negative) with consultants.
4. How can we improve consultations?
5. How much do you think you should do before the consultant comes?
6. What do you think explains negative behavior of consultants?
7. What questions would you like us to ask the consultants if they were in a group such as this?
8. What would you consider to be the ideal consultation?

## Intervention

After presenting the chief of the targeted service with a written summary of the focus group findings and recommendations, the authors facilitated a detailed question-and-answer period with the chief. Thereafter, the chief of the targeted service held several lengthy discussions of the results with faculty, chief residents and residents in his department.

## RESULTS

Seventeen residents of a 34-resident complement (50%) participated in a focus group, none more than once. Participants and nonparticipants were similar in training level, race/ethnicity and gender. Residents uniformly selected one subspecialty service as the poorest in response time, courtesy and quality of teaching.

## Concerns

Resident-identified concerns about the consultations provided by this subspecialty service fell into three categories:

- 1. Prolonged waiting times.** One resident stated: “[This service’s] very delayed response time to the patients creates a lot of anxiety between the patients and pediatrics.” A second resident said: “I find that the patients tend to wait an awful long time to be seen and have their treatment administered and be cleared to home through the service. I’ve been trying to figure out why it takes so long. Sometimes it’s hard to treat them. Sometimes it takes me 3 or 4 people I have to page. I’d have to call the administrative office and I’ve had to call for the attendings because no one else answers pages.” A third resident wondered whether this service’s prolonged waiting times resulted from the fact that “they think our time is not as valuable as to what we need to do. Like what we’re going through as being pediatricians is not as valuable as what their time is.” Some residents expressed more positive opinions, including “I am sure they are working very hard, but when children are in pain, it’s frustrating for us, especially for me, when kids have to wait” and another who noted that “patients have had to wait for hours, but when they get treated, they get treated well.”
- 2. Teaching.** Residents felt that they were not always being taught what they needed to learn. In the words of one resident: “I would like for them to teach me something and not ask me questions as though I know already. If I knew it, I wouldn’t need a consultant.” Another resident felt that “we should be able to learn from consults. They should explain their management. We hope it will be the latest standard of practice. They should understand

that it is a matter of comanagement, because they are also learning from us.”

- 3. Courtesy.** Pediatric residents felt that residents from the consulting service were short tempered. In the words of one resident: “I had an experience where a resident had actually cursed at me over the phone, basically, because I told him the patient was running a high blood pressure due to a pain that he was experiencing and he cursed me out, but I counted to 10 and smiled and continued to tell him what I needed to tell him.” Another resident wanted to ask a rude and nonteaching consultant, “Why are you killing the messenger instead of teaching me?” While a third resident stated that, “The only way I can justify is that they are simply overworked, or their seniors are not particularly treating them well.” Another felt that “the stress level cannot be 100, 24 hours a day, seven days a week, just because they had a bad day.”

## Favorable Perceptions

The residents gave uniformly favorable ratings to the overall quality of care provided by this subspecialty service. As stated by one resident: “Once they see the patients, they seem to be giving them good care.” Another said, “When they get there, they do a very good job. They take care of business. When the patients get treated, they are treated well.”

## Possible Impact of Pediatricians’ Behavior

Several residents felt that pediatricians’ behaviors could, in turn, change the behavior of subspecialists. As stated by one resident: “I think a lot of it has to do with the way you communicate. Just the tone of voice that you may use, the way you present the patient, the type of history you give, is very important. It makes a real big difference, I think, in them coming in the next two hours or them coming in the next six hours.” Another resident said, “Sometimes it’s our fault too when we call the consult in. There are some of us that don’t give a good history or have labs available, and it may take a long time.” Several residents expressed their views that the perception of pediatricians as “docile” or “unaggressive” elicited subspecialists’ discourtesy.

## Solutions

Resident-generated solutions for all subspecialty departments related to response time, teaching, courtesy and overall quality of care. Any solution proposed by a resident is reflected in the following lists:

- 1. Waiting time.** Consulting service should:

  - communicate status of consultant at regular intervals (e.g., reasons for delay, estimated time of arrival, etc.);

- improve efficiency of deployment of consultant;
  - appropriately use physician extenders
- 2. Teaching.** Consulting service should conduct resident sessions on inter-disciplinary teaching.
- 3. Courtesy.** Consulting service should:
- convene focus groups to explore reasons for “negative” behavior and to propose solutions,
  - convene workshops on stress-reduction techniques and professional behavior,
  - convene monthly meetings between Department of Pediatrics and each subspecialty service chief,
  - model appropriate behavior.

While maintaining professionalism and courtesy, pediatricians should also be more assertive.

- 4. Quality of service.** Consulting service should:
- make liberal use of “language” lines or interpreters,
  - schedule residents for interdepartmental rotations,
  - schedule interdepartmental lectures.

## Ratings

When pre- and postintervention ratings were compared, subspecialties not receiving the targeted intervention showed no significant difference in time, courtesy, teaching or quality of the service provided to patients. The service receiving the targeted intervention, however, showed significantly improved ratings for time ( $t=3.9$ ,  $p<0.01$ ), courtesy ( $t=3.1$ ,  $p<0.01$ ) and teaching ( $t=2.2$ ,  $p<0.05$ ), although there was no significant difference in the perceived quality of the service provided to patients ( $t=1.3$ ,  $p=0.19$ ).

## DISCUSSION

This focus group study emphasizes that effective solutions do not have to be expensive. At minimal cost to an institution, physicians in training may provide valuable input into its continuous quality improvement activities. Participation in quality improvement activities allows residents to take ownership of a given process. Ownership, in turn, increases their understanding of processes, making it more likely that they will integrate recommended solutions into their own activities.

In the present study, resident-generated solutions for all subspecialty departments related to response time, teaching, courtesy and overall quality of care. Subspecialty consultants need to be aware that patients and families may become impatient with the pediatric resident, even though the delay originates outside of pediatrics. On the other hand, a frustrated resident may become less effective

in interacting with patients. For these reasons, residents expect the consultant to communicate his/her status (e.g., reasons for delay, estimated time of arrival, etc.) at regular intervals. Furthermore, by providing high-quality teaching to pediatric residents, the subspecialty resident is more apt to generate interdisciplinary teamwork. The Accreditation Council on Graduate Medical Education (ACGME) dictates the number of subspecialty residents for any given program, and budgetary constraints may obviate the hiring of the required number of physician extenders.<sup>14</sup> Nevertheless, a subspecialist’s regular communication with the pediatric resident about his/her whereabouts and estimated arrival time costs nothing and could significantly mitigate the anxiety of both patient and resident.

Other feasible suggestions made by focus group participants related to interdepartmental rotations and lectures. Based upon specialty and subspecialty requirements for passage of the respective board examination, each department could select lecturers from within the institution to cover specific subjects. Furthermore, in-house elective rotations could be designed to meet the rotator’s learning needs (rather than needs of the service).

ACGME-mandated meetings of all approved residency programs would provide an ideal forum for discussing problems and solutions, and interactions between consulting and primary care residents should be a regular agenda item. Joint Council of Interns and Residents (JCIR) meetings would provide another forum.

It was interesting to find that several focus group participants felt that underlying the behavior of subspecialty residents was a belief that pediatricians are less important than subspecialists or physicians who take care of adults. Changing such a belief would be critical to improving relationships between the pediatricians and other specialists. The importance of improving relationships between pediatricians and members of other specialties has been underlined in a recent report on the future of pediatric education: “Other physicians have played a role in meeting the healthcare needs of pediatric patients as well, including family physicians, emergency department physicians, psychiatrists and pediatric subspecialists. These relationships are likely to continue and, if anything, will become even more essential in the future.”<sup>15</sup> For this reason, the identification of resident-perceived problems and resident-generated solutions as applied to both subspecialists and primary care physicians should be ongoing, high-priority activities at all institutions.

## Implementation

As recommended by the focus group participants, the researchers of this study met with the chief of the service having the poorest ratings for response time, teaching and courtesy in order to discuss the findings and recommendations of the focus groups. Armed with a copy of the findings and recommendations, the chief discussed them and stressed their importance in serial departmental meet-

ings. While a study of the long-term impact of implementation of focus group findings is in progress, an initial assessment of the average waiting time for patients shows a decrease by 50% from preintervention waiting time. Residents also describe improvements in teaching and courtesy. Quantitative analysis of pre- and postintervention questionnaires shows significant improvement in time, courtesy and teaching.

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