

Use of Synchronous, On-line Focus Groups as a Needs Assessment Tool

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Abstract: The American College of Obstetricians and Gynecologists will hold an educational conference in September of 2013. This action research project used synchronous on-line focus groups, as a tool for needs assessment in preparation for the conference. Participant's comfort with accessing and using the technology was evaluated and the effectiveness of the focus group process was assessed. Data was collected using synchronous on-line questions, along with pre and post-event survey instruments. This paper presents and discusses that data, along with the challenges encountered with the project. General needs assessment findings are reviewed. Suggestions for future use of this process and future research opportunities are discussed.

Introduction

The American College of Obstetricians and Gynecologists (ACOG) is a professional association with 55,000 members divided into eleven geographic districts and one Armed Forces district (see figure 1). Districts V, VI, VIII and IX will hold a joint annual meeting and educational conference on Maui in September of 2013.

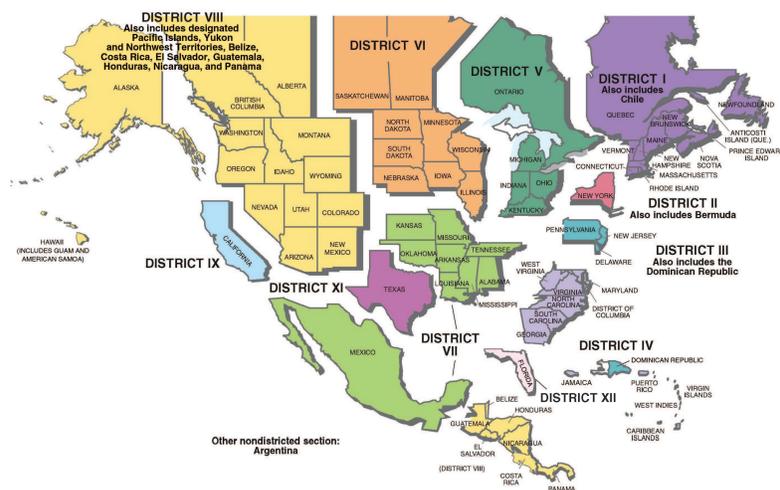


Figure 1. Districts of the American College of Obstetricians and Gynecologist

The planning committee is responsible for the scientific program (the education portion) of the conference and it is difficult to anticipate the educational needs of four generations of learners, all coming from diverse medical practice situations and a wide geographic area. Needs assessment has typically been done using expert opinion (in the form of the planning committee) and evaluation comments from past meeting. Both of these sources leave much to be desired. Occasionally surveys have been used for gathering information about the learners' needs, but low response rates and the closed-end nature of the questions limits this methodology's usefulness. Evidence from marketing research seems to suggest that focus groups are useful for gaining novel insights into the feelings and concerns of a diverse population. However, time, distance and lack of person-power render face-to-face focus groups impractical. It is possible that focus groups using web conferencing technology could be an effective needs assessment tool. The purpose of this action research project was to evaluate the use of synchronous on-line focus groups as a tool for assessing the learners' needs while assisting in the design of an educational conference for obstetrician-gynecologists.

Background

Needs assessment in medical education conference planning, especially in light of the seismic changes effecting the profession, is clearly needed (Norman, 2004). Several authors have reported on the use of focus groups for needs assessment in continuing medical education (Powell & Single, 1996; Sargeant, 2003; Barbour, 2005) and they share important logistic suggestions to improve the process. While the use of conferencing software for synchronous marketing research has been described (O'Conner, 2003), information on distance focus groups in medicine is harder to find. Rezabec (2000) and Kenny (2005) published their experience with some asynchronous on-line focus groups and Cooper, et al (2003) reported experience with conference call focus groups. All felt these were effective method of collecting information but that each had some important drawbacks. An extensive literature review failed to identify publications addressing on-line focus groups for medical education needs assessment.

It is important to note that focus group research has shown that individuals in sessions with like-minded people feel more comfortable participating in the process (Grudens-Schuck, et al, 2004).

Methods

This meeting is a combined annual meeting of Districts V, VI, VIII and IX of the American College of Obstetricians and Gynecologists and the Chairs of those districts are members of the planning committee. The District Chairs used meeting announcements, newsletters and blast emailing to solicited volunteers to be included in the pool of focus group participants. This pool was sorted by generation, gender, and practice setting, to constitute focus groups with similar values and concerns.

Synchronous on-line focus groups were held using web-conferencing technology (BlackBoard Collaborate®) with groups of 2-9 participants. On-line polling (Doodle®) was used to identify time periods with a sufficient number of participants from a given demographic able to attend. The final invitation included the appointed focus group time (adjusted to their time zone), a link to the virtual classroom and a “First-time User” orientation link (Brain shark®) for those that were not familiar with the web-conferencing environment. A link was also supplied that took the participant to a Google Form that collected their demographic information and allowed them to give informed consent to participate.

During the live sessions, a PowerPoint presentation was used to guide the participants through a series of polls, short-answer questions and open-ended questions to gather information about their demographics, their educational needs and their preferred learning styles (see figure 2).

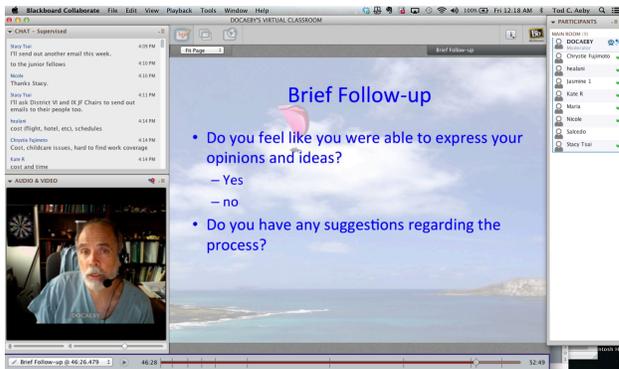


Figure 2. Screen capture of a focus group session.

Additional questions were used to evaluate their impression of this method of needs assessment. The sessions were recorded for off-line transcription and detailed observation. The session ended with the participants receiving a link to a follow-up survey that was used to collect anonymous impressions of the on-line focus group experience.

Quantitative data was collected using yes/no responses multiple choice questions and 10-point rating scales, while qualitative data was collected from the surveys and notes taken during the live sessions and during review of the achieved recordings.

Results

Requests for volunteers theoretically went out to approximately 20,000 members of ACOG in the four participating districts. From that, a pool of 64 physicians agreed to participate. Seven focus group sessions were held. Of the 36 individuals scheduled to participate, 31 actually made it to the sessions. The two most common reasons for missing the scheduled sessions were medical emergencies and technical difficulties with accessing the virtual classroom. The average number of participants per session was 4.4

with a range of 2 to 9. Two sessions were organized but ultimately aborted due to lack of participants.

The seven focus groups fell under one of five themes (see Table 1), based on available participants.

Table 1. Focus Group Types

Focus Group Session	Type	Participants
Session 1	Junior Fellows and Young Physicians	4
Session 2	Mixed	4
Session 3	Junior Fellows and Young Physicians	9
Session 4	Females	5
Session 5	Rural and Suburban Practitioners	4
Session 6	Academic Practice	2
Session 7	Academic Practice	3

Each of the ACOG four districts was represented, as there were participants from Alaska, Alberta, California, Hawaii, Indiana, Michigan, Montana, New Mexico and Saskatchewan. Figure 3 depicts the age and gender distributions of the participants.

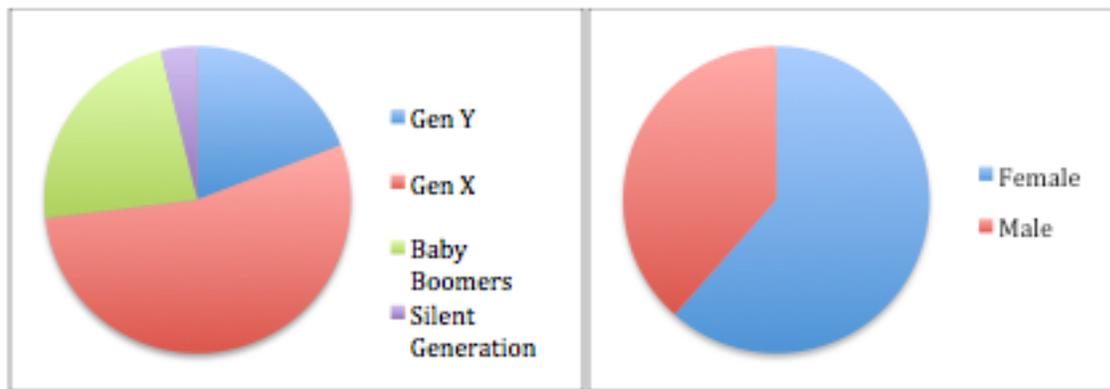


Figure 3. Age and Gender Distribution of Participants

All participants completed the entry survey and agreed to participate fully in the study, but only 26 (84%) of the participants completed the exit survey. Since the exit survey was anonymous, no additional effort was made to encourage completion.

Focus Group Process

When polled for their opinion of the process during the focus groups, 100% of the participants said they found the method of discussion useful and that they felt they were

able to express their thoughts and opinions. More specific questions, asked on the exit survey were still very positive, but a little less so (table 2).

Table 2. Focus group Process (10-point scale)

1	Comfort with Technology	10
This was stressful and caused misery!	8.6	Piece of cake! Could have done it in my sleep
	Ability to Participate	
Felt left out, like I wasn't there	8.9	Felt completely included
	Express your ideas	
I had ideas, but nobody heard them	8.9	All my ideas were easily expressed
	Effectiveness for needs assessment	
Worthless!	8.8	This was a great way to learn what the participants felt they needed

Table 3. Representative Comments on Process

<p>“This was fun! Do more!”</p> <p>“Felt like I was right there with my colleagues from across the country”</p> <p>“There is a learning curve, but it was fine once you get into it”</p> <p>“Wish I had known how important having headphones would be”</p> <p>“Audio delay and echoes can be distracting and frustrating”</p> <p>“Wish the video images were bigger”</p> <p>“Nine participants is too many”</p>
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A conscious effort was made to limit each session to approximately 60 minutes. This was long enough to allow discussions to flow in a natural and unrushed fashion, but not so long as to be boring or burdensome.

Needs Assessment

Participants were asked to discuss their needs and the needs of their colleagues, regarding general and specific topics and instructional formats. Benefits and barriers to meeting attendance were explored. All but one of the participants had attended an Annual District Meeting (ADM) in the past and all of the participants were planning to attend the Maui meeting.

While most participants rated the education portion of the meeting important, they all felt like they could meet those needs in other ways (textbooks, ACOG publications, journals, on-line courses, etc.). The most common reason for wanting to attend the meeting was the ability to interact and socialize with colleagues. Participants felt this allowed them to discuss worries and concerns from their practice while re-energizing their commitment to their patients and women's health.

Reported barriers to attending the ACM focused mostly on cost, time and distance (see Table 4). Viewing the ADM as an opportunity to combine going to a meeting with taking a vacation was only selected by one participant and one participant said she was only going to the meeting because it was a required duty as an officer of her district.

Table 4. Barriers to attendance

Cost of flights, hotel, meals
Cost of meeting registration
Cost of lost revenue when away from practice
Unable to get time away from work
Feel guilty about time away from family (and too expensive to bring them along)
Kids are in school at that time
Five time zones away!
Can't find coverage for patients while gone (mostly a rural issue)

While the specific medical topics suggested by the participants is beyond the scope of this paper, it is important to note that there was nearly unanimous encouragement to move away from a purely didactic format towards interactive and small-group sessions that focus on the review of common conditions and timely, controversial topics.

Discussion

Needs assessment is an important part of instructional design, but current methods in continuing medical education are rarely sufficient. Expert opinion and reviews of prior meetings evaluations, while helpful, is not complete. Surveys suffer from low response rates and questions that are closed ended. This project set out to evaluate the use of synchronous online focus groups as a novel approach to assessing the instructional needs of a geographically diverse group of physicians.

The selected web-conferencing technology had a number of important features, including simultaneous texting, video and audio methods of communication, a polling function, the ability to upload a presentation, and a relatively short learning curve. However, novice participants often did not have headphones making audio challenging. Also, small video screens and lag created by a narrow bandwidth occasionally dampened the participants' enthusiasm for the experience.

The main challenge seems to be getting the physicians into the virtual meeting space, since once there, participants typically found the experience easy, engaging and effective. It remains unclear why only 36 of a possible 20,000 physicians actually ended up participating, though more aggressive advertising of the program would undoubtedly have been helpful. One can theorize that this population has excessive demands on their time and thus they are resistant to requests for participation in extra projects. Another possibility is that they were intimidated by the technology. Technical difficulties accessing the virtual meeting space and medical emergencies are to be expected.

For six of the seven groups, the recommendation that participants be sorted into groups of like-minded individuals was followed with seemingly good results. On the other hand, the one mixed group seemed to bring out new insights that might not have surfaced, otherwise.

From a moderator's standpoint, the web-conferencing seemed to make participant interactive as good as, if not better than, a face-to-face focus group. The texting feature was particularly useful since participants could add short comments, affirmations and disagreements without interrupting the speaker. Some of the more reticent participants still felt comfortable texting. It was easy to identify those that weren't participating so that they could be pulled in with a directed question. Polling made it easy to assess the individual's standing on contentious issues without forcing them to take a verbal stand.

As an aid to planning this and future meetings, the focus groups seemed to be effective. It was very clear that people willing to spend money and time to attend the meeting, would do so because of the opportunity to learn while interacting with their colleagues. Additionally, if they are going to go to that expense, they want to have time in the day to enjoy the venue.

Aside from airfare, expensive hotels and expensive meals, most felt the registration fees at past ADMs were excessive, especially for physicians that are early in their careers. Since lots of inexpensive educational opportunities are available, they can understand why many of their colleagues choose not to come.

Perhaps counter intuitively, most participants would not choose to use ADM attendance as an excuse for a vacation. Most felt they would rather choose their own vacation destination and get their continuing medical education another way. The younger segment of the American College of Obstetricians and Gynecologists has been shown to be more focused on life balance and family. They would prefer to bring their spouse and

children with them to the meeting, but cost, instructional session attendance and the children's school schedule makes this difficult or undesirable.

Conclusion

Needs assessment in continuing medical education has room for improvement and synchronous online focus groups may be a novel tool for this purpose. This action research project, while limited in size, was able to show that participants found the process relatively easy, engaging and effective.

A larger study would need to find better ways to get a broader segment of the target audience to volunteer to participate. Universal broadband access to the web-conferencing tools, headphones and microphones for all participants, and better video support will improve the effectiveness of the process.

References:

- Barbour, R. S. (2005). Making sense of focus groups. *Medical Education*, 39(7), 742–750. doi:10.1111/j.1365-2929.2005.02200.x
- Cooper, C. P., Jorgensen, C. M., & Merritt, T. L. (2003). Report from the CDC. Telephone Focus Groups: An Emerging Method in Public Health Research. *Journal of Women's Health*, 12(10), 945–951. doi:10.1089/154099903322643866
- Grudens-Schuck, et al. (2004). Focus Group Fundamentals – Methodology Brief Available at Iowa State Univeristy Extension Online Store. <http://www.extension.iastate.edu/Publications/PM1969B.pdf>
- Kenny, A. J. (2005). Interaction in cyberspace: an online focus group. *Journal of Advanced Nursing*, 49(4), 414–422. doi:10.1111/j.1365-2648.2004.03305.x
- Norman, G. R. (2004). The need for needs assessment in continuing medical education. *BMJ*, 328(7446), 999–1001. doi:10.1136/bmj.328.7446.999
- O'Connor, H., Madge, C. (2003), ""Focus groups in cyberspace": using the Internet for qualitative research", *Qualitative Market Research: An International Journal*, Vol. 6 Iss: 2 pp. 133 - 143
- Powell, R. A., & Single, H. M. (1996). Focus Groups. *International Journal for Quality in Health Care*, 8(5), 499–504. doi:10.1093/intqhc/8.5.499
- Rezabek, R. J. (2000). Online Focus Groups: Electronic Discussions for Research. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 1(1). Retrieved from <http://www.qualitative-research.net/index.php/fqs/article/view/1128>
- Sargeant, B. N., et al (2003). Interactive On-Line Continuing Medical Education: Physicians' Perceptions and Experiences. *The Journal of Continuing Education in the Health Professions*, Volume 24, pp.227-236
- <http://www.blackboard.com>
- <http://www.brainshark.com/blackboardinc/vu?pi=zGLzYw5XBz35Sgz0>
- <http://www.Doodle.com>