A Window into Clinical Practice: A Communication Program Introducing a Blog as a Reflective Tool for Doctor-Patient Communication Training

Jeanine Warisse Turner
Georgetown University

James Robinson
University of Dayton

Elise Morris, Michelle Roett
Georgetown University-Providence Hospital
Family Medicine Residency Program

Abstract

While communication is essential to effective clinical outcomes and patient satisfaction, training programs that employ synchronous feedback systems are time consuming. This pilot investigation examines use of a secure blog as an asynchronous alternative for communication training. In this pilot, residents who had participated in the program for 3 years (N=7) responded to a survey about the effectiveness of a self- and peer- feedback blog as a training tool. Similarly, 2 focus groups (N=21) compared the asynchronous blog feedback system with a traditional synchronous face-to-face program. Resident perceptions of the two systems were identified and themes were identified and compared using the constant comparative method. Residents learned about communication by watching their videotaped interactions and their colleagues interact with patients. The asynchronous interaction provided an additional opportunity to reflect on behavior. This pilot introduces the viability of a blog for peer interaction and reflection and implications are discussed.

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Effective doctor-patient communication has been linked to improved patient outcomes, compliance, adherence to recommendations, and trust (Bensing et al., 2006)(Maguire & Pitceathly, 2002)(Roter & Hall, 1989) which points to the important role of adequate training. Research suggests that training programs need to be intensive and include ongoing performance feedback as opposed to single training opportunities. Unfortunately, ongoing intensive feedback can create logistical challenges.(Beck, Daughtridge, & Sloane, 2002)(Brown, Boles, Mullooly, & Levinson, 1999) This pilot study explores the initial assessment by residents of an asynchronous blog tool to provide reflection and focus on communication skills among residents concerning the medical interview.

Introduction

Current Training Programs

Family medicine residencies must assess resident communication within four communication sub-competencies of the ACGME Family Medicine Milestones from intern to final year (3 years in total) (Education & The American Board of Family Medicine, 2013) (Duffy et al., 2004). These training programs typically include checklists of observed behaviors, patient satisfaction surveys, and examinations as in In-Training examinations or tests or formal validated observed interviews (Duffy et al., 2004). Interactions with live or simulated patients are often videotaped and sometimes discussed. Most of these training programs involve a one-time taping with the resident reviewing the tape with a superior or possibly the superior reviewing the tape without the resident. Sometimes the residents are given the tape to review by themselves but are not provided a feedback session. (Deveugele et al., 2005). While usually not part of a comprehensive system of feedback and review, the process has been shown to increase resident self-awareness. (Duffy et al., 2004; Jonassen, 1979; Makoul, 2001)

Unfortunately, feedback sessions are time consuming and require significant scheduling efforts (Deveugele et al., 2005). Supervisors must take the time to go over tapes of the doctor and patient interaction, requiring complicated synchronous scheduling efforts. Blogs allow asynchronous interaction and create a new space for reflection and education. Blogs have been used extensively by corporations and universities (Sim & Hew, 2010) and support learning by providing instructor and peer viewpoints, and reflection (Sharma & Xie, 2008) (Dippold, 2009) (Zeng & Harris, 2005). Additionally, research suggests that residents can be competent providers of feedback to other residents (Da, Aj, & Rj, 1989; Thomas, Gebo, & Hellmann, 1999). This research combines these capabilities and assesses the viability of an asynchronous blog as a peer feedback tool for doctor-patient interaction.

While research has explored doctor and patient communication focusing on the interaction itself, no research has explored doctor-to-doctor interaction about the doctor and patient interaction. While doctors have the opportunity to communicate with each other about their patients, researchers have not had the opportunity to examine and analyze this communication. This pilot study provides an initial step towards understanding peer interaction, specifically at the residency level. It also examines the use of a collaborative technology tool on the development of a culture of knowledge sharing and peer feedback.

Blog Development

The Family Medicine Residency Program was interested in using an asynchronous environment to provide a space for residents to learn from each other and address doctor and patient communication issues specifically. A protected, HIPAA compliant site was launched in collaboration between the university medical center and a graduate program focusing on communication and technology. The Residency Director introduced the blog to the new residents and also provided windows of time for the residents to complete their feedback. Residents gained access to the blog using their university user id and password as the blog was housed on a university server. Patient interviews were recorded, posted to the blog site and watched by residents. Residents then wrote self-assessments and posted self-evaluations to the blog site. Each member of the cohort watched each interaction, read the resident's self-critique and those of their peers, and made comments about the interaction. This study received IRB approval.

The Residency Program's blog innovation was prompted by two challenges. First, the program wanted to focus specifically on doctor and patient interaction so as to improve doctor understanding of patient health literacy in the description of diseases and procedures. Second, the program wanted to develop a culture of knowledge sharing where residents could look to each other with questions and challenges to solve together rather than attempt to hide challenges and problems from each other.

Methods

Data Collection

This study assessed blog perceptions of the residents (N = 7) over a three-year period through an open-ended survey. Additionally, two focus groups (60 minutes each) were recruited to compare the effectiveness of blog feedback with a traditional, synchronous system (N = 21). The focus group viewed a video recording of a doctor patient interaction and provided feedback to the resident featured in the video. Residents then compared the advantages and disadvantages of the two feedback systems. While some of the residents in the focus group had participated in the blog to some extent, all of the residents in the survey had participated.

Data Analysis

Transcripts of the video recorded focus groups and resident survey responses were analyzed using the constant comparative method (Tracy, 2013). Four themes emerged from the open-ended survey condition while 3 themes emerged from the focus groups.

Results

Survey Responses

Analysis of the open-ended responses provided by the residents participating in the survey yielded 4 message themes: Self Assessments, Comparative Assessments, Reflective Assessments, and Time Constraints. **Self-Assessments** occurred when residents talked about learning from observing their own behavior. These assessments involved resident reflection based on their ability to step outside themselves and observe their behavior in the taped interaction. This self-assessment was aided because of the required viewing and self-reflection focused specifically on the communication elements of the interaction, rather than the choice of a specific medication or treatment route. Examples of this type of comment included. "I noticed I was fidgety." **Comparative Assessments** occurred when residents learned something by observing another resident. These reflections came through the opportunity to observe residents in an asynchronous setting allowing them to watch their peers and also have time to reflect and discuss specific aspects of the interaction that were notable. An interesting example of this type of statement was, "I learned that we are different but that I am not outside the range of normal." This statement is especially interesting because it points to the benefit of having the opportunity to observe peer interaction – another person learning - as opposed to observing a supervisor. **Reflective Assessments** occurred when residents learned through a combination of their interaction with the other residents and their own behavior. These assessments reflected the residents' ability to connect what they were seeing in themselves to what they were viewing in their peer interactions. An example of this type of comment included, "I learned how to have more efficient time management as I have a tendency to have lengthier visits with lots of communication with the patient." This type of assessment builds on the self-assessment but extended it to include a reflection on what that observation meant to the resident's ability to be effective in their doctor and patient interaction. **Time Constraints** occurred

when a comment focused on structural properties of the blog feedback program and difficulties associated with fitting it into their schedules. An example of this type of comment included, "It would be more efficient to have the resident pick out a few minutes of the interview that were challenging and then ask how other people would deal with it." Learning occurred through self-assessment, the assessment of others, and the combination of self and other assessment. Messages coded as part of a **Time Constraint** theme provided insights into the blog as a learning tool (See Table 1).

Table 1

Themes from Open-Ended Responses by Residents

Theme	Example
Self-Assessments (SA)	"I noticed I was fidgety" "I did not make much eye contact."
Comparative Assessments (CA)	"I learned that we are different but that I am not outside the range of normal." "Useful for us to see ourselves and our colleagues to confirm we're all struggling with the same things, to learn tips from each other"
Reflective Assessments (RA)	"I learned how to have more efficient time management as I have a tendency to have lengthier visits with lots of communication with the patient."
Time Constraints (TC)	"It would be more efficient to have the resident pick out a few minutes of the interview that were challenging and then ask how other people would deal with it. Really, watching the whole visit is a huge waste of time."

Focus Group Responses

Residents in the 2 focus groups (N = 21) identified 3 primary differences in the two feedback conditions: They were the absence of **Contextual Cues** in the asynchronous condition, the opportunity for **Peer Connection/Modeling**, and **Logistical Concerns** (See Table 2). Resident comments were coded as **Contextual Cues** if the messages stressed that face-to-face interaction contained more nonverbal information and/or impacted the relationship between residents. Focus group members were split as to whether the absence of context cues was helpful or not helpful to providing peer feedback. Several focus group members were concerned that written feedback would produce more misunderstandings without this contextual information. For example, some commented, "Things you would say in a face-

to-face setting, you would never write out." Additionally, these participants were concerned that in addition to missing some cues that might have been present in the doctor and patient interaction, the observer would need more cues to deliver a message that might be negative or critical. Specifically, one resident remarked, "Talking in person, you could give more background, like what you were thinking." However, another perspective of some focus group members was that the blog allowed improved opportunity to study the interaction and more time to reflect on the comments of their peers. They felt that the asynchronous nature of the interaction led to fewer snap judgments about the behaviors in the interaction and more opportunity to reflect on that behavior. An example of this perspective included, "I think when you have written feedback you have to think a lot more…you have to put thoughts into concrete points."

Table 2

Themes from Focus Groups

Theme	Valence toward the Blog	Example
Content and Context	Negative	"Things you would say face-to-face, you really can't write out." "Talking in person, you could give more background, like what you were thinking, whether it was the first time you were seeing this patient…it's a more interactive fleshed out process. Whereas in the blog, watching through a small snapshot…you might get more objective feedback from that but you will miss a whole (sic) contextual cues."
	Positive	'It's nice to see the written comments from the blog. And I would also say there is not much difference from the blog comments and what I got from here. Sure, there's richer context and … I get to explain myself a little more…but it doesn't change the overall outcome." "I think when you have written feedback, you have to think a lot more…you have to put thoughts into concrete points." "I always think people form their thoughts better in their blog comments. I can also sort it out

		in my mind. For example, (one person) thinks three things and someone else articulates another three. By the time I read all the comments, there are 6 concrete things to in the encounter for me. And when I want to review, I can just click and see the 6 things there."
Peer Connection and Modeling	Positive	"I feel like I get more value from watching other people's video than actually getting feedback from watching my video…I feel like it's really an intimate thing to see how the others interact with their patients in another room." "You are vulnerable in the process and that vulnerability can make you closer and it made me more comfortable asking my colleagues how they would handle a particular situation "I feel closer to my classmates, and I'd ask them how to say this to a patient – to get someone else's opinion, and to tell them they did really well in the video."
Technical and Logistic Concerns	Negative	"The technical part is difficult and I just forget, I have 500 things to do, I just forget." "I feel like it's hard for people to get to it (the blog). There is a long list for people to do things. It takes a long time to do it."

Peer Connection/Modeling comments focused on learning by watching other residents interact with patients. All of these perspectives were positive. In addition to learning through modeling, focus group participants also noted that the blog opportunity increased their comfort level in asking questions of their peers about clinical encounters. Some examples of these comments include, "I feel closer to my classmates, and I'd ask them how to say this to a patient – to get someone else's opinion, and to tell them they did really well in the video." Another noted, "You are vulnerable in the process and that vulnerability can make you closer and it made me more comfortable asking my colleagues how they would handle a particular situation."

Finally, **Technical and Logistical Concerns** that were voiced by residents focused primarily on logging in. The blog is located in a password protected area of the university's website that the residents only need to go to for the blog. They also do not need to use the password for other aspects of their daily

activities. As a result, residents would have difficulty remembering their log in information. Since their schedules were very busy, they would carve out time and then not be able to get into the blog. These times often occurred when they were not able to reach anyone for technical support help (especially if they were working on the blog in the middle of the night). This challenge became frustrating and impacted their ability to comment during times they had designated for commenting.

Discussion

The blog program focused on communication within the medical interview without the need for a synchronous meeting. Residents reported learning about communication in a variety of ways including: watching themselves; reflecting on their behavior; writing about their behavior; watching other residents interact with patients; and reading the commentary of their colleagues about the videotaped interactions. This program provided both normative and comparative reference information about interacting with patients (e.g., at the end of their residency residents had observed 21 patient interviews and had the opportunity to reflect on those interviews). Residents also reported feeling closer to their colleagues and more willingness to share concerns after participating in the process. The residents shifted the view that their difficult experiences or questions should be kept to themselves or discussed with a faculty advisor and reframed the residency experience as a more open learning situation for themselves and their colleagues. This alteration in the resident's approach to problem solving and knowledge sharing could have contributed to an increased feeling of trust among this residency of cohorts. Exploring the development of trust associated with the blog would be an interesting area for further research.

The comments in the focus group reinforce the difficulty that many people have in providing feedback to their peers. While some residents believed the asynchronous environment helped them to be more thoughtful, other residents were concerned that the lack of cues available in a text only environment did not provide enough opportunity to "soften the blow" of the criticism so as not to hurt their colleagues feelings.

In comparing the focus group responses to the individual survey respondents, it is interesting that the focus group seemed to focus on the ability of the blog tool to be used as a feedback system. Participants distanced themselves from their own use of the system to examine overall use of the system. When the participants responded individually to the surveys, they reflected more on their individual use and its influence on their learning. This observation points back to the fact that the focus group participants had a range of experience with the blog, while the surveyed participants had all participated in the blog for three years. As a result it is difficult to tease out assumptions about blog communication that are based in experience and comments that are based on perceptions around the technology from experiences from past uses outside this particular context.

Goffman (1959) introduced the concept of life as theater and that we all participate in both front and back stage behavior. Front stage behavior is more formal and reflects how we act when people are watching. Back stage behavior describes a more informal authentic behavior that is less practiced. The blog introduces an interesting example of the back stage behavior of peer commenting on the doctor and patient interaction, without the patient. This commenting would not happen with the patient present so constitutes a type of back stage. However, the residents are aware that all comments are observed. This observation happens with their supervisors and with each other so in a sense the blog provides a new type of front stage behavior for observing peer interaction.

The complexities of setting up the blog were challenging. Difficulties in each stage of the process from creating a secure blog environment that satisfied health information and patient privacy requirements, to securing patient consent, and encouraging residents to comment and respond to the blog on top of an already intense schedule all contributed to this complexity. Several times the patient had given consent, the medical interview was ready to be taped, extended time was blocked from the resident schedule to accommodate the taping, and the patient decided that he or she did not want to participate. These changes required the rescheduling of the interview. Additionally, given the myriad of assignments that residents are responsible for, it came as no surprise that residents were concerned with the time associated with blog commenting. However, it is also clear that this blog provided opportunities for residents to specifically focus on communication during the medical interview while also providing benefits to peer interaction not possible in a traditional, synchronous communication feedback program limited to supervisor and resident communication.

The opportunity for peer-to-peer interaction has grown with many innovations that create open communication platforms. While this example of peer interaction takes place within a medical context, the opportunity for learning from peers by watching them interact and then reflecting on that interaction could be useful in many areas where successful interaction plays such an important role to the accomplishment of a specific goal. Teaching, sales, and consultations all provide interesting environments for creating more open conversations and reflections around practice.

While research has explored the use of blogs in traditional academic settings, we need to better understand how these same tools can be used as knowledge sharing devices. The blog provides a window into a never before seen interaction, the interaction between doctors about their patients. Examining this interaction can provide us with a new understanding of how doctors view their patients and the communication with them. Similarly, other contexts where knowledge sharing might be difficult could incorporate a blog like this to better understand implicit knowledge in that setting. For example, creating a blog with videotapes of a teacher teaching a class and creating a blog where teachers could talk about the practice of teaching might be helpful. A blog could also be created to examine sales transactions, or interactions with consumers in service contexts. Setting up environments for reflection and learning in an asynchronous context can provide a different type of reflection for understanding work practices and interaction.

Charlene Li (2010) points to critical use of emerging media technologies (intranets, social media platforms, other information sharing apps) to create more open environments (both private and public) for information sharing. Specifically, she suggests that what she calls “open leadership” provides a new way for colleagues to share information and learn from each other. Li describes open leadership as “having the confidence and humility to give up the need to be in control while inspiring commitment from people to accomplish goals” (p. 18). Open leadership contributes to stronger relationships because it is based in a foundation of collaboration and learning from each other. The peer-to-peer interaction in the doctor and patient blog project provides an example of open leadership on the part of the residency program in its focus on knowledge sharing. As organizations continue to explore mechanisms for incorporating social media platforms within their organizations, this project provides an interesting example of how expert-to-expert interaction can occur. Another benefit of new media technologies like blogs that provide information sharing is the opportunity for peer innovation (Bernoff & Schadler, 2010). As residents observed each other and shared experiences they were able to learn new ways of taking a patient’s history or describing a specific medical procedure or treatment. The blog became a collective database of examples of different ways to approach patients.

The introduction of a blog for peer reflection and comments on doctor and patient interaction was created to fill a void created by the difficulty associated with synchronous scheduling of feedback. The creation of an asynchronous option merely shifts the time into intervals chosen by each resident. However, introducing protected time could reduce resident stress about finding time to comment on the blog site. While this study is limited by the small sample size, it provides initial insights regarding a blog as a reflection tool. Although the total number of residents is small, the number of interactions and the complexity of the program provide an interesting case for exploring the value of peer-to-peer interaction via an asynchronous environment. In the increasingly complex environment of healthcare, creating spaces where clinicians can share information and learn the value of sharing that information is critical.

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JEANINE WARISSE TURNER, Ph.D. is an Associate Professor in the Communication, Culture, and Technology Program at Georgetown University. She is also an Affiliate Faculty member within the McDonough School of Business.

JAMES ROBINSON, PH.D. is a Professor in the Department of Communication at University of Dayton.

ELISE MORRIS, M.D. is Director of Behavioral Health and Director of Women's Health for the Georgetown University-Providence Hospital Family Medicine Residency.

MICHELLE ROETT, M.D., MPH, FAAFP, CPE is Professor and Interim Chair for the Department of Family Medicine at Georgetown University Medical Center.