

## **Conference Final Report**

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### **Regional Patient Safety Officer Conference – Learning Together Today and Tomorrow**

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This report summarizes a conference held October 19, 2012, in Raleigh, North Carolina. Support for the conference was provided by the Agency for Research on Healthcare Quality (AHRQ grant 1R13HS021791-01), the North Carolina Center for Hospital Quality and Patient Safety, and the University of North Carolina Health Care System.

## **Abstract**

### **Purpose:**

The purpose of the conference was to build social capital, disseminate social science research, and connect graduate-level students with Patient Safety Officers as potential research partners.

**Scope:** The conference participants were recruited from Virginia, North Carolina, and South Carolina.

**Methods:** The design was based on adult learning theory. The impact of the conference was evaluated using Kirkpatrick's Taxonomy of Training Criteria (Alliger et al., 1997), as a guide. Level 1 criteria (learner satisfaction and utility judgment of the content) and Level 2 criteria (immediate change in learner knowledge) were measured immediately after the conference. Measures of Level 3 criteria (how the learning was applied in the participants' organizational environment) and Level 4 criteria (the learning's impact on structure and process) were evaluated with online surveys administered 3 months and 7 months after the conference.

**Results:** We found that learner satisfaction and utility judgment of the content were high, with 100% of participants either satisfied or very satisfied; 100% of participants viewed utility as either good or excellent. Immediate change in learner knowledge was also high. Three months after the conference, 70% of respondents indicated use of the learning or tools in their organizations (49% response rate). Seven months after the conference, 92% of respondents indicated that they made changes in their respective organizations as a result of the conference learning, and 69% reported increased networking (37% response rate).

**Key words:** Patient Safety Officer, Patient Safety, Adult Learning, Social Capital

### **Purpose**

Two substantial problems that many Patient Safety Officers (PSOs) face are limited access to peers and limited exposure to social sciences research. The Regional Patient Safety Officer Conference for PSOs from Virginia, North Carolina, and South Carolina attempted to address these limitations. The first aim of this conference was to bring PSOs from the region together to build and maintain social capital through a conference design based on adult learning theory that included reflective dialogue and the conceptualization of a virtual networking site to maintain the social structure. The second aim was to increase PSOs' knowledge and skill for organizational and cultural change by disseminating and learning from social science research not widely available at other healthcare conferences. The third aim was to provide opportunities for graduate-level students interested in patient safety research to connect with PSOs as potential research partners.

### **Scope**

Even the largest healthcare organizations typically have only one person in the role of a PSO, although, for the prevention of unintended patient harm, it is one of the most important operational and consultative roles in healthcare. There is no professional organization for PSOs, and the tacit sense of competition between organizations further hampers building relationships. Furthermore, the PSO role is still relatively new in healthcare, and many individuals in the role have a nursing background with limited exposure to social science research that informs understanding of culture change. Future research contributing to the understanding of preventing patient harm and addressing the issues PSOs see every day will require student researchers to have access to living laboratories – the hospital environment. Connecting students with PSOs is important and can result in research collaborations, access to real data for the students, or

identification of research questions that might result in findings that are rapidly applied for organizational improvement.

The Regional Patient Safety Officer Conference was the first of its kind to purposefully create the time and space for PSOs and students to develop social capital that can contribute to individual organizations, the region, and beyond.

The 1-day conference was held in Cary, NC, at the NC Quality Center on October 19, 2012. It was attended by 36 PSOs or those with PSO responsibilities but different titles and three graduate-level students. The PSO participants were from healthcare organizations in Virginia, North Carolina, and South Carolina. The student participants included a medical student and a nursing student from different university systems in North Carolina and a human factors engineering student from South Carolina.

The presenters and their topic areas were Katherine Jones, PhD, University of Nebraska, "Assessing Safety Culture: A Theory Driven Approach to Understanding Results"; Javier Velasco, PhD (awarded since conference), University of North Carolina, "Social Networking for Patient Safety Officers"; Sara Singer, MBA, PhD, Harvard School of Public Health, "Is Your Hospital a Learning Organization? What Does This Mean to Patient Safety and How Do You Measure?"; and Bryan Sexton, PhD, Duke University Medical Center, "Resilience Building for Patient Safety Officers and Application to Organizational Change."

## **Methods**

The conference design was based on adult learning principles, and each presentation on a research topic or tool involved active learning by participants. For example, if the learning was about approaches for building a learning culture, participants compared different approaches and selected one that best suited their organization; then, they were invited to explain how they would apply it to their organization and their role. This was in contrast to typical didactic lecture conferences, in which participants are passive learners and generally only interact during breaks. The adult learning theory-based approach was also designed to foster participant relationship building, as open sharing throughout the day created a sense of membership and trust. One specific learning and networking activity was designed as an ice breaker and served to continue to connect participants throughout the day. All participants were asked in advance to bring a story board about themselves, their organizational role, and their accomplishments and challenges. These story boards were displayed during registration and visited by participants throughout the day.

Active dialogue, a hallmark of adult learning experiences, is conducive to building trusting relationships (Vella, 2002). Research on social capital has identified the importance of network ties that can be established when time and space for building relationships could occur (Nakamura and Yorks, 2011). These networking ties can be maintained in virtual spaces, where people can continue to interact. One collective action of PSO participants at the conference was to conceptualize a virtual space for ongoing access to each other for information and relationship building. This virtual space was created based on their design for use after the conference.

Conference topics were drawn from behavioral economics, human resource development, public health, and information science. A nine-member planning committee that included representatives from the three states selected the research areas and approved the topic and speakers. The representatives included PSOs, hospital association leaders, and a school of nursing faculty person. Nationally recognized researchers spoke on the topics of Patient Safety Culture, Social Networks, and Resilience.

## Results

The impact of the conference was evaluated using Kirkpatrick's Taxonomy of Training Criteria (Alliger et al., 1997) as a guide. Level 1 criteria (learner satisfaction and utility judgment of the content) and Level 2 criteria (immediate change in learner knowledge) were measured immediately after the conference using a paper-and-pencil survey. Measures of Level 3 criteria (how the learning was applied in the participants' organizational environment) and Level 4 criteria (the learning's impact on structure and process) were evaluated with online surveys administered 3 months and 7 months after the conference.

We found that learner satisfaction and utility judgment of the content were high, with 100% of participants either satisfied or very satisfied; 100% of participants viewed utility as either good or excellent. Immediate change in learner knowledge was also high. Three months after the conference, 70% of respondents indicated use of the learning or tools in their organizations (49% of response rate). Below are two survey comments from participants on the 3-month post-conference survey.

*"I would love to have a list-serve or another resource so we could stay in touch. I would LOVE to be able to connect with this group again. One day was not enough. There was so much experience and knowledge to be shared."*

*"I shared Katherine Jones' presentation and handouts with all of our system quality and safety leaders at our November 27, 2012, meeting. They will utilize her approach to examine recent patient safety culture survey results. I participated in a social design networking call, joined the LinkedIn group."*

Seven months after the conference, 92% of respondents indicated that they made changes in their respective organizations as a result of the conference learning, and 69% reported increased networking (37% response rate). Below are two survey comments from participants on the 7-month post-conference survey in response to the survey question, "Have you implemented anything that you learned at the conference in your patient safety work at your organization?"

*"A greater understanding of patient safety culture data: We have recently administered the survey, and what I learned through this conference was put to good use in terms of analyzing gaps."*

*"I have actively used the understanding data conference content to help interpret and communicate data to others. I have employed aspects of learning culture and resiliency to my work and in my organization. I have engaged in social networking opportunities to continue to expand my knowledge and to connect with others for insights."*

A private LinkedIn group called "Patient Safety Officer Group" was created after the conference, and 51% of the conference participants joined. Since then, there have been five discussions started and one small, in-person get-together organized.

A healthcare background for PSOs is essential to thoroughly understand the environment where change needs to occur. However, what is also needed to change organizational culture and improve patient safety is knowledge of a broader scope of social sciences that explain organizational culture and human performance, human factors engineering and human factors psychology, industrial and organizational psychology, cognitive psychology, behavioral economics, and sociology, to name a few. This conference provided needed exposure to more comprehensive ways of viewing patient safety and the tools and understanding needed to make change. The need for making change collectively with support from peers was also

recognized and acted on, with the creation of the LinkedIn group, thus creating an opportunity to know each other as individuals with the same challenges, goals, and shared passion for patient safety.

One expected outcome of the Regional Patient Safety Officer Conference was a stronger sense of PSO community, in which collaboration and support is enabled, and this indeed was substantiated. Participants connected after the conference via the online community and in other ways. The goal to connect students with PSOs for research opportunities was also realized. Two of the three students each had 3-month internships with PSOs whom they met at the conference. Both have told one of the co-PIs (CM) that the conference experience changed their career direction and helped them clarify their patient safety research interests.

Organizational leaders are motivated by public comparisons with peer organizations. A robust network of PSOs can rapidly leverage the accomplishments and approaches of others when easy access to each other and a sense of an open, sharing community exist. As a result of the conference, it is expected that PSOs will have new tools for organizational and cultural change as well as the support of a network of PSOs committed to help with this change.

Finally, dissemination of learning from the conference was published in Patient Safety InSight: The online magazine of the American Society of Professionals in Patient Safety (Mayer & Milne, 2013).

### **List of Publications**

Alliger GM, Tannenbaum S, Bennett, Jr. W, et al. A meta-analysis of the relations among training criteria. *Personnel Psychology* 1997 Summer 50(2) :341-358.

Mayer C, Milne J. Building a patient safety community around support and learning. *Patient Safety InSight: The online magazine of the American Society of Professionals in Patient Safety* Winter 2013.

Nakamura YT, Yorks L. The role of reflective practices in building social capital in organizations from an HRD perspective. *Human Resource Development Review* 2011;10(3)222-245.

Vella J. *Learning to Listen Learning to Teach, The Power of Dialogue in Educating Adults*. San Francisco: Jossey-Bass: 2002.