Communities of Practice: Creating Opportunities to Enhance Quality of Care and Safe Practices

Debbie White, Esther Suter, I. John Parboosingh and Elizabeth Taylor

Abstract

A Communities of Practice (CoPs) approach was used to enhance interprofessional practice in seven clinical sites across Alberta. Participating staff were free to decide the area of practice to focus on and the actions to be implemented. All practice changes implemented by the CoPs related to either improving communications (e.g., introduction of joint care meetings) or information transfer (e.g., streamlining of admission and discharge processes). The practice changes contributed to more effective communication of information and more effective transitions of patients between providers, hence potentially reducing errors.

The present study demonstrates that CoPs can enhance interprofessional communication and patient safety in traditional care delivery units. In contrast to more structured safety initiatives, sites were able to choose their area of focus. This ensures buy-in and enhances sustainability, making CoPs an interesting option for patient safety initiatives.

Team learning, practitioner competencies, a shared vision and system thinking are elements critical to patient safety (Dekker 2006; Sheps 2006). Furthermore, creating safe places for discussing errors and latent conditions for patient harm are vital to advancing a culture of safety (Morath and Leary 2004). Communication that reduces risk and improves safety in patient care focuses on the ability to share near misses or "no harm" events that caregivers experience at work and the structures and processes that influence these events. High trust levels between professionals are required for successful communication of "dare to share" issues. This type of trust needs to be developed over time.

A number of mechanisms have emerged that help create safe collaborative environments that provide opportunities for health providers to exchange information and discuss experiences. The benefits of safety teams in reducing errors and improving quality of care have been recognized in a number of studies (Boddington et al. 2006; Firth-Cozens 2001; West 2001). (Although safety teams and safety action teams are similar, safety teams in patient literature are seen as broader collaboratives than those teams defined as safety action teams. Here, we refer only to safety teams.) Clinical microsystems (Barach and Johnson 2006)

transcend disciplinary boundaries, providing an opportunity to impact both micro and system-wide improvements in patient safety and quality care. Because of their inter-professional focus, they provide a conceptual and practical mechanism to understand the core processes of care and influence redesign of care (i.e., facilitate effective transitions for patients).

Communities of practice (CoPs) are frequently discussed in the context of knowledge management (Hildreth and Kimble 2004; Hindmarsh and Pilnick 2002; O'Hara and Brown 2001; Seidler-de Alwis and Hartman 2004) and are characterized by shared learning and teaching, collegial relationships, non-hierarchical structures and commitment to change. CoPs are not unlike safety teams (Morath and Leary 2004) and provide a structure and collaborative culture where improvements in patient safety and quality can occur (Firth-Cozens 2001). CoPs have been employed in the business world to connect stakeholders across departments and improve information sharing (e.g., St. Onge and Wallace 2003). However, they have not been extensively explored in the healthcare context. The present project, funded through Health Canada's Interprofessional Education for Collaborative Patient-Centred Practice initiative, used a CoP approach to enhance inter-professional practice in clinical sites.

Methods

Seven healthcare sites across three large healthcare regions in Alberta were approached for participation in the project. The sites were purposefully chosen to represent a range of services provided, populations served, size and geographical locations to provide a rich context for the study. The sites were approached through the site managers; presentations to site staff were held to explain the project, expectations and timelines and to answer questions. The following sites participated: a geriatric psychiatry ward, a rural in-patient rehabilitation unit, a geriatric day centre, a geriatric day centre with 24/7 care, a management team for outreach services, an acute care unit and acute and community care departments in a rural hospital.

Staff at participating sites were asked to focus on collaboration across health professions (i.e., inter-professional practice) using a CoP approach. Essential to CoPs are three elements: (1) the community, which consists of a self-motivated and voluntary group of people who find innovative and dynamic ways to generate knowledge (including tacit knowledge), (2) the domain, or area of interest that creates a sense of identity and cohesiveness for the community or group and (3) the practice, which is the common knowledge (including tools, protocols, etc.) that the community or group develops to work together effectively (Wenger 1998; Wenger et al. 2002). The area of practice to focus on and the actions that were implemented to improve practice were at the discretion of participating staff. At each site, CoP members from different health professions met face to face to discuss their current practice and to identify areas for improvement. During those meetings, the CoP members also jointly decided what kind of practice changes they wanted to design and who would be responsible for implementing them. Each site had a project facilitator assigned who worked with site members over a period of six months to support CoP development and the implementation of inter-professional practice.

Data Collection and Analysis

After three and six months, semi-structured interviews were conducted with CoP members at the different sites to examine how the project was progressing and how it impacted individual learning, professional practice, team functioning and organizational climate. In addition, the evaluation monitored how the inter-professional CoPs were created, including the successes and challenges. Facilitators assisted with the recruitment of interview participants. If not all CoP members were available for interviews, facilitators ensured that a representative sample of individuals at each site (i.e., both core and peripheral CoP members from as many disciplines as possible) were interviewed. Interviews were taped using digital recorders and transcribed. Interviews lasted approximately 60 minutes. Informed consent was provided.

Transcribed interview data were stored and managed using QSR N6 computer software. Interview transcripts were coded for themes; themes across participants and CoPs were then identified and categorized by one researcher and verified by additional researchers. Differences in interpretation were discussed and reconciled.

Results

A total of 74 health professionals from the seven participating sites (40 at the midpoint, 34 at the end of the six months) were interviewed. Practice changes and main challenges are discussed here.

An example of a change to improve communication was the introduction of the purple pen.

Practice Changes

Across all sites, practice changes implemented by the CoPs could be categorized as improving either communications or information transfer. A number of the CoPs instituted joint meetings as a way of improving communication. Depending on the site, these joint meetings were organized between nursing and other staff, between acute care and rehabilitation teams or between two sets of program staff that were physically located at different centres. An example of a change to improve communi-

cation was the introduction of the purple pen – physiotherapy staff used the purple pen to leave notes on the white board to alert other providers to their care concerns. According to a staff nurse, this made a significant difference to communication and the continuity of patient care:

> "On the white report board, physio uses purple. So that's their concerns for that patient; then it's integrated into the care we give during that day or there may be something that says what to do over the weekend. So that doesn't fall behind with the progress the patient is making with them. So it's been good for communication that way."

Other changes implemented by CoPs included clarification with relevant providers around the services the program offers and identification of anticipated outcomes:

> "The other thing that happened was group meetings with others around [clinical applications and treatments] that were causing confusion, miscommunication and just clarifying when those programs will be done, when they will not be done; that type of thing. So that is something that has changed and I think is working well."

This clarification was required as many of the treatments this clinic provides are time sensitive with respect to subsequent rehabilitation interventions. Prior to the project, these time-sensitive windows were missed due to misunderstandings or lack of communication, leading to suboptimal patient care.

Many of these communication changes emerged because CoP members realized how important clear communication is to an inter-professional team, including communication around the roles and responsibilities of different professional groups. Improvements to communication processes, internally or externally, created a greater sense of being informed. Staff also felt that the changed communication processes improved the relationships between staff members and led to greater team cohesion.

Streamlining admissions and discharge processes to improve information flow and continuity was another common practice change implemented by the CoPs. This was achieved by consolidating patient intake forms from different health professionals to avoid duplications and eliminate out-of-date and unnecessary documentation, by developing a discharge form or by designating an intake person to reduce the initial involvement of multiple professionals in admissions:

> "The process already is working better. Having [professional's name] as our triage person instead of front-loading every professional with an admission has been really beneficial."

There were a number of positive results for both patients and providers as a result of the CoPs. For staff involved, the CoPs provided increased opportunities to prioritize, examine client issues and engage in shared decisions. As a result, staff reported that they felt more connected as a team and enjoyed better working relationships. Participants commented on the impact of these practice changes on patient care, such as reduced assessment times, reduced burden for patients by minimizing "front-loading" and eliminating repetition of admission questions, and greater patient care continuity.

Main Challenges for the Clinical Sites

Initially, some sites found it difficult to grasp the CoP concept and to find a domain or focus to work on. This resulted in a slow start for many of the sites and the need for the facilitators to carefully explore the concepts with site participants within the unique context of each site. Once staff were able to more fully understand the nature of CoPs and how to use them to enhance inter-professional practice, CoP development progressed more smoothly and practice changes rapidly emerged.

Various time and environmental constraints were also discussed. These included finding staff time and space for meetings as well as difficulty implementing the changes. It was difficult for sites to identify local champions or leaders to move the project forward; this was perhaps not unrelated to time constraints. The support from the facilitators was widely appreciated, as was the flexibility of the CoP participatory approach. Each site had the opportunity to tailor the project to their individual site needs and to seek assistance as needed from the facilitator to improve their project experience. In addition to the flexible approach, sites reported that the opportunity for reflection on existing processes and the provision of "permission" to explore were beneficial. The importance of organizational support was also emphasized.

Discussion

When presented with the challenge to improve inter-professional practice, each of the seven participating sites determined that changes in the style and type of communication were the primary focus for practice change. Although CoPs during their exploratory stage discussed many different options for practice improvement, there seemed to be a general recognition that clear, effective communication is an essential prerequisite for successful collaboration. CoP members were skilled in identifying information and communication gaps or redundancies and in finding creative solutions to improving communication flow, such as the purple pen. CoPs have helped create more opportunities for staff to talk about their work, exchange information, listen respectfully and build relationships while engaged in shared decision-making.

Significant gains in quality of patient care can be achieved by

enhancing communication processes. Although no patient outcomes were captured in this study, the practice changes implemented contributed to more effective communication of information – hence, there was a potential reduction in errors. Streamlining admission and discharge processes led to perceptions of more effective transitions of patients between providers and across various practice settings and facilitated appropriate monitoring and surveillance of the patient, further reducing the potential for failure-to-rescue events.

CoPs have not been extensively used in healthcare primarily due to the lack of understanding of the concept. This project demonstrated that the use of CoPs can be an effective approach to initiate discussions among health providers and explore opportunities for practice change. In contrast to more rigorous and prescribed communication and practice interventions, the CoP approach has multiple benefits; it is a self-directed and flexible approach that can be adapted to various contexts. CoP members consist of all levels of staff, who jointly decide what is important and what adds value to their practice. This creates a sense of ownership and buy-in. Given the time pressures and initiative burnout experienced in some healthcare settings, staff buy-in is essential for the success of an intervention.

Organizational change literature stresses the importance of including front-line professionals, patients and senior leaders for successful organizational change (Alton et al. 2006; Odwazny et al. 2005). Furthermore, the need for dedicated structures and multiple tactics to support sustainable change and share organizational learnings has been highlighted (Dixon and Schofer 2006; Woodward 2006). The CoP approach is flexible enough to allow for ongoing modifications and adaptations as needed. Mature CoPs have also demonstrated that significant culture change can be effected. While this project's duration was too short to show pronounced culture changes, indications of emerging shifts were evident through staff perceptions of improved working relationships and team cohesiveness.

CoPs might be one vehicle for creating new mechanisms for staff to relate to each other, sharing tacit knowledge and contributing to organizational learning (Gherardi and Nicolini 2000). In addition to sharing problems and creating solutions, exchanging emotions, values and meaning are important components of communication of both CoPs and safety teams. For example, story telling has been shown to be an effective way of communicating and building trust (Clandinin and Connelly 2000; Denning 2006) as well as to share tacit knowledge and practical wisdom about how to work not only as individuals but within an interprofessional context (Czarniawska 2007). Healthcare leaders have to see the value of relationships in enhancing patient safety and be prepared to invest in CoPs. CoPs are similar to patient safety collaboratives in that, when supported and resourced by the organization, they provide excellent opportunities for health professionals to develop and implement care processes and structures that enhance both quality and safety (Leape et al. 2006). "Effective communication [among a CoP or safety team] is a critical factor in ensuring the delivery of effective health services and avoiding error and adverse events" (Lingard et al. 2006).

The present study has provided insight on the usefulness of CoPs and their potential for enhancing inter-professional communication and patient safety in traditional care delivery units. In contrast to other more structured safety initiatives, in

CoPs sites were able to choose their area of focus, ensuring buy-in and enhancing sustainability, which makes CoPs an interesting option for patient safety initiatives. HQ

About the Authors

Debbie White, PhD, RN, is associate professor, Faculty of Nursing, University of Calgary, Calgary, Alberta.

Esther Suter, PhD, MSW, is a research and evaluation consultant, Health Systems and Workforce Research Unit, Calgary Health Region, Calgary, Alberta. You can reach Dr. Suter at 403-943-0183, by fax at 403-943-1321 or by e-mail at esther.suter@calgaryhealthregion.ca.

I. John Parboosingh, MB, FRCSC, is professor emeritus, Faculty of Medicine, University of Calgary.

Elizabeth Taylor, MEd, PhD(c), is with the Department of Occupational Therapy, University of Alberta, Edmonton, Alberta.

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