Enhancing Patient Outcomes in Healthcare Systems Through Multidisciplinary Teamwork

Sara McComb, PhD, PE, and Megan Hebdon, RN, FNP-C

The increasingly complex needs of patients with cancer and their families call for a multidisciplinary team to achieve optimal patient outcomes. The purpose of the current article is to describe a teamwork model that can be used to address the needs of patients and the challenges associated with a healthcare system. The teamwork model was developed to address the mechanism needed to establish a paradigm shift in achieving high-quality patient care through effective teamwork.

Teamwork Model

A teamwork model for general medical units was introduced by McComb et al. (2012). The concept of teamwork was evaluated using the Big Five dimensions of teamwork (i.e., team leadership, mutual performance monitoring, backup behavior, adaptability, and team orientation) and their coordinating mechanisms (Salas et al., 2005). McComb et al. (2012) proposed a teamwork model with a three-person central care team comprised of a physician, nurse, and patient. The physician and nurse also were members of the physician and floor team, respectively, where they functioned as intermediaries between other care providers (e.g., specialists, therapists) and the central care team. In addition, the central care team maintained stability when the patient care needs and corresponding care provider needs changed. The central care team was unique because the patient was included. The patient was integral to the central care team because his or her personal preferences, support network, and internal motivations affected overall well-being (Patient-Centered Outcomes Research Institute, 2012).

Big Five Dimensions of Teamwork

The Big Five dimensions of teamwork include team leadership, mutual performance monitoring, backup behavior, adaptability, and team orientation.
Successful implementation of the Big Five dimensions of teamwork is facilitated by the coordinating mechanisms. The coordinating mechanisms are closed-loop communication, mutual trust, and shared mental models. According to Salas et al. (2005), closed-loop communication involves three steps: the initiation of a message by the sender, the receipt of the message by the receiver who acknowledges and interprets the message, and follow-up by the sender to ensure the intended message was received. That type of communication is central to teamwork because it aids in continually updating the team’s shared mental models. Several diverse situations exist where the healthcare team can use closed-loop communication, such as when ordering medication or planning a patient’s advanced directives. A culture of mutual trust contributes to multidisciplinary collaboration. Mutual performance monitoring and backup behavior are seen as team-building behaviors that protect the team and its members rather than behaviors that convey mistrust (Salas et al., 2005). If the patient and support system trust the healthcare providers, more time is spent supporting patient recovery. Shared mental models help team members establish a common understanding about goals, capabilities, needs, and performance expectations. With shared understanding, teams can improve communication and perform better, particularly when stress occurs in the oncology care setting (Salas et al., 2005).

Team Leadership

Team leadership is vital to effective teamwork because leaders are responsible for guiding and structuring team progress. Strong leaders facilitate problem solving, monitor the internal and external environment, and establish performance expectations (Salas et al., 2005). Leaders also communicate with team members about how organizational and national health policies affect patient decision-making, and ensure that the goals of the team align with patient preferences. For example, if a patient, caregiver, or healthcare provider have conflicting views on end-of-life care, an effective team leader would facilitate the necessary counseling to resolve the conflict as well as provide psychosocial support.

Mutual Performance Monitoring

Mutual performance monitoring is a team behavior in which members monitor each other’s work to avoid or detect mistakes. This allows team members to be aware of how the team is functioning, particularly during stressful tasks (Salas et al., 2005). Healthcare providers may encounter stressful tasks frequently (e.g., terminal diagnosis, life-threatening reaction to medication, presenting illness that requires heroic measures to control). Healthcare providers should monitor and provide feedback to each other regarding mistakes and oversights to prevent never events and promote patient well-being (Agency for Healthcare Research and Quality, 2012).

Backup Behavior

Backup behavior occurs when team members provide resources and help each other when the workload is not evenly distributed within the team. Team members can exhibit backup behavior by providing feedback, coaching, assistance, or task completion. Mutual performance monitoring supports backup behavior because, once task overload is detected, backup behavior is initiated (Salas et al., 2005). Backup behavior can help achieve the mutual goal of patient safety by sharing patient care tasks between the patient, support network, and healthcare providers. The cumulative emotional, physical, and time resources of those individuals would allow the team members to accomplish the goal of patient safety.

Adaptability

Adaptability involves the team’s ability to recognize deviations from the expected course and adjust accordingly. It requires team members to have a global understanding of a task, to notice how changes in the internal or external environment may change team member roles in a task, and to recognize when changes occur (Salas et al., 2005). Adaptability is crucial in a complex healthcare environment that has constantly changing federal regulations, standards of practice, reimbursement requirements, and patient and family preferences (Starr, 2015). Healthcare team members should adhere to the goals, understand the needs and abilities of each team member, and know how to compensate when an unexpected event occurs. Those characteristics often are observed during treatment for cancer because changes in the patient disease trajectory can affect patient decisions regarding their care. Team members in that situation should re-evaluate patients’ desires and needs and maintain quality of life.

Team Orientation

Team orientation, an attitudinal component, involves member preferences for working in teams and accomplishing tasks through coordination, evaluation, and input from team members (Salas et al., 2005). Members of the patient care team often believe they are independent from each other, but coordinated group behavior is required from the physician, nurse, patient, and support network to accomplish the goal of patient well-being (McComb et al., 2012).

Multidisciplinary Teamwork

McComb et al. (2012) found that nurses and physicians understood the importance of multidisciplinary teamwork, but reported not having the skills and knowledge to effectively employ teamwork in a complex healthcare setting.
Barriers included inconsistent attitudes toward team leadership, lack of communication, absence of backup behavior, limited mutual performance monitoring, and insufficient interdisciplinary mutual trust (McComb et al., 2012). A culture change within healthcare organizations is necessary to promote teamwork and change how it is applied and who it includes. Teamwork should be valued, taught, and reinforced, and the central care team should include the patient. The central care team has the potential to make patient-focused teamwork easier.

Future research should address the use of the Big Five in healthcare teams, clarify the patient’s role in the central care team, and articulate the influence of healthcare system issues (e.g., regulation, reimbursement, complexity of team functioning). Using teamwork to guide patient care and involving the patient in the central care team would be beneficial in providing patient-centered care and maintaining overall quality of life.

References