

The Science of Teams

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RENEWED INTEREST in implementation of state of the science interventions and treatments in healthcare settings is promoting collaboration across disciplines and institutions. This requires a change in the way we think about teams and teamwork in healthcare. Team science provides the basis of a new perspective allowing healthcare providers to address more complex questions and reduce challenges to coordinate people and tasks across previously established boundaries (McLaney et al., 2022). Knowledge of the science underlying high functioning teams is needed that brings together clinicians, researchers, and other stakeholders, and creates a more deliberate approach to the work of teams in healthcare.

We are very good at training healthcare providers, researchers, and other healthcare professionals but we do very little to train them how to work across teams or to include patient perspectives on a team. Healthcare teams are multidisciplinary and contain high levels of knowledge. If team members do not interact or coordinate efforts, however, the team is less effective. High functioning teams must practice collaboratively to enhance the

delivery of person-centered care and improve patient and health systems outcomes (Reeves et al., 2017; Sangaletti et al., 2017)

The tasks in healthcare today are increasingly cognitive. The complexities and frequently urgent nature of the tasks involved make it difficult for one individual to accomplish the task. No individual has all of the information, cognitive abilities or time necessary to achieve optimal outcomes. Healthcare professionals are not expected to perform in isolation in the healthcare setting and certainly not without access to the plethora of data and information. Teams of teams process knowledge more effectively when members communicate well with other members to enhance information sharing (Grand et al., 2016). Interprofessional collaboration among healthcare teams is essential to the delivery of increasingly complex care.

Team cognition is crucial to the effectiveness of the team and refers to the thought processes and actions that occur at the team level. The cognitive processes of teams are similar to those of individuals. Common tasks include learning, clinical reasoning, decision making, problem solving, and assessment of various situations. In situations with high lev-

els of cognitive complexity, it is impossible for any individual to have complete awareness or to view all perspectives of a task or situation. (Cooke et al., 2013) Thus, the importance of team cognition cannot be overstated.

Theories are guiding the examination of team cognitive processes and dynamics. A novel theoretical perspective that provides the basis for team science include, Interactive Team Cognition (ITC) theory. This theory views team cognition as an activity, not a property or a product. There are implications of ITC for theory building, measurement, and applications that make team performance more effective (Cooke et al., 2013). Other team focused theoretical frameworks are currently in development and testing. These include the Social Cognitive Framework of Multidisciplinary Team Innovation (Paletz & Schunn, 2010). This theoretical perspective indicates that the expertise and specialization in a team impacts the quality of the knowledge that is generated and decisions that are made within the team. These theories and frameworks are designed to guide delivery of team-based competencies and behaviors in complex, fast paced environments, such as healthcare.

This new interpretation of teams goes beyond former perspectives of teams. An example of this is the growing importance of teams in healthcare involving nurse practitioners (NPs). Reliance on teams of NPs is growing to evaluate patients, interpret diagnostic tests, diagnose and initiate and manage treatments, and implement as well as evaluate quality improvement interventions in the clinic setting. Despite the progress, some individuals contend that NPs are beneficial only to a certain extent with proper supervision and time for encounters. One of the often overlooked advantages of the NP is the ability to lead and function on teams, and to integrate team science in the clinic setting. NP practice includes functioning on teams along with physicians and other healthcare

professionals. High functioning teams may provide support to team members and have the potential to resolve burnout faced by healthcare professionals today. NPs are in an ideal position to bring to the table the growing knowledge and behaviors needed for the integration of team science in healthcare.

Multiple opportunities exist for preparing and or retraining healthcare professionals to understand the dynamics of interprofessional teams differently and to be members of this new order of high functioning teams. Development and testing of theoretical perspectives of teams is a timely topic for research today. Interprofessional teams appear to be a key in resolving multiple challenges facing healthcare and may help navigate the complexities and challenges of healthcare more effectively. Our current understanding of interprofessional teams requires a reset. A new perspective, knowledge, and skills for functioning on highly effective teams are

needed for the greatest impact. Despite this emerging team science paradigm, outdated thinking remains and originates from old perspectives of teams and how teams once functioned. State of the science knowledge of teams is informing new perspectives and behaviors. This novel way of thinking and acting in a team serves multiple purposes and optimizes outcomes in healthcare that cannot be overlooked. ■

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