Published in final edited form as:

Simul Healthc. 2017 April ; 12(2): 96–103. doi:10.1097/SIH.0000000000000200.

Developing team cognition: A role for simulation

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SUMMARY STATEMENT

Simulation has had a major impact in the advancement of healthcare team training and assessment. To date, the majority of simulation-based training and assessment focuses on the teamwork behaviors that impact team performance, often ignoring critical cognitive, motivational, and affective team processes. Evidence from team science research demonstrates a strong relationship between team cognition and team performance and suggests a role for simulation in the development of this team-level construct. In this article we synthesize research from the broader team science literature to provide foundational knowledge regarding team cognition and highlight best practices for using simulation to target team cognition.

INTRODUCTION

Team cognition is critical to effective teamwork and team performance.¹ The current working definition of team cognition encompasses the organized structures that support team members' ability to acquire, distribute, store, and retrieve critical knowledge.² An ability to share crucial information, and know where in the team unique knowledge resides, allows

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members to anticipate and execute actions as a unit rather than as individuals. Team cognition emerges through team learning and team member interaction and thus is highly amenable to team training.

Healthcare simulation is widely used as a mechanism for improving team performance;³ however, simulation-based team training interventions focus primarily on developing team *behavioral processes* (e.g., the communication, monitoring, and coordination behaviors that support high performing teams), and tend to neglect team cognition.⁴ As a result, teams do not maximally leverage the collective knowledge, skills, and attitudes of their members. Team science researchers advocate for the use of simulation as a mechanism to both develop and assess team cognition;⁵ however, current healthcare simulation-based team interventions rarely focus on team learning or the knowledge structures underlying effective team performance.

The first goal of this article is to provide the healthcare simulation community with an understanding and appreciation for team-level cognitive structures as important mediating factors in team performance. We focus on two unique team cognition domains – team mental models and transactive memory systems – two components of team cognition that are critical to team effectiveness and responsive to team training efforts. The second goal is to provide principles to guide educators and researchers in the design and implementation of healthcare-based simulation to target team cognition development.

TEAM MENTAL MODELS

Definition

Klimoski & Mohammed define *team mental models (TMM)* as team members' shared understanding and mental representation of knowledge relevant to key elements of the team's task environment (Figure 1).⁶ TMMs describe the content and organization of both task- and team-related knowledge held by the team as a unit. This focus on both content and structure distinguishes TMMs from other forms of cognition. TMMs represent different types of knowledge, including declarative (knowledge of what), procedural (knowledge of how), and strategic (knowledge of context and application).⁷ TMMs also fulfill multiple functions, such as allowing team members to interpret information similarly (description), share expectations concerning future events (prediction) and develop similar causal accounts for a situation (explanation). Ultimately, TMMs ensure that the entire team has a collective understanding of the current and future state of the task, and an understanding of how to achieve task goals. TMMs facilitate coordination by enabling individuals to accurately anticipate the needs of other team members and quickly direct resources when and where they are needed.

There is no single, all-encompassing TMM for any team. Rather, teams are thought to hold multiple different TMMs simultaneously.⁷ Cannon-Bowers initially proposed four content domains of TMMs: (a) equipment model, (b) task model, (c) team member model, and (d) team interaction model (see Table 1).⁸ These four types can be collapsed into two broad categories: task-related mental models that focus on work goals and performance requirements, and team-related mental models that focus on team member interactions,

teamwork beliefs, and skill distribution amongst team members.⁹ Task-related mental models reflect shared knowledge about what a team needs to do and how they can do it, whereas team-related mental models reflect shared beliefs about the team's capabilities and expectations for how to interact with one another.

From a conceptual perspective, TMMs are often operationalized as having two properties: similarity and accuracy. Similarity refers to the degree to which mental models are shared among team members, whereas accuracy refers to the correctness of individual team members' knowledge structures, usually determined by task subject matter experts or a "gold standard" protocol. Thus, similarity reflects if team members are "on the same page" whereas accuracy reflects if members are "on the correct page." The majority of TMM research focuses on similarity; however, both similarity and accuracy are needed for effective team performance.^{10,11}

Importance in Healthcare

Research across different domains and contexts support the notion that TMMs positively impact both team processes and performance.¹² Well-developed TMMs allow teams to rapidly adapt to changes in patient condition. When team members are working toward a shared goal, with a common understanding of how to get there, they can anticipate fellow team members' actions and know how to respond to expected challenges.^{13,14} When plans need to change, a common understanding of the shared goals and objectives can streamline communication and decrease inefficiencies because team members are already "on the same page". The goal is to have TMMs that are not only similar, but also accurate; that is, they reflect the true nature of the clinical problem. Inaccurate, highly similar TMMs can result in an entire team going down the wrong path. Not surprisingly, TMMs are most critical during tasks requiring high levels of interaction and team member interdependence.¹⁵ Task interdependence is a key characteristic of high reliability organizations and noted to be an attribute of healthcare teams and systems.¹⁶ As healthcare continues to move toward team-based systems of care, the need to establish shared understanding around patient diagnoses, treatment plans, and goals of care becomes crucial to patient and system-based outcomes.

TRANSACTIVE MEMORY SYSTEMS

Definition

Transactive memory systems (TMSs) and TMMs refer to conceptually distinct team-level cognitive structures (Figure 1). Transactive memory systems are a shared memory "network" among multiple team members. While TMMs focus on shared knowledge and understanding, TMSs reference distribution of specialized knowledge within the team. DeChurch, et al note that TMSs are a form of cognitive architecture that includes both the knowledge uniquely held by particular team members, as well as a collective awareness of who knows what.¹ Transactive memory consists of three dimensions: (1) knowledge specialization, or the level of memory differentiation within the team, (2) credibility, or team members' beliefs about the reliability of other team members' knowledge, and (3) the ability of the team members to coordinate information retrieval effectively.¹⁷ Teams with well-developed TMSs are able to rapidly determine which team members can provide the

information or expertise needed, to whom particular types of information should be provided, how to access this information, and whether this information is credible.¹⁸ TMSs are especially helpful in highly complex tasks that require specialized knowledge that is accurate and applicable.

A team's level of TMSs and TMMs can be viewed as a continuous, dynamic trade-off between specialization and integration. As outlined above, having shared knowledge and mental models are critical to coordination. However, it is not practical, realistic, nor beneficial for teams to have members with completely identical mental models. Teams with a large pool of overlapping knowledge may create redundancy of effort and not be as nimble when adapting to novel threats. Mohammed and Dumville provide the following example:

Within surgical teams, there will be some knowledge that needs to be held in common by all team members (identical), some knowledge that needs to overlap among various dyads and triads (e.g., nurse and surgeon, surgeon and anesthesiologist), and some knowledge that will be unique to individual roles within the team (complementary).

In such teams, it would be important to have a shared understanding (TMM) of the team's goals (e.g., indication for procedure), plan of action (e.g., surgical procedure and approach), any anticipated challenges (e.g., risk factors, comorbidities), and available resources or resource limitations (e.g., time challenges, equipment issues). However, TMSs would represent the knowledge of which team members hold specific task expertise (e.g., managing general anesthesia), decision-making capabilities (e.g., decision to change surgical approach), and resource availability (e.g., organization of surgical supplies).

Importance in Healthcare

Transactive memory systems provide an additional knowledge structure to support team performance. TMSs promote a shared understanding of specific task expertise, such as technical skills or non-technical skills like leadership, and allow teams to become highly specialized and diverse. Not surprisingly, TMSs are most critical in heterogeneous teams with high levels of specialization and in situations where teams must adapt and solve dynamic, ill-defined problems.^{2,18} Transactive memory systems decrease overall cognitive load and redundancy, thus improving efficiency and increasing the capacity for specialization.¹⁹ In healthcare teams, where high-level expertise is distributed throughout the team, awareness of "which team member knows what" and trusting that team member's expertise is critical. A respiratory therapist, intensivist, and nurse could not (and should not) have completely overlapping knowledge domains. Their success as a team hinges on developing an appropriate TMM for the task at hand and a strong TMS to allow efficient and appropriate sharing of individual expertise. Overall, both TMSs and TMMs are necessary for a team to possess an excellent shared cognition.

SIMULATION

Simulation is a potentially powerful tool to develop and assess team cognition. Simulation-based training allows for the design of a "synthetic world" that emulates key aspects of a real world work setting, evokes its critical task, psychological and behavioral processes, and

allows assessment of a range of possible performance outcomes.²⁰ As such, simulation-based training can be used to develop task-related TMMs and TMSs that can then be generalized to any team configuration.^{8,21} Simulations can also build specific skills, such as proficiency in pre-briefing and de-briefing, that support the development of team cognition, particularly in settings with low levels of team member familiarity.²²

Training **intact teams** using simulation creates shared team experiences. Intact teams have stable team memberships from day to day. Simulation-based training provides opportunities for teams to work together and develop both shared understanding of the team, tasks, equipment, and patterns of communication (TMM) as well as a networked system of expertise accessible to team members when needed (TMS). Simulated experiences can provide opportunities for team members to exchange ideas and insights, thus building collaborative knowledge and shared understanding.²³ Team members have the opportunity to practice their roles and develop skills necessary to determine who needs to know what, thus strengthening TMS formation.

Unfortunately, not all healthcare teams are stable, and training intact teams is not always possible. Ad hoc teams (e.g., resuscitation teams, trauma teams, and rapid response teams) lack consistent, stable memberships. Such teams do not have the repeated interactions needed to develop a significant “team history.” Additionally, because their memberships are not defined, it is not possible to train these teams as a unit. As a result, they cannot rely on traditional methods for developing strong team-related TMMs and TMSs. Burtscher and Manser highlight this challenge and note that ad hoc teams must build TMM through mechanisms other than longstanding experience.²⁴ Simulation-based training can be used to develop **individual skills** that will translate to team settings, thus addressing some of the challenges associated with ad hoc teams. Simulated clinical experiences can help individuals develop knowledge about the expertise and skills held by other professions and about the various roles within the team. Additionally, individuals can build knowledge of protocols and procedures (e.g., sepsis care bundles, cardiac resuscitation algorithms) that facilitate a shared, consistent team approach.

Below we offer a summary of simulation-based training design and implementation principles that support development of team cognition. While these principles are described here for the purpose of enhancing healthcare team cognition through experiential training, they represent best practices for simulation-based team training across multiple competencies. Table 2 offers a summary of the principles along with practical examples.

Principles to Guide the Use of Simulation to Develop Team Cognition

1. Use a systematic approach to simulation-based training design—Event-based simulation design provides a clear set of principles to guide the development of effective simulation-based team training.²⁵ This methodology is centered on the discreet, purposeful placement of events within a simulated experience. Each event begins with a “trigger” that is strategically designed to provoke specific team behaviors and cognitive activities (Figure 2). Triggers and back-up triggers ensure that the team experiences all components of the scenario even if the team fails to respond to early cues. Well-designed triggers and event sequences minimize the interdependence of performance quality from one task to the next

and allow each event to unfold independent of the team's performance on a previous event. Taken together, the components of event-based simulation design offer realistic training exercises that can be linked to observable team behaviors and performance metrics. Additionally, because all components of the simulation are tightly scripted, instructors can manipulate team, task, and environmental conditions to specifically target development of different types of mental models.

Event-based simulation design also provides a rigorous mechanism to determine expert mental models for specific clinical events. Because event-based simulations are easily replicated, they can be used to determine a "gold standard" mental model or TMS using expert teams. This gold standard could then serve as a benchmark when determining the accuracy of mental models for trainees. Areas where trainee TMMs or TMSs deviate from expert cognitive content or structures suggest opportunities for further training and discussion.

2. Use simulation to target information sharing behaviors—Communication and information sharing are necessary for the development of team cognition.³² These processes distribute new knowledge among team members so it can become a shared property within the team (TMM). Additionally, information highlighting which team members are responsible for specific or unique knowledge helps build TMSs. Interdisciplinary simulation-based training gives team members the skills necessary to determine *who* needs to know *what*, thus strengthening team cognition. Since teams cannot continuously communicate every bit of available information, knowing *what* to communicate and *when*, influences team performance. A meta-analysis of team performance and information sharing suggested that information sharing had a greater influence on team performance when the information was unique and relevant to performance outcomes.³³ This suggests that sharing of non-relevant or redundant information can be ineffective and hinder team performance.³²

Simulation-based training provides a mechanism to improve the recognition and sharing of knowledge that is directly relevant to the task, team, and environment. This skill can be targeted through techniques that force explicit communication between team members. For example, performing a basic resuscitation simulation with a blindfolded team leader requires all team members to explicitly share key information in a well-organized manner. Video or audio playback of performance can be employed during debriefs to help learners become more aware of their communication patterns. Trainers can also pause simulations at key points and query team members to see how their information sharing is (or is not) contributing to their mental model. While this has some drawbacks in terms of simulation flow, it is a powerful tool that can pinpoint examples of ineffective information sharing and the deleterious impact on team cognition.

3. Design simulations to target team processes and behaviors that positively influence TMMs and TMSs—Evidence suggests that certain team processes are particularly relevant for the development of team cognition. Planning behaviors, specifically those involving information gathering and strategic planning, positively influence the development of TMMs with high levels of similarity.³⁴ These behaviors help team members make sense of their task and environment and ensure that the team's objectives are clear.

Additionally, strategizing behaviors not only help teams plan their approach to a task, but also to create contingency plans that help establish mental models capable of facilitating adaptability when unexpected challenges arise.³⁵

Simulations can be specifically designed to target these high-yield planning behaviors. The degree to which the simulation forces the team to perform key planning behaviors under time pressure can be altered depending upon the skills of the team members. Additionally, instructors can manipulate key environmental factors such as the asynchronous arrival of team members in order to challenge teams to execute effective planning behaviors under realistic, time-pressured, and dynamic conditions.

4. Use simulation to equip team leaders with the skills necessary to develop TMMs and TMSs in healthcare teams—Empirical research supports the link between effective leadership behaviors and mental model development.^{23,36} Leader behaviors and leader cognition shape the development and accuracy of team-level mental models. Team leaders must gather and interpret critical information about the task, team, and environment to form their own mental representation of the situation.³⁷ This mental model should reflect not only the clinical task, but also factors such as resource constraints, team member capabilities, and potential challenges. Leader-initiated briefings, in which team leaders provided an overview of the team's goals, potential strategies for dealing with challenges, and information about task prioritization, positively influenced development of similar and accurate TMM.²³ Team leaders also monitor team performance and provide feedback to the team, thus helping team members build a shared understanding of their progress in relation to their goals.³⁸ A well-developed mental model then positions the team leader to begin strategizing and forming a plan to address the clinical problem. Each step in this process influences the accuracy and similarity of TMM as well as what information is distributed to specific team members.

Simulation-based training is a recommended mechanism for training team leaders and leadership processes.^{37,39} In addition to training entire teams, simulations can recreate a “team” experience for team leader training and assessment even when intact teams (i.e., teams containing their full membership) are unavailable. Simulation allows learners to practice the specific behaviors that influence team cognition, including facilitating knowledge sharing amongst the team, setting team goals and priorities, and providing continuous status updates.^{2,37}

5. Use team training strategies that support development of TMMs and TMSs—Simulation-based training can support team training design elements that develop and strengthen elements of team cognition.⁴⁰ Evidence supports using several training strategies to positively influence team cognition (Table 3). Cross training improves team interaction mental models, leading to increases in coordination and backup behavior and, ultimately, improved team performance.⁴¹ Additionally, team self-correction training, which focuses on skills relevant to (a) event review (following a task episode), (b) error identification, (c) feedback exchange, and (d) planning for subsequent task episodes, is thought to foster the development of TMMs.⁴² These instructional training design approaches can all be

implemented using a simulation-based platform. In fact, the ability to create highly realistic behavioral triggers makes simulation a logical choice for such training.

6. Purposefully structure team debriefs to support development of team

cognition—Simulation educators can optimize the development of team cognition by using an evidence-based, guided approach to debriefing. Feedback is classically defined as the delivery of information regarding one's performance results, often to inform trainees about what they did in relationship to what should have been done.⁴³ Providing feedback through debriefing is a cornerstone of effective team training and is recognized as one of the most valuable components of simulation-based training. However, simply providing teams with an opportunity to debrief does not necessarily facilitate the development of shared team cognition.¹⁰ The degree to which feedback positively influences learning and team performance depends largely on the manner in which it is delivered, the content of the information discussed, and the way it is interpreted.⁴⁴ By using a debriefing framework that incorporates these factors, educators can optimize team cognition and strengthen TMM and TMS development.

First and foremost, debriefing should be structured around an expert model of teamwork and performance. Team members tend to organize their debriefing around the chronology of the task. As a result, the discussion focuses on what happened and why it happened in a very situation-specific context. This may improve team performance in similar situations and contexts but does not necessarily develop the cognitive skills and structures necessary to think or act under different conditions, i.e., to adapt.⁴⁵ In fact, it could lead to negative learning if trainees attempt to generalize highly context-specific knowledge from simulations of rarely occurring events.^{22,46} Without the guidance of an expert model, team members may adopt similar, but inaccurate, models of the team and/or task. Using an expert model of teamwork to guide debriefing would help teams focus on team behaviors rather than situation-specific outcomes.

Second, debriefings should incorporate both positive and negative feedback to maximize the development of team cognition. Research suggests that when post-event debriefs include both positive and negative performance elements, trainees develop more detailed mental models and demonstrate improved performance on complex skills.⁴⁷ However, instructors and team leaders often focus on performance problems and view the discussion of positive behaviors as a waste of time.⁴⁸ Using a structured approach to debriefing would encourage the discussion of both effective and ineffective behaviors.

Third, using a framework to guide debriefing can also help facilitate shared understanding in teams whose members hold high quality, yet dissimilar, mental models. This is particularly relevant in healthcare teams, where all team members are trained experts in their respective fields and bring highly specialized, often divergent views to the team. In these situations, it can be difficult for team members to communicate their point of view and negotiate a shared vision of the task, associated challenges, and possible solutions.²² Using a team-oriented framework to guide debriefing can avoid conflict and facilitate the development of overlapping mental models among team members from different disciplines.

7. Design simulation-based systems to assess elements of team cognition—

An essential component of team science and training is measurement.⁴⁹ Team cognition is a critical component of teamwork that is rarely assessed as a training outcome. A detailed discussion of team cognition measurement is well beyond the scope of this manuscript. However, we feel it is important to note the critical role simulation has played in advancing team cognition research in other domains. To evaluate interventions, a simulation system can serve as a standardized platform to determine whether a targeted intervention such as team training improves teamwork, team cognition, and patient management. As teams progress through the simulation(s), the need for knowledge acquisition, storage, and sharing is triggered, resulting in the development of, or the failure to develop, supporting cognitive structures, e.g., TMMs and TMSs. Using a variety of techniques, TMMs and TMSs can be assessed for both similarity amongst team members as well as accuracy against subject matter experts who also completed the simulation. We refer readers to Langan-Fox, et al.²⁸ and Mohammed, et al.⁵⁰ for additional detail regarding measurement of TMMs and TMSs.

FUTURE DIRECTIONS

Healthcare team cognition research is still in its infancy, and significant opportunities exist to advance theory, methodology, and empiric knowledge. From a conceptual standpoint, Kozlowski and Ilgen note, “empirical research on transactive memory is not commensurate with its theoretical development.”³⁸ Research across multiple domains demonstrates that TMSs are positively related to both team effectiveness and team performance.^{51,52} However, this area is underexplored in healthcare teams. Future research should consider both TMMs and TMSs as complementary, critical factors that influence team effectiveness and performance.

From a methodologic standpoint, studies comparing educational interventions targeting team cognition can help define best practices and evidence-based approaches. Moreover, robust research evaluating team cognition assessment tools can provide evidence supporting assessment validity and reliability. Such tools are necessary if educators and clinicians are to consider the contribution of team cognition to team effectiveness and patient care.

Several areas of empirical research are particularly relevant for healthcare teams. The optimal balance between shared knowledge and distributed knowledge depends upon the nature of the healthcare team, the task, and the clinical environment. It will be important to understand how these factors interact within healthcare teams, and how training can be used to correctly target development of TMSs along with TMMs. Research focusing on TMSs should consider not only the constituent components of the TMS, (i.e., what, where, and how knowledge is distributed), but also whether or not all team members share the same vision of the TMS. Finally, there is a need to understand and mitigate potential barriers to accessing distributed knowledge, such as professional hierarchies and communication issues (e.g., profession-specific jargon).

CONCLUSION

Team cognition plays a critical role in team effectiveness and performance outcomes, yet is poorly studied in healthcare. Simulation-based training provides experiential opportunities for development of team cognition that may build upon, or even replace, actual clinical experience. Additionally, simulation-based training can address issues related to healthcare reliance on ad hoc team structures by providing opportunities to develop role-related TMM within individual team members. As with any scientific endeavor, we recommend that clinicians, educators, and simulation experts partner with experts in team science to develop robust approaches to simulation-based training that targets team cognition constructs.

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Team Mental Model

- Overlapping knowledge shared by the entire team
- Overlapping knowledge shared between specific team members

Transactive Memory System

- Team member **awareness** of what information is shared
- Team member **awareness** of what information is unique to each team member
 - How this information is organized
 - How this information can be accessed by the team
 - How credible is the knowledge held by other team members

Figure 1.
Team Mental Model and Transactive Memory System Definitions

Figure 2.
Example of Event-based Simulation Design

Table 1

Content Domains of Team Mental Models

	Type of Mental Model	Definition	Example of knowledge content
Task-related	Equipment model	Shared knowledge about the equipment and technology used or available to the team	Availability of cardiac catheterization after routine hours
	Task model	Shared, organized knowledge about how a task is accomplished in terms of existing protocols, necessary team member skills, procedures, and likely contingencies	Checklist for procedural sedation
Team-related	Team member model	Shared information specific to the team's membership, including individual team member's skills, attitudes, strengths, weaknesses, and preferences	Understanding limited knowledge/skills of trainees
	Team interaction model	Shared conceptions of how the team interacts and which teamwork behaviors are appropriate and effective – includes roles and responsibilities of team members, role interdependencies, and information flow/communication channels	Standard role assignment during a cardiac arrest resuscitation

Table 2**Principles to Guide the Use of Simulation to Develop Team Cognition**

Principle	Explanation	Example(s)
1. Use a systematic approach to simulation design	Use event-based simulation design ²⁵ principles to ensure targeted behaviors are elicited	<ul style="list-style-type: none"> • Use a standardized participant to trigger desired information sharing behaviors, such as a brief or a huddle • Use a standardized trigger event, e.g., patient arrest, to force teams to access knowledge from its members
2. Use simulation to target information sharing behaviors	Train teams to identify what information is pertinent, focusing on quality, applicability, and criticality rather than quantity	<ul style="list-style-type: none"> • Conduct simulation with leader blindfolded, thus forcing all team members to explicitly share key information • Pause simulations at key points to query team members to see how information sharing is contributing to TMM and TMS • Use a standardized junior participant e.g. student to ask pre-defined questions if the team is struggling to share information
3. Design simulations to target team processes and behaviors that positively influence TMMs and TMSs	Focus on team processes known to improve team cognition, such as planning behaviors	<ul style="list-style-type: none"> • Incorporate an unexpected change in patient condition to trigger rapid re-prioritization • Remove team leader mid-simulation • Have team members arrive asynchronously
4. Use simulation to equip team leaders with the skills necessary to develop TMMs and TMSs	Train team leaders who can then develop and influence the team – important when unable to train intact teams due to variability in team composition	<ul style="list-style-type: none"> • Use a standardized team to train team leaders • Expose team leaders to teams with varying backgrounds and skillsets
5. Use team training strategies that support development of TMMs and TMSs	Incorporate established team training strategies that are well suited to simulation-based training	<ul style="list-style-type: none"> • Cross-training²⁶ • Reflexivity training²⁷ • Team interaction training²³ • Guided self-correction training²²
6. Purposefully structure team debriefs to support development of team cognition	Design debriefs to maximize impact on team cognition development	<ul style="list-style-type: none"> • Use an expert model of teamwork as a reference to promote a universal framework that is not scenario specific • Focus on and reinforce positive behavior, in addition to highlighting opportunities for improvement
7. Design simulation-based systems to assess elements of team cognition	Simulations provide a standardized platform to assess both TMMs and TMSs. Several measurement options exist. ²⁸	<ul style="list-style-type: none"> • Cognitive interviewing²⁹ • Concept mapping¹¹ • Pathfinder³⁰ • Communication coding³¹

* NOTE: REFERENCES ARE NUMBERED BASED ON LOCATION OF TABLE WHERE INDICATED IN TEXT.

Table 3

Instructional training strategies that support the development of team cognition

Instructional Strategy	Description	Reference
Cross training/Interpositional knowledge training	Team members receive specific instruction on the roles and responsibilities of other team members.	Volpe, et al., 2006 ²⁶
Reflexivity training	Teams are guided to reflect on progress toward their goals, consider how they might adjust their approach, and plan how to implement new strategies	West, MA, 2000 ²⁷
Team interaction training	Team members are trained on teamwork skills embedded within in a high fidelity environment that replicates the work (clinical) setting	Marks, et al ²³
Guided self-correction training	Team members are guided to diagnose performance deficiencies and problem solve to find more effective strategies	Smith-Jentsch, et al ²²

* NOTE: REFERENCES ARE NUMBERED BASED ON LOCATION OF TABLE WHERE INDICATED IN TEXT.