Evidence-Base: Situation Monitoring

Situation monitoring is the process of actively scanning and assessing elements of the "situation" to gain or maintain an accurate awareness or understanding of the situation in which the team is functioning. Marks, Mathieu, and Zaccaro identified three key elements that effective teams need to monitor during action phases, defined as "periods of time when teams are engaged in acts that contribute directly to goal accomplishment" (p. 360).[3] These elements include systems (both internal and environmental), the team itself, and progress towards the goal.

Systems monitoring includes tracking internal systems components (e.g., equipment), environmental conditions (e.g., facility provided work area). Teams working in dynamic environments need to monitor and assess internal and external systems, allowing identification of changes that can impact tasks and/or the final goal. For example, failure to have a private interview may result in receiving inadequate information regarding the issues being discussed.

Team monitoring refers to the process of observing, or cross-monitoring, the actions of fellow team members in an effort to identify errors, performance discrepancies, and areas in which another member can provide support.[1-3] Support encompasses feedback, coaching, performing back-up behaviors, and assuming or completing task work for another member.

For example, a physician credentialing review is required. The facility staff explains the credentialing policy to a less experienced surveyor (S1) who accepts this and is planning to move forward with other survey tasks. A Surveyor Coach (SC) asks the surveyor how he or she actually knows that the policy is being implemented and reviews survey procedures in the State Operations Manual (SOM) with S1. After this, S1 thanks facility staff for explaining the policy and requests a list of credentialed physicians to pick a sample from.

Shared Mental Models

The act of sharing and discussing information gained from situation monitoring provides the opportunity to gather more information about the situation and helps cultivate a mutual understanding. This mutual understanding is commonly referred to as a shared mental model.

Shared mental models are defined as organized knowledge structures of relevant facts and relationships about a task or situation that are commonly held by members of a team. Teams develop the plan, share the plan, and monitor the plan.

The information sharing literature, as summarized by Mohammed and Dumville,[4] examined information pooling behaviors in groups and distinguished shared information (information held by all members) from unshared information (information held by only one member). Given that teams are typically composed of members with distinct roles who tend to have unique

information, it is important to pay attention to the factors that promote and undermine the opportunity for team members to present and discuss their diverse information and observations.

Research has shown that each team member needs to be aware that they may have unique information that would benefit the team as a whole. As a result, opportunities for "sharing" information will be less about rehashing information that all members already possess and focus more on discussing and pooling unique and unshared information.

The literature on cognitive consensus defined this construct as the "similarity among [team] members regarding how key issues are defined and conceptualized" (p. 99).[4] In other words; team members who have cognitive consensus are more likely to interpret situational cues and other issues similarly. This literature adds to the shared mental model concept that team members share adequate knowledge of task work and teamwork, in addition to having a common understanding of the assumptions underlying significant issues. However, it should be noted that extreme levels of consensus can be dysfunctional in many situations; therefore, there needs to be a balance between diversity and consensus for optimal team effectiveness.

Evidence suggests that team members who possess shared mental models yield teams that:

- Can anticipate
- Back-up and fill-in for one another
- Communicate to ensure team members have the necessary information for task performance
- Team members understand each other's' roles, and how they interplay

The basic premise regarding the relationship of shared mental models and teamwork is that team effectiveness will improve if team members have a shared understanding of the situation.

References

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