



SITUATION MONITORING

Attention to detail is one of the most important details...

– Author Unknown



SUBSECTIONS

- Situation Monitoring
- Cross Monitoring
- STEP
- Situation Awareness
- Shared Mental Models
- Teamwork Actions

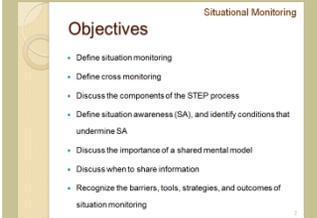
TIME: 45 minutes

OBJECTIVES

SAY:

In this module, we'll—

- Introduce the concepts of situation monitoring, cross monitoring, situation awareness, and shared mental models.
- Discuss the components of the STEP process to support situation monitoring.
- Identify some strategies to help cultivate shared mental models among teams.
- Discuss the importance of when to share information.
- Recognize potential barriers to success and identify tools and strategies to overcome them.



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**MODULE
TIME:**

45 minutes

TeamSTEPPS FRAMEWORK

SAY:

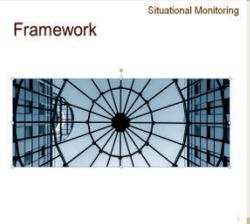
Situation monitoring is a key component of the teamwork process and is intimately linked to the other three essential elements of teamwork:

- Because situation monitoring concerns the willingness and ability to continually monitor situations and share this awareness with fellow team members, it is enhanced by team leadership, given that team leaders encourage and role model supportive behaviors.
- Situation monitoring allows mutual support through the ability to anticipate other team members' needs with accurate knowledge of their responsibilities.
- Situation monitoring is also moderated by communication, which allows for the sharing of new and emerging information with other team members to retain a shared mental model.

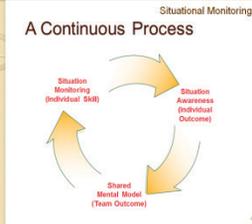
Continual monitoring of the situation enables the team to anticipate and predict the needs of fellow team members, allowing the team to be more adaptive and flexible. That allows the team to recognize early and respond to deviations in the survey plan, potential problems, or dangerous circumstances. Because of this vigilance, teams are better able to self-correct, compensate for fellow team members, and reallocate functions if necessary. Effective teams possess a shared understanding of the way a plan should be carried out and established goals met, which allows teams to mitigate and correct errors before they occur.

The most important team outcome of knowledge is a shared mental model. The basic premise underlying the relationship between shared mental models and teamwork is that team effectiveness will improve if team members have a shared understanding of the situation.

We'll talk more about situation monitoring and shared mental models in this module.



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SAY:

Here we have a continuum that begins with the individual skill of situation monitoring. The processing of monitored information results in the individual outcome of situation awareness. Sharing your situation awareness with fellow team members results in the team outcome of a shared mental model.

- **Situation monitoring** is the process of actively scanning and assessing elements of the situation to gain information or maintain an accurate understanding of the situation in which the team functions. Situation monitoring is a skill, which implies that it can be trained and developed as discussed earlier.
- **Situation awareness** is the state of knowing the conditions that affect one's work. It is a detailed picture of the situation. Note: Situation awareness (SA) is not a static "thing" or concept. Because the situation and context in which the situation exists are dynamic and ever-changing, team members must continually assess relevant components of the situation and update their individual SA.
- **Shared mental models** are the result of each team member maintaining his or her situation awareness and sharing relevant facts with the entire team. Doing so helps ensure that everyone on the team is "on the same page."
- **A continuous process** is necessary because of the dynamic situations in which teams function. It allows individual team members to maintain their situation awareness and share new and emerging information with other team members to retain a shared mental model.

ASK:

When have you used situation monitoring in your work? How did the information that you obtained from the environment affect how you approached or responded to the situation?

SITUATION MONITORING (INDIVIDUAL SKILL)

Situation Monitoring

SAY:

Situation monitoring is the process of actively scanning behaviors and actions to assess elements of the situation or environment.

Situation monitoring is a skill team members can acquire, practice, and improve on. It enables team members to identify potential issues or minor deviations early enough so that they can correct and handle them before they become a problem or pose harm to the patient. Mutual respect and team accountability are cultivated because situation monitoring provides a safety net for team members.

ASK:

What are some of the ways you monitor the when conducting a survey?

Situational Monitoring

Situation Monitoring
(Individual Skill)

Process of *actively scanning* behaviors and actions to assess elements of the situation or environment

- Fosters mutual respect and team accountability
- Provides safety net for team
- Includes cross monitoring

... Remember, engage the patient whenever possible.

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KEY POINT:

- Situation monitoring is a skill that essentially over time becomes second nature for the seasoned professional.

Situational Monitoring Cross Monitoring is...

Process of monitoring the actions of other team members for the purpose of sharing the workload and reducing or avoiding errors

- Mechanism to help maintain accurate situation awareness
- Way of "watching each other's back"
- Ability of team members to monitor each other's task execution and give feedback during task execution

Mutual performance monitoring has been shown to be an important team competency. (McIntyre and Salas 1995)

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KEY POINTS:

- Cross monitoring is a safety net feature for the team.
- It is the ability of team members to monitor each other's task execution and provide immediate feedback.
- Mutual respect and team accountability are essential for the strategy of cross monitoring to be successful among team members.
- This strategy is meant to help the team meet its collective goal.
- Mutual performance monitoring is an important team competency as described by McIntyre and Salas (1995).

SAY:

Cross monitoring is used by fellow team members to help maintain situation awareness and prevent errors. Commonly referred to as “watching each other’s back,” it is the action of monitoring the behavior of other team members by providing feedback and keeping track of fellow team members’ behaviors to ensure that procedures are being followed appropriately. It allows team members to self-correct their actions if necessary. Cross monitoring is not a way to “spy” on other team members, rather it is a way to provide a safety net or error-prevention mechanism for the team, ensuring that mistakes or oversights are caught early. When all members of the team trust the intentions of their fellow team members, a strong sense of team orientation and a high degree of psychological safety result.

DO:

Have participants form pairs, and have each pair share an example of a situation in which cross monitoring was successful and one in which cross monitoring should have been used but was not.

Have several pairs volunteer to share their examples with the larger group.

STEP



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SAY:

How do you acquire a trained eye as you “monitor the situation” during a survey? What are relevant components of the situation that provide clues about impending complications or contingencies? The STEP process is a mnemonic tool that can help you monitor the situation and the overall environment.

The STEP process involves ongoing monitoring of the—

- **S**tatus of the survey
- **T**eam members
- **E**nvironment
- **P**rogress toward the goal

Examples:

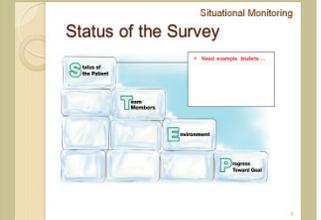
- Facility staff are not impeding the efforts of the survey team to interview staff members. Realizing this could impact the survey, the team leader intervenes to rectify this situation and keep the survey moving. (**STATUS**).
- Team member A is having a hard time concentrating. Noticing this, team member B discusses this with her. Team member A shares that her child is ill and she was up several times during the night. Team members A and B discuss with the team leader. Team member A feels she can still contribute to the survey and the team leader assigns team members A and B to work on specific tasks jointly. (**TEAM MEMBERS**).
- A surveyor notices the team leader’s laptop is not charging. He troubleshoots the problem. (**ENVIRONMENT**).
- A surveyor finds a significant care issue which requires extensive time to investigate appropriately. She informs the team leader and duties are reassigned so that the survey can proceed in a timely manner. (**PROGRESS**).

STATUS OF THE SURVEY

SAY:

During a survey, the most obvious element of the situation requiring constant monitoring is the progress of the survey. Recognition of potential concerns and a swift response can keep the survey on track and avoid or decrease the potential for the survey to be compromised in some way or not effective.

- Are tasks being done efficiently?
- Is the staff providing documents and records?
- Are issues being discovered?
- Are interpersonal issues becoming apparent?



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 **CUSTOMIZABLE
CONTENT**



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SAY:

You should also be aware of team members' status, to include the following:

- Fatigue Level
- Workload
- Task Performance
- Skill Level
- Stress Level

New and experienced surveyors are both prone to human error. Teams that recognize and maintain an awareness of their individual team members' functioning are more likely to lend support or assistance. Observing the actions of fellow team members is a safety mechanism that can be used to mitigate errors.

I'M SAFE CHECKLIST

SAY:

Awareness of your own condition to ensure that you are fit and ready to fulfill your duties is essential to delivering safe, quality care. Team members should assess and report if there is a personal situation affecting their ability to perform.

“I'M SAFE” is a simple checklist that should be used daily (or more frequently) to determine both your co-workers' and your own ability to perform safely. I'M SAFE stands for—

- **Illness.** Am I feeling so bad that I cannot perform my duties?
- **Medication.** Is the medication I am taking affecting my ability to maintain situation awareness and perform my duties?
- **Stress.** Is there something (such as a life event or situation at work) that is detracting from my ability to focus and perform my duties?
- **Alcohol/Drugs.** Is my use of alcohol or illicit drugs affecting me so that I cannot focus on the performance of my duties?
- **Fatigue.** The effects of fatigue should not be ignored. Team members should alert the team regarding their state of fatigue (e.g., watch me a little closer today, I only had three hours of sleep last night).
- **Eating and Elimination.** Has it been 6 hours since I have eaten or used the restroom? Many times we are so focused on ensuring our work is completed, and our team member needs are being taken care of, that we forget to take care of our own needs. Not taking care of our elimination needs affects our ability to concentrate and stresses us physiologically.

Teams should be encouraged to set goals concerning the items on this checklist (e.g., everyone will be given the opportunity to take a break and have lunch today).

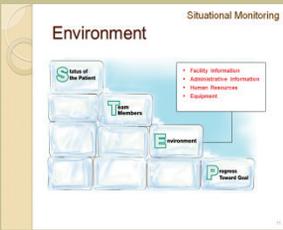
ASK:

- In your current situation would you feel able to express that you're not safe?
- What are the factors that inhibit you from doing so and/or that contribute to your inability to do so?
- If you feel inhibited, what can you and your team do to change the culture?

For this to be successful, there must be a culture in place in which staff feel safe to be honest without fear of reprisal, retribution, or disdain.



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SAY:

The environment directly affects the quality of work delivered. Is there enough staff? The environment can change quickly and dramatically, and teams must be able to adapt to the dynamic nature of the situation. For example, if a potential IJ is discovered, is the team able to recognize and address it appropriately and in accordance with Appendix Q?

When assessing the environment, consider the following:

- Facility Information- Surveyors are consistently working in different facilities. However, in each facility, there should be a private area for the survey team to work and conduct survey tasks.
- Administrative Information
- Equipment Status– Laptops and IT support are an important component

PROGRESS TOWARD GOAL

SAY:

By monitoring progress toward the team's established and agreed-on goals, team members will be able to alert the team when strategies or the survey plan may need to be reconsidered or revised or when additional resources are needed. When assessing progress, team members need to consider the following:

- Status of survey
- Goal of the team
- Tasks/actions completed or that need to be done
- Continued appropriateness of the plan

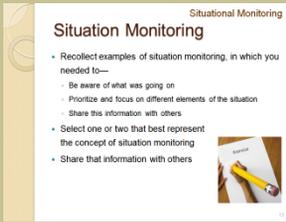
Goals were established and agreed on at the team meeting. What has changed, and how does our goal have to be modified?



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KEY POINT:

- In reviewing progress toward the goal, have you noticed a change that would provide a reason to modify the goal?



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TIME:

5–10 minutes



MATERIALS:

- Flipchart or Whiteboard (Optional)
- Markers (Optional)

SAY:

Break into groups and recollect real-life examples of situation monitoring in which you needed to—

- Be aware of what was going on
- Prioritize and focus on different elements of the situation
- Share that information with others

DO:

Once each group has completed the exercise, ask the groups to share their examples with the larger group.

SITUATION AWARENESS IS

SAY:

Situation awareness is the state of knowing the conditions that affect one's work. It is the extent to which team members are aware of the following:

- Status of a particular event
- Status of the survey
- Operational issues affecting the team
- Need to maintain mindfulness

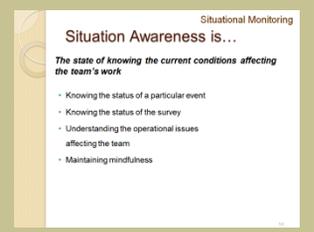
Each healthcare environment is dynamic, requiring team members to continually reassess situations to update their situation awareness while conducting a survey. What results is a sense of “knowing what’s going on around them.”

A loss of situation awareness results in the following:

- Ambiguity
- Confusion
- Decreased communication

High-Reliability Organizations (HROs)

The success of HROs in managing the unexpected is due to their determined efforts to act mindfully! Strive to maintain an underlying style of mental functioning that is distinguished by continuous updating and a deepening of increasingly plausible expectations of what the context is, what problems define it, and what remedies it contains.



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Situational Monitoring
Conditions that Undermine Situation Awareness (SA)

- Failure to—
- Share information with the team
 - Request information from others
 - Direct information to specific team members
 - Utilize resources fully (e.g., status board, automation)
 - Maintain documentation that is adequate, complete, and timely

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KEY POINT:

- Create a culture in which there is an expectation that information will be shared among team members and that information will be actively sought from others.

SAY:

Below are some of the numerous barriers to maintaining situation awareness. They are the result of team members' failure to—

- Share information with the team.
- Request information from others.
- Direct information to specific team members.
- Utilize resources fully (e.g., status board, automation).
- Maintain documentation that is adequate, complete, and timely.

A SHARED MENTAL MODEL IS

SAY:

A mental model is a mental picture or sketch of the relevant facts and relationships defining an event, situation, or problem. When all members of a team share the same mental model, this is referred to as a “shared mental model.” Sharing your situation awareness with fellow team members results in a shared mental model, or in “everyone being on the same page.”

Similar to the way situation awareness is the result of an individual team member’s situation monitoring, a shared mental model is the result of each team member maintaining his or her situation awareness and sharing relevant facts with the entire team. In isolation, it is possible for an individual team member to misinterpret cues or to place too much emphasis on one piece of information. Shared mental models are knowledge structures of the relevant facts and relationships about tasks or situations that the team is engaged in, and about the way the team members interact. Shared mental models enable the team to anticipate and predict each other’s needs; identify changes in the team, task, or teammates; and adjust the course of action or strategies as needed.

Shared mental models are sustained by the following:

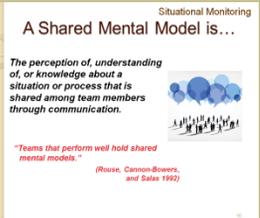
- The process of planning
- Team decision-making
- Vocalizing

Research supports the notion that the ability to hold shared mental models is an important team competency.

Shared mental models provide team members with a common understanding of who is responsible for what task and what the information requirements are. In turn, this allows them to anticipate one another’s needs so that they can work (i.e., provide patient care) in synchronicity (Stout et al. 1999).

DO:

Ask participants to share instances in which they have been on the “same page” with others on their team.

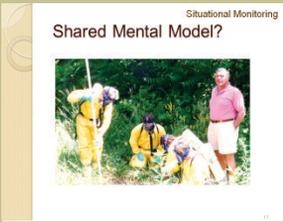


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KEY POINTS:

- Situation monitoring is a trained eye.
- Cross monitoring is “watching each other’s back.”
- Situation awareness is “knowing what is going on around you.”
- With a shared mental model all team members are “on the same page.”

SHARED MENTAL MODEL?



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SAY:

On our continuum of situation monitoring, situation awareness, and shared mental model, where are these two groups? How can lack of a shared mental model affect safety?

HOW SHARED MENTAL MODELS HELP TEAMS

Situation Monitoring

SAY:

Can you think of ways that the team will work more efficiently and effectively if all members of the team are “on the same page?” If teams are better able to predict and anticipate, then the team will know what is supposed to happen. They will have a better understanding of how the case is progressing.

How do shared mental models help teams?

- Lead to a mutual understanding of problems, goals, team strategies, patients’ condition, and plan of care.
- Lead to more effective communication to ensure that team members have the necessary information for task performance.
- Enable team members to back up and fill in for one another.
- Help team members understand each other’s roles and how they interplay.
- Improve ability of individual team members to predict and anticipate the needs of the team.
- Create commonality of effort and purpose.

Most important, shared mental models help teams avoid errors that put patients at risk.



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KEY POINTS:

- Shared mental models help teams avoid errors that put patients at risk.
- Shared mental models ensure that all team members are aware of the plan of care.

WHAT DO YOU SEE?



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SAY:

Each team member has a unique perspective and information that benefits the team as a whole when shared. Different people may view the same situation differently, but without sharing and communicating, each team member may have a different understanding.

Ask the audience what they see in each picture. After responses are given, discuss how totally different figures are seen if the pictures are viewed from the left versus the right.

DISCUSSION:

- When looking at these images, what do you see?
- Do you see different images if you look right to left versus left to right?
- How did sharing perspectives increase your ability to see the whole picture?

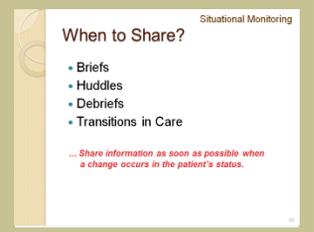
Answers:

- Left image: Indian and Eskimo
- Center image: Duck and rabbit
- Right image: Old lady and young one

WHEN TO SHARE?

SAY:

There are both ad hoc and structured opportunities to share vital information with team members. Some examples of when information can be shared include team events such as briefs, huddles, and debriefs. It is important to establish the expectation that these team events will occur and that all team members are empowered to speak up. Teams should communicate often and at the right time to ensure that fellow team members have the information they need to be able to contribute.



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TeamSTEPPS Situation Monitoring

BARRIERS	TOOLS and STRATEGIES	OUTCOMES
<ul style="list-style-type: none"> ▪ Hierarchical Culture ▪ Lack of Resources or Information ▪ Ineffective Communication ▪ Conflict ▪ Time ▪ Distractions ▪ Workload ▪ Fatigue ▪ Misinterpretation of Data ▪ Failure to Share Information 	<ul style="list-style-type: none"> ▪ Brief ▪ Huddle ▪ Debrief ▪ STEP ▪ Cross Monitoring 	<ul style="list-style-type: none"> ▪ Situation Awareness ▪ Shared Mental Model ▪ Adaptability ▪ Team Orientation ▪ Mutual Trust

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SAY:

This module discussed barriers that hinder team members from accurately monitoring situations that affect the care of the patient and the effectiveness of the team.

The tools and strategies introduced in this module to overcome these barriers include the following:

- **STEP**—a mnemonic template to help cue active monitoring of all the vital components of a situation
- **I'M SAFE checklist**—a list to prompt a self-status check
- **Cross monitoring**—“watching each other’s back”
- Shared mental models and their impact on team safety are the most important outcomes of situation awareness. Other benefits include the following:
 - **Adaptability**—having members who can back up and fill in for one another and easily adjust the plan of care as new information becomes available
 - **Team orientation**—having members who understand each other’s roles and how they fit together
 - **Mutual trust**—having members who trust other team members’ intentions
- By conducting situation monitoring you are more likely to have a positive experience:
 - You’ll enjoy working as a team.
 - You’ll trust your teammates.
 - You’ll be better able to adapt to changes and quickly recover.
 - And finally, your team will be safer and more likely to identify and correct errors.

SAY:

Teamwork actions can include the following:

- Conduct team exercises to increase situation monitoring skills.
- Share information.
- Include patient and/or family in communication.
- Use cross monitoring.
- Apply the STEP process when monitoring the situation.
- Foster communication to ensure a shared mental model among all team members.
- Share information during team events (e.g., briefs, huddles, and debriefs) and transitions in care.

ASK:

What actions will you take to improve your and your team's situation monitoring skills?

Situational Monitoring

Teamwork Actions

- Conduct team exercises to increase situation monitoring skills
- Share information in a timely fashion
- Use cross monitoring
- Apply the STEP process when monitoring the situation
- Foster communication to ensure that all members of the team have a shared mental model
- Share information during briefs, team huddles, debriefs, and transitions in care

"Teams do not seek consensus; they seek the best answer."
--Kaltenbach and Smith

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