



SITUATION MONITORING (DRAFT)




SUBSECTIONS

- Teamwork Exercise #2
- STEP
- Situation Awareness
- Shared Mental Models

TIME: 45 minutes

INSTRUCTOR OUTLINE: SITUATION MONITORING

Situation Monitoring

 **Instructor Note:** In this module, you will present information about situation monitoring. Participants will learn how to identify relevant information that will inform situation awareness and create shared mental models.

The Situation Monitoring module includes the content provided in the outline below. More content is available than can be covered in the time provided; therefore, optional content and activities are noted. It is strongly recommended that instruction not focus solely on lecture, but also include exercises, videos, and other activities. As such, instructors should use the information below to plan how the module will be taught within the time available.

	Content	Page #	Approx. Time
1.	Teamwork Exercise #2	5 – 6	10 mins*
2.	Introduction	7 - 9	4 mins
3.	The STEP Process	10 - 15	10 mins
4.	Situation Monitoring Exercise	16	5 mins
5.	Situation Awareness	17 - 18	4 mins
6.	Shared Mental Models; When and How To Share	19 - 21	10 mins
7.	Practical Exercise	22 - 24	25 mins*
8.	What Do You See?; How Shared Mental Models Help Teams	25 - 26	5 mins
9.	Tools and Strategies Summary	27	2 mins
10.	Applying TeamSTEPPS Exercise	28	5 mins

*Although all instructional content and activities are recommended to ensure that participants achieve the learning objectives, these activities may be considered “optional” if time is constrained.



MODULE TIME:

45 minutes



MATERIALS:

- Construction Paper
- Tape
- Scissors
- Flipchart or Whiteboard (Optional)
- Markers (Optional)
- STEP Subacute Video (STEP_Subacute.mpg)
- Cross Monitoring Subacute Video (Cross_Monitoring_Subacute.mpg)
- Exercise Script
- Exercise Role Information
- Exercise Care Plan Questions to Consider
- TeamSTEPPS Implementation Worksheet


Continued...

INSTRUCTOR OUTLINE: SITUATION MONITORING (Continued)

Additional Resources: Below are sources of additional information and videos you may wish to use to customize this module to your participants.

- **TeamSTEPPS for Long-Term Care DVD:** The TeamSTEPPS for Long-Term Care DVD includes Specialty Scenarios and additional videos that can be used to customize your instruction.
- **TeamSTEPPS 2.0:** Includes videos specific to the use of the situation monitoring tools and strategies in multiple hospital settings.
- <http://www.ahrq.gov/professionals/education/curriculum-tools/teamstepps/instructor/fundamentals/index.html>
- **TeamSTEPPS for Office-Based Care Version:** Includes videos specific to the use of the situation monitoring tools and strategies in the primary care setting.
- <http://www.ahrq.gov/professionals/education/curriculum-tools/teamstepps/primarycare/>
- **TeamSTEPPS Rapid Response Systems Module (RRS):** Includes videos specific to the use of the situation monitoring tools and strategies by Rapid Response Teams.
- <http://www.ahrq.gov/professionals/education/curriculum-tools/teamstepps/rrs/>
- **Comprehensive Unit-Based Safety Program (CUSP) “Implement Teamwork and Communication” Module:** Includes information on some of the situation monitoring tools and strategies taught in TeamSTEPPS.
- <http://www.ahrq.gov/professionals/education/curriculum-tools/cusptoolkit/modules/implement/index.html>

(OPTIONAL) TEAMWORK EXERCISE #2

 **Instructor Note:** This is the second iteration of the teamwork exercise conducted at the beginning of the course.

SAY:

You'll recall our paper chain exercise from earlier. Please get back into your teams, and this time, identify a team leader.

DO:

Take the leaders out of the room and brief them on the exercise, using the information below.

SAY (Only to team leaders):

When we return to the room, you will direct your team to make the longest paper chain possible. This time, however, team members may only use their non-dominant hand, and there will be no talking. You will have 30 seconds to brief your team. At the end of the 30 seconds, the talking must stop. You will have 2 minutes to work after I say "Begin."

ASK:

- Does anyone have any questions?

DO:

Provide the team leaders with the materials and return to the room.

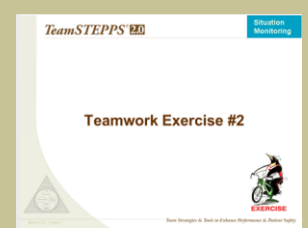
SAY:

You now have 30 seconds to brief your team. After this briefing period, I will say "Begin" and you will then have 2 minutes to work.

DO:

After 30 seconds, say "Begin."

At the end of the 2 minutes, tell the teams to "Stop" and identify the longest chains. To conclude the exercise, conduct a debrief using the discussion questions that follow. You may wish to list any key points identified during the discussion on a flipchart or whiteboard.



Slide



TIME:

10 minutes



MATERIALS:

- Construction Paper
- Tape
- Scissors
- Flipchart or Whiteboard (Optional)
- Markers (Optional)



DISCUSSION: Go to next page >

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(OPTIONAL) TEAMWORK EXERCISE #2 (Continued)



DISCUSSION:

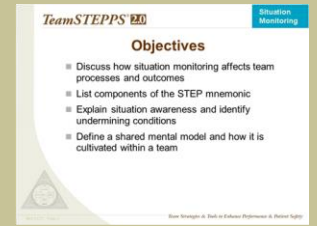
- What did the leader do before the exercise began?
- Was there a clear plan? What was the plan?
- Did you have a clear understanding of your role and responsibilities? If not, what information would have been helpful?
- Did you know the roles and responsibilities of others on your team?
- Did your role change during the exercise?
- How did the lack of communication during the task affect your work on the task?
- Were other communication techniques used? If so, what were they?
- Given the information your leader shared at the start of the exercise, what were you monitoring throughout the task?
- What would you do differently if you performed this exercise again?

OBJECTIVES

SAY:

Following this module, you will be able to:

- Discuss how situation monitoring affects team processes and outcomes;
- List components of the STEP mnemonic;
- Explain situation awareness and identify undermining conditions; and
- Define a shared mental model and how it is cultivated within a team.



Slide



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SAY:

So far, we have covered the following in the TeamSTEPPS framework:

- **Team Structure**, which facilitates teamwork by identifying the individuals among which information must be communicated, a leader must be clearly designated, and mutual support must occur.
- **Communication**, which facilitates teamwork by enabling team members to effectively relay relevant information in a manner that is known and understood by all.
- **Leadership**, which facilitates teamwork through leaders' effective communication with their team members to ensure that a plan is conveyed, reviewed, and updated; continuous monitoring of the situation to better anticipate team members' needs and effectively manage resources; and fostering of an environment of mutual support through role modeling and reinforcement.

In this module, we will cover **Situation Monitoring**.

Situation Monitoring is a way for team members to be aware of what is going on around them. This awareness will enable individuals to adapt to changes in the situation and will also create opportunities to support other team members when needed. Situation monitoring is moderated by communication, which allows for the sharing of new and emerging information with other team members, to develop and maintain a shared mental model.

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 also allows for mutual support through the ability to anticipate other team members' needs with accurate knowledge of their responsibilities.

A CONTINUOUS PROCESS

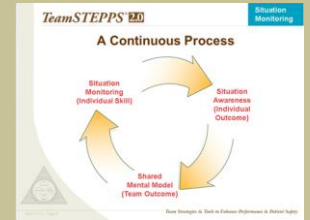
SAY:

Situation monitoring is a continuous process because of the dynamic situations in which teams function. This process consists of three components:

- **Situation monitoring** (an individual skill) 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 taught, developed, and improved. It enables team members to identify potential issues or minor deviations early enough to correct and handle them before they become a problem or pose harm to the resident.
- **Situation awareness** (an individual outcome) is the state of knowing the conditions that affect one's work. It is a detailed picture of the situation. Note that situation awareness 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 situational awareness.
- **Shared mental models** (a team outcome) 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."

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?



Slide



Slide

SAY:

In a busy health care environment, knowing which elements you need to monitor, and being able to keep track of each element, can feel overwhelming. Yet knowing the relevant components of the situation that provide clues about impending complications or contingencies is critical for resident safety. STEP is a mnemonic tool that can help you monitor critical elements of the situation and the overall environment.

The STEP mnemonic stands for:

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

It is not only the responsibility of the direct care team to monitor these elements—anyone involved in the care of residents or the environment should be expected to monitor the situation.

Examples:

- The respiratory therapist notes that a ventilated resident is showing a marked increase in respiratory rate that might indicate an increased level of pain that cannot be communicated (**STATUS**).
- The resident's nurse is busy helping another resident (**TEAM MEMBERS**).
- It is a shift change, and everyone is busy, so you check the medication record and note that the resident is overdue for his morphine (**ENVIRONMENT**).
- You notify the oncoming nurse of your concern (**PROGRESS**).

STATUS OF THE RESIDENT

SAY:

In a health care setting, the most obvious element of the situation requiring constant monitoring is the resident's status. Even minor changes in the resident's vital signs may require dramatic changes in the team's actions and the urgency of its response. When assessing resident status, consider the following:

- Resident history;
- Vital signs;
- Medications;
- Physical exam;
- Plan of care; and
- Psychosocial condition (e.g., resident's stress level).

Let's view a video example.

DO:

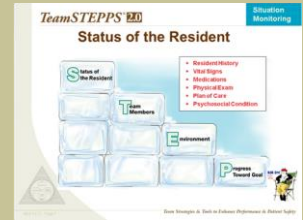


Play the video by clicking the director icon on the slide.



DISCUSSION:

- Why was Olivia concerned about Mr. Larkin when he said he was o.k. and even made a joke about losing his touch?
 - Resident was sweaty and short of breath
 - Resident was not keeping up the same pace as in previous therapy sessions
 - Resident denied pain as a reason for frequent pauses in his exercises



Slide



VIDEO TIME:

0:51 seconds



MATERIALS:

- STEP Subacute Video (STEP_Subacute.mpg)



Slide



VIDEO TIME:

0:27 seconds



MATERIALS:

- Cross Monitoring Subacute Video (Cross_Monitoring_Subacute.mpg)

SAY:

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

- Fatigue level;
- Workload;
- Task performance;
- Skill level; and
- Stress level.

Health care providers are just as prone to human error as the general population. Teams that recognize and maintain an awareness of their individual team members' functioning are more likely to provide constructive feedback, have a shared understanding of the situation, and lend support or assistance when needed.

Observing the actions of fellow team members—or cross-monitoring—is a safety mechanism that can be used to mitigate error before the resident is harmed. Commonly referred to as “watching each other’s back,” monitoring other team members by keeping track of their behavior and providing feedback ensures that procedures are being followed appropriately. It allows team members to self-correct their actions if necessary.

Staff members need to constantly be aware of the situation, anticipate next steps, “watch each other’s back,” and take appropriate corrective action to prevent errors from reaching the resident.

In the next video, let’s watch how the team members monitor and assist each other to ensure that the resident receives timely and appropriate emergent care.

DO:



Play the video by clicking the director icon on the slide.



DISCUSSION:

- What actions by the nurse manager demonstrated cross-monitoring?
 - Noticed that the physical therapy aide could not find the appropriate mask and reminded her of the correct oxygen dose to use with the rebreather mask.

I'M SAFE CHECKLIST

SAY:

Being aware of, and honest about, your own current state is also a vital component of a safe environment. We will now discuss how to assess your own condition, as well as the condition of your team members.

“I'M SAFE” is a simple checklist that can be used to determine your ability to perform safely. I'M SAFE stands for:

- **I**llness. Am I feeling so bad that I cannot perform my duties?
- **M**edication. Is the medication I am taking affecting my ability to maintain situation awareness and perform my duties?
- **S**tress. Is there something—such as a life event or situation at work—that is detracting from my ability to focus and perform my duties?
- **A**lcohol/Drugs. Is my use of alcohol or illicit drugs affecting me so that I cannot focus on the performance of my duties?
- **F**atigue. Am I tired? The effects of fatigue should not be ignored. Team members should alert the team regarding their state of fatigue. For example, saying “Watch me a little closer today. I only had 3 hours of sleep last night.”
- **E**ating and Elimination. Has it been 6 hours since I have eaten or used the restroom? Many times we are so focused on ensuring our resident’s basic needs that we forget to take care of our own. Not taking care of our elimination needs affects our ability to concentrate and stresses us physiologically.

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 or that contribute to your inability to do so?
- If you feel inhibited, what can you and your team do to change the culture?



Slide



Slide

SAY:

The environment directly affects the quality of care delivered. Is the needed equipment present? Are there enough staff to tend to all the residents? The environment can change quickly and dramatically, and teams must be able to adapt to the dynamic nature of the situation.

When assessing the environment, consider the following:

- Facility information;
- Administrative information;
- Human resources;
- Acuity of residents' and other team members' assignments; and
- Equipment status.

PROGRESS TOWARD GOAL

SAY:

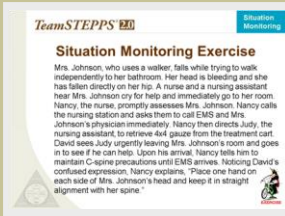
By monitoring progress toward the team's established goals, team members will be able to alert the team when strategies or the plan of care may need to be reconsidered or revised, or when additional resources are needed. When assessing progress, team members need to consider the following:

- Status of the team's residents;
- Goal of the team;
- Tasks/actions completed or that need to be completed; and
- Continued appropriateness of the plan.

Goals were established and agreed on at the team briefing. If something has changed, a huddle should be called to discuss how the plan needs to be modified.



Slide



Slide



TIME:

5 minutes



MATERIALS:

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

SAY:

Review the scenario shown here while keeping in mind how well members of this team worked together.

Mrs. Johnson, who uses a walker, falls while trying to walk independently to her bathroom. Her head is bleeding and she has fallen directly on her hip. A nurse and a nursing assistant hear Mrs. Johnson cry for help and immediately go to her room. Nancy, the nurse, promptly assesses Mrs. Johnson. Nancy calls the nursing station and asks them to call EMS and Mrs. Johnson's physician immediately. Nancy then directs Judy, the nursing assistant, to retrieve 4x4 gauze from the treatment cart. David sees Judy urgently leaving Mrs. Johnson's room and goes in to see if he can help. Upon his arrival, Nancy tells him to maintain C-spine precautions until EMS arrives. Noticing David's confused expression, Nancy explains, "Place one hand on each side of Mrs. Johnson's head and keep it in straight alignment with her spine."



DISCUSSION:

- What TeamSTEPPS tools and strategies were exhibited in this scenario?
- Identify each component of the STEP framework in this scenario. How was the STEP framework useful?

SITUATION AWARENESS IS...

Situation Monitoring

SAY:


Situation awareness is the state of knowing the conditions that affect one's work. This awareness is achieved by constantly monitoring the ever-changing situation. Situation awareness is the extent to which team members are aware of the following:

- Status of the resident;
- Status of other team members;
- Status of the environment; and
- Status of the progress toward the goal.

The health care environment is dynamic, requiring team members to continually reassess situations to update their situation awareness. What results is a sense of “knowing what’s going on around them” and the ability to support each other where needed.

A loss of situation awareness results in:

- Ambiguity;
- Confusion; and
- Decreased communication.

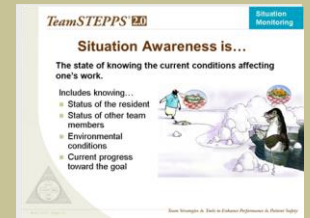
 **Instructor Note:** (Time Permitting): The question below is intended to prompt discussion prior to showing the next slide.

ASK:

- What are the factors that undermine situation awareness?

DO:

As participants respond to the question, you may wish to use a flipchart or whiteboard to list their responses and then compare them with the information you will present on the following page.

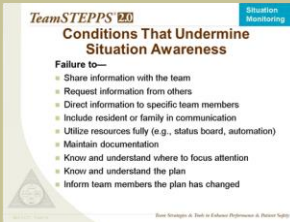


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MATERIALS:

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



Slide

SAY:

There are 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;
- Include resident or family in communication;
- Utilize resources fully (e.g., status board, automation);
- Maintain documentation that is adequate, complete, and timely;
- Know and understand where to focus attention;
- Know and understand the plan; and
- Inform team members the plan has changed.

Here are some examples of where failure can occur in the STEP process:

- *Status of the Resident:* Failure to take a resident's vital signs
- *Team:* Failure to assist a team member who you know is overloaded
- *Environment:* Failure to know where the necessary equipment is stored
- *Progress Toward Goal:* Failure to call a huddle and update the team when the plan has changed

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.” This is a continuous process requiring relevant input from all team members.

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.

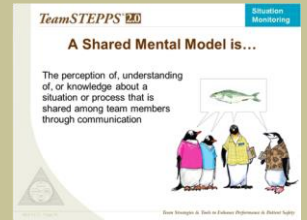
Shared mental models are sustained by:

- Huddles;
- Briefings;
- Monitoring; and
- Communication.

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

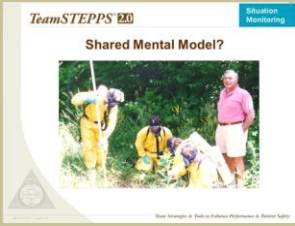
ASK:

- What is an example from your own experiences of being “on the same page” with others on your team?
- How was a shared understanding maintained?



Slide

SHARED MENTAL MODEL?



Slide

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?

WHEN AND HOW TO SHARE?

SAY:

Sharing information with other team members is necessary to establish and maintain a shared mental model. When each team member shares his or her unique information, the team will have a more accurate assessment of the situation.

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:

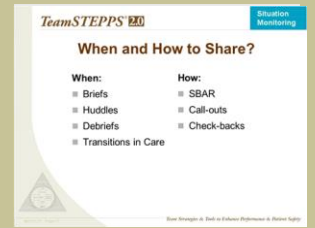
- Briefs;
- Huddles; and
- Debriefs.

It is important to establish the expectation that these team events will occur and that all team members are empowered to speak up.

Some examples of how to share information include:

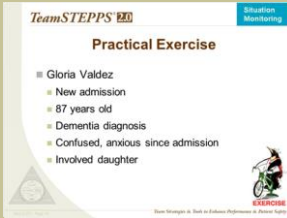
- SBAR;
- Call-outs; and
- Check-backs.

Teams should communicate often and at the right time to ensure that everyone is on the same page and has a comprehensive view of the situation.



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(OPTIONAL) PRACTICAL EXERCISE



Slide



TIME:

25 minutes



MATERIALS:

- Exercise Script
- Exercise Role Information
- Exercise Care Plan Questions to Consider



Instructor Note: Prepare for the exercise in advance so that the envelopes are prepared and copies of the “Care Plan Questions to Consider” are available for distribution.

The goal of this exercise is to explore and discuss the role and value of all team members in achieving a shared mental model.

This exercise simulates an interdisciplinary care plan meeting and demonstrates how the information that each team member brings is important to developing a thorough and thoughtful care plan. In the exercise, some of the team members are not at the meeting, so their contributions are not heard by the group. The group sees how the care plan developed differs when only some members are present and contribute in contrast to when all members of the team are heard.

The exercise may be presented to a small group with individuals playing roles of care plan team members or as a large group discussion.

To prepare for the exercise:

- 1) Review the exercise sheets for this activity:
 - Exercise Script
 - Role Information Exercise Sheet
 - Care Plan Questions To Consider Exercise Sheet
- 2) Designate one envelope for each of the eight roles:
 - Nurse
 - Activity Assistant
 - Social Worker
 - Occupational Therapist
 - Mrs. Valdez
 - Rose, Mrs. Valdez’s Daughter
 - Nursing Assistant
 - Housekeeper
- 3) Using the information provided on the “Role Information” exercise sheet, place the appropriate information for each person in the designated envelope. This is the information each person should know about Mrs. Valdez.
- 4) Make copies of the “Care Plan Questions to Consider” exercise sheet for the entire audience.

Continued...

(OPTIONAL) PRACTICAL EXERCISE (Continued)

DO (SMALL GROUP EXERCISE):

- Ask for eight volunteers. Randomly assign each volunteer an envelope with a role designation (e.g., social worker, daughter, nurse).
- Read the script provided on the Exercise Script out loud to the group.
- Display the Practical Exercise slide on Mrs. Valdez. The information displayed is “common knowledge” about Mrs. Valdez. Review the information with the group.
- Provide copies of the Care Plan Questions to Consider to the care plan team (and the audience).
- Have all eight volunteers open their envelopes.
- Participants not attending the care plan meeting can have no input. They must be quiet! The team attending the care plan meeting meets to 10 minutes to create an initial plan of care, considering the supplied questions.
- Ask each team to report its care plan about Mrs. Valdez to the group.
- Discuss the role of all team members and the relationship between communicating information, including team members, and developing a shared mental model. To not include Mrs. Valdez, her daughter, the housekeeper, and the nursing assistant in the process is to create a plan of care missing significant information.
- As a group, review the questions and care plan again with all of the available information. Share new insights and perspective related to “everyone being on the same page.”
- Ask the group:
 - What lessons were learned?
 - What can be incorporated in current care planning processes within your nursing home?

OR

DO (WHOLE GROUP EXERCISE) on the next page.

(OPTIONAL) PRACTICAL EXERCISE (Continued)

DO (WHOLE GROUP EXERCISE):

- Display the Practical Exercise slide on Mrs. Valdez. The information displayed is “common knowledge” about Mrs. Valdez. Review the information with the group.
- Ask the group to formulate an initial care plan about Mrs. Valdez. Provide copies of the Care Plan Questions to Consider.
- After the group discusses its conclusions, provide the class with information from those roles designated as being in attendance (nurse, social worker, activity assistant, occupational therapist).
- Discuss how the additional information alters the group’s initial plan of care.
- Provide information from those who were not in attendance (Mrs. Valdez, Rose, nursing assistant, housekeeper). Discuss how this additional information changes the group’s plan of care.
- Focus discussion on the relationship between the communication of information and the development of a shared mental model.

* Mrs. Valdez exercise was adapted with permission from Healthcentric Advisors.

<http://www.healthcentricadvisors.org/individualized-care.html>

WHAT DO YOU SEE?

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.



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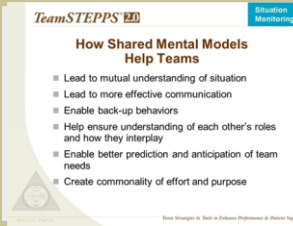


DISCUSSION:

- 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 discussing these different perspectives increase your ability to see the whole picture?

Answers:

- Left image: American Indian and Alaska Native
- Center image: Duck and rabbit
- Right image: Old lady and young woman



Slide

SAY:

Teams 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, the team will know what is supposed to happen and will have a better understanding of how the case is progressing.

Shared mental models can help teams by:

- Leading to a mutual understanding of problems, goals, team strategies, residents’ condition, and plan of care
- Leading to more effective communication to ensure that team members have the necessary information for task performance
- Enabling team members to back up and fill in for each other
- Helping team members understand each other’s roles and how they interplay
- Improving the ability of individual team members to provide mutual support by predicting and anticipating the needs of the team
- Creating commonality of effort and purpose

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

TOOLS AND STRATEGIES SUMMARY

SAY:

Situation monitoring is an integral piece of the TeamSTEPPS framework and directly links to communication, leadership, and mutual support. Engaging in effective communication techniques will enable team members to relay relevant and timely information.

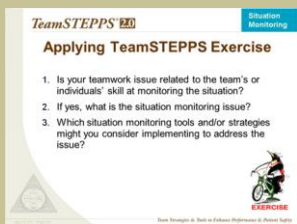
Leadership's role in continually monitoring and updating the team when changes to the plan are necessary helps to maintain a shared mental model. Likewise, when team members are aware of the situation, they are better able to support each other, either when asked or when they see a need.

The tools and strategies introduced in this module include STEP and the I'M SAFE checklist. Use of these tools will aid in awareness of the situation and development of a shared mental model, which will enable team members to anticipate, prevent, and correct potential errors in care.



Slide


EXERCISE: APPLYING TEAMSTEPS



Slide

MATERIALS:

- TeamSTEPS Implementation Worksheet

 **Instructor Note:** This slide is intended for the Master Training course only. The previous slide should be the last one shown to staff participants at your nursing home.

SAY:

Now return to your TeamSTEPS Implementation Worksheet. Think about whether any aspect of your teamwork issue is related to situation monitoring and answer the questions for this module.

Think about:

- Whether the team or individuals targeted for your TeamSTEPS implementation have an issue related to their ability to monitor the situation?
- If so, which of the Situation Monitoring tools or strategies might you use to address the issue?

DO:

Ask a few individuals to report on issues they have identified as related to Situation Monitoring and which TeamSTEPS tools or strategies they might use to address the issue in their implementation plan.