

**Situation Monitoring**

“Attention to detail is one of the most important details ...”  
—Author Unknown

**TeamSTEPPS**

AMRC National Center for Healthcare Research and Quality | PATIENT SAFETY | TEAMSTEPPS

---

---

---

---

---

---

---

---

---

---

**Situation Monitoring**

**TeamSTEPPS**

### Objectives

- Define situation monitoring
- Define cross monitoring
- Discuss the components of the STEP process
- Define situation awareness (SA), and identify conditions that undermine SA
- Discuss the importance of a shared mental model
- Discuss when to share information
- Recognize the barriers, tools, strategies, and outcomes of situation monitoring

Mod 4.06.1 Page 2 | Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

---

---

---

**Situation Monitoring**

**TeamSTEPPS**

### Scenario

A patient in the ICU has coded, and CPR is in progress. The Resuscitation Team is busy ensuring that intravenous access is available, and the ET tube is inserted correctly. Dr. Matthews, the Team Leader, is calling out orders for drugs, X-rays, and labs. Judy, a nurse at the bedside, is inserting an IV. Nancy, another nurse, is drawing up meds. Judy can tell by Nancy's expression that she didn't get the last order called out by Dr. Matthews. Judy calls out while continuing to place the IV, "Nancy, he wants the high-dose epinephrine from the vial in the top drawer."

Mod 4.06.1 Page 3 | Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

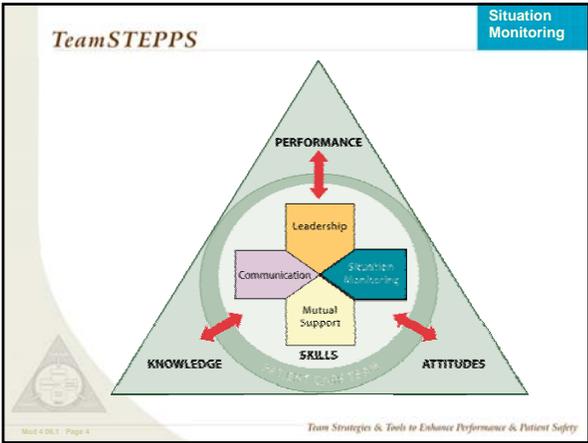
---

---

---

---

---




---

---

---

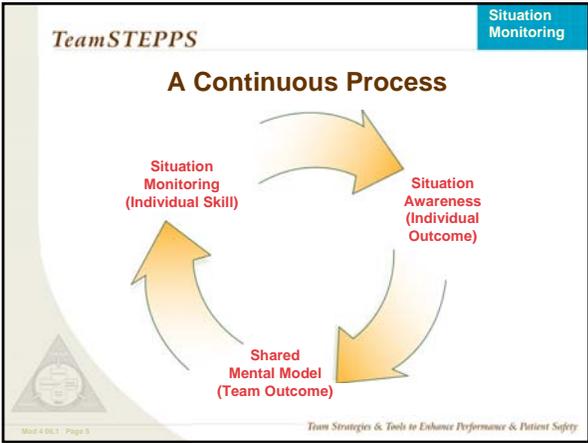
---

---

---

---

---




---

---

---

---

---

---

---

---

**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 and patient
- Includes cross monitoring

*... Remember, engage the patient whenever possible.*

---

---

---

---

---

---

---

---

TeamSTEPPS
Situation 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)*

Mod 4.06.1 Page 7
Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

---

---

---

TeamSTEPPS
Situation Monitoring

## Cross Monitoring



Mod 4.06.1 Page 8
Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

---

---

---

TeamSTEPPS
Situation Monitoring

## STEP

S

tatus of the Patient

T

eam Members

E

nvironment

P

rogress Toward Goal

Components of Situation Monitoring:

Mod 4.06.1 Page 9
Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

---

---

---

Situation Monitoring

**TeamSTEPPS**

### Status of the Patient

S

tatus of the Patient

T

eam Members

E

nvironment

P

rogress Toward Goal

- Patient History
- Vital Signs
- Medications
- Physical Exam
- Plan of Care
- Psychosocial Condition

Mod 4.06.1 Page 10 Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

---

---

---

Situation Monitoring

**TeamSTEPPS**

### Team Members

S

tatus of the Patient

T

eam Members

E

nvironment

P

rogress Toward Goal

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

Mod 4.06.1 Page 11 Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

---

---

---

Situation Monitoring

**TeamSTEPPS**

### I'M SAFE Checklist

**I** = Illness

**M** = Medication

**S** = Stress

**A** = Alcohol and Drugs

**F** = Fatigue

**E** = Eating and Elimination

*An individual team member's responsibility ...*

Mod 4.06.1 Page 12 Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

---

---

---

**TeamSTEPPS** Situation Monitoring

### Environment

- Facility Information
- Administrative Information
- Human Resources
- Triage Acuity
- Equipment

Mod 4.06.1 Page 13 Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

---

---

---

**TeamSTEPPS** Situation Monitoring

### Progress Toward Goal

- Status of team's patient(s)?
- Goal of team?
- Tasks/actions that are completed or that need to be done?
- Plan still appropriate?

Mod 4.06.1 Page 14 Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

---

---

---

**TeamSTEPPS** Situation Monitoring

### Situation Monitoring

- Recollect 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 this information with others
- Select one or two that best represent the concept of situation monitoring
- Share

**EXERCISE**

Mod 4.06.1 Page 15 Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

---

---

---

**TeamSTEPPS** Situation Monitoring

### Situation Awareness is...

The state of knowing the current conditions affecting the team's work

- Knowing the status of a particular event
- Knowing the status of the team's patients
- Understanding the operational issues affecting the team
- Maintaining mindfulness



Mod 4.06.1 Page 16 Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

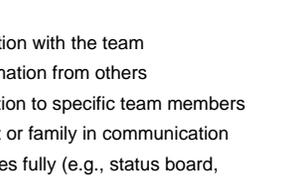
---

**TeamSTEPPS** Situation Monitoring

### Conditions that Undermine Situation Awareness (SA)

**Failure to—**

- Share information with the team
- Request information from others
- Direct information to specific team members
- Include patient or family in communication
- Utilize resources fully (e.g., status board, automation)
- Document



Mod 4.06.1 Page 17 Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

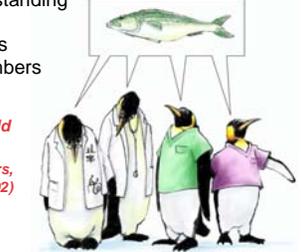
---

**TeamSTEPPS** Situation Monitoring

### A Shared Mental Model is...

The perception of, understanding of, or knowledge about a situation or process that is shared among team members through communication.

*"Teams that perform well hold shared mental models."  
(Rouse, Cannon-Bowers, and Salas 1992)*



Mod 4.06.1 Page 18 Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

---

**TeamSTEPPS** Situation Monitoring

### Shared Mental Model?



Mod 4.06.1 Page 19 Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

---

---

---

**TeamSTEPPS** Situation Monitoring

### Practical Exercise

Room #	Patient	Orders	VS
1	Jackson	EKG, O <sub>2</sub> , Cardiac Enzymes	HR 115 R 24 B/P 174/98
2	Simmons	CBC, U/A, HCG, IV	HR 132 R 22 B/P 92/76
3	Bailey	CXR, neb Rx, CBC, UA, O <sub>2</sub>	HR 120 R 32 B/P 132/86



Mod 4.06.1 Page 20 Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

---

---

---

**TeamSTEPPS** Situation Monitoring

### How Shared Mental Models Help Teams

- Help ensure that teams know what to expect, so if necessary, can regroup to get on the "same page"
- Foster communication to ensure care is synchronized
- Ensure that everyone on the team has a picture of what it should look like
- Enable team members to predict and anticipate better
- Create commonality of effort and purpose

**"Shared mental models help teams avoid errors that place patients at risk."**

Mod 4.06.1 Page 21 Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

---

---

---

TeamSTEPPS
Situation Monitoring

### What Do You See?






Mod 4.06.1 Page 22
Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

---

---

---

TeamSTEPPS
Situation Monitoring

### When to Share?

- Briefs
- Huddles
- Debriefs
- Transitions in Care

... Share information as soon as possible when a change occurs in the patient's status.

Mod 4.06.1 Page 22
Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

---

---

---

TeamSTEPPS
Situation Monitoring

### Situation Monitoring

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

Mod 4.06.1 Page 22
Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

---

---

---

**TeamSTEPPS** Situation Monitoring

### Teamwork Actions

- Conduct team exercises to increase situation monitoring skills
- Share information in a timely fashion
- Include patient and/or family in communication
- 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."  
—Katzenbach and Smith*

Mod 4.05.1 Page 25 Team Strategies & Tools to Enhance Performance & Patient Safety

---

---

---

---

---

---

---

---