TeamSTEPPS® 2.0 AU Specialty Scenarios

The specialty scenarios on the following pages can be used to customise the TeamSTEPPS scenarios, vignettes, and practical exercises. The specialty scenarios are indexed by both specialty/location and TeamSTEPPS team skill:

Specialty/Location

- > Community and Outpatients
- > Clinical Support Services
- > Med-Surg
- > Dental
- > ICU/Neonatal ICU
- > Emergency Department (ED)
- > Theatre
- > Labour and Delivery (L&D)

TeamSTEPPS Team Skills

- > Team Structure
- > Leadership
- > Situation Monitoring
- > Mutual Support
- > Communication

The matrix on the next page indicates which scenarios are appropriate for use by: a) specialty/location and b) specific tools for each TeamSTEPPS® Team Skill. Use this matrix as a roadmap to identify which scenarios are most relevant to your training audience.

Specialty Scenarios Matrix

TeamSTEPP S Skill	Community and Outpatients	Clinical Support Services (8-15)	Med-Surg (16- 24)	Dental (25-30)	ICU/Neonat al ICU(31-37)	Emergency Department (38-59)	Theatre (60-77)	Labour and Delivery (78-109)
Team Structure	(1-7) 1, 2,	13,	20, 24,		34, 35, 37,	39, 40, 41, 48, 50, 57,	67, 68,	85, 91, 95, 100, 103, 104, 105, 109,
Leadership	1			1		J.	1	
Delegation	2,	8, 10, 11, 15,	20,			40, 44, 50, 52, 54, 55, 57,	63,68,	86, 91, 93, 94, 103,
Brief	2,	14,	20, 22,	28,	34, 35, 37,	58,		
Huddle	3,		21,		34,			85, 90, 91, 103, 104, 105
Debrief		13,14,				41, 50, 58,		
Situation Mo	Ĵ	I	I			I		I
Situation Awareness	3, 4, 6,	8, 12,	18, 21,	29, 30,	31,	42, 44, 45, 47, 49, 53, 55, 56,	61, 63, 64, 67, 69, 70, 71, 72, 73, 77,	78, 79, 80, 86, 91, 92, 94, 97, 98, 99, 101, 102, 103, 105, 106, 109,
IM SAFER								
Cross Monitoring	4, 5, 7,	8, 9, 15,	22, 23,		32, 35, 36,	40, 44, 47, 50, 51, 52, 54, 55, 57, 58,	67, 68, 69, 70, 71, 72, 73,	80, 86, 90, 91, 92, 97, 98, 99, 101, 102, 106, 109,
STEP	3, 5,			30,	32,	55,	69, 73,	94, 96, 100, 109,
Mutual Supp	ort		-			-		
Task Assistance	4, 5,	8, 15,	17, 23,	27,	36, 37,	38, 40, 44, 46, 51, 52, 54, 57,	63, 64, 66, 68, 69, 72,	86, 91, 93, 94, 103,
Two Challenge Rule			19,		31, 33, 37,	43, 48, 49,	63, 77,	78, 79, 83, 84, 101, 108, 109,
Feedback	6,	13, 14,	16, 21,			41,		
Advocacy and Assertion	3, 4, 6,		16, 17, 19, 21,	26, 28, 29, 30,	31, 33, 35, 37,	38, 43, 48, 49, 50, 51, 54, 56, 57,	62, 67, 69, 70, 71, 72, 77,	78, 79, 80, 84, 86, 90, 91, 92, 94, 96, 97, 98, 99, 100, 101, 102, 104, 106, 107, 109,
Conflict Resolution	1, 3, 6,		19, 24,		33, 37,	39, 42,	67, 77,	78, 79, 83, 88, 89, 92, 103, 109,
CUS								
DESC Script								88,
Collaboratio n	1, 3, 4, 5, 7,	8, 9, 10, 11, 13, 14, 154,	17, 21, 23, 24,	27,	32, 34, 35, 36, 37,	38, 39, 40, 41, 43, 44, 46, 47, 48, 50, 51, 52, 54, 55, 57,	63, 64, 66, 67, 68, 69, 70, 71, 72, 73, 77,	78, 79, 86, 90, 91, 93,94, 96, 97, 98, 99, 101, 102, 103, 105, 106, 107, 108,
Communicat	1							
ISBAR Handover	3,	8, 10, 11,	21, 18, 19, 20, 22,	26,	34, 35, 37	50, 44, 52, 54, 57, 58, 59	60, 61, 62, 67,	95, 80, 82, 85, 86, 90, 91, 93, 94, 103, 106,
Call-Out	4, 5,		23,	25,	33, 36, 37,	55, 57,		90, 91, 94,
Check- Back	2, 3, 7,		18, 20, 21,	28,	37,	38, 43, 46,	60, 61, 62, 72,	80, 81, 83, 84, 85, 87, 90, 91, 94, 96,

Scenario: 1 Appropriate for: All Specialties Setting: General Practice

A renal failure patient presents to their GP Clinic for a follow-up review for a UTI. Jane, the nurse places a BP cuff on the patient's arm and, at that moment, detects the thrill from a dialysis fistula. As she removes the BP cuff, the doctor, seeing what she has done, reprimands her in front of the patient and the patient's friends, stating abruptly, "The patient has a fistula in that arm." Jane is embarrassed but does not speak to the doctor about the situation.

Later that day, the same doctor asks another nurse, for a report on one of his patients. The nurse proceeds with the report but is unable to recall the patient's BP or pulse. Jane, who knows this information, chooses not to share it with the doctor for fear he will reprimand her for speaking up.

Instructor Comments

Ineffective team leadership results in having team members who do not speak up or challenge when appropriate. In this case, mutual support is lacking; however, skill in conflict management could enhance team development.

Effective teams resolve conflicts constructively rather than allow interpersonal issues to persist without resolution. Failure to share information has a detrimental effect on patient care and may result in delayed diagnosis or an inadequate plan of care.

Skills Needed

Team structure: Identify barrier to team effectiveness. Mutual support.

Potential Tools

Collaboration, Conflict resolution.

Scenario: 2 Appropriate for: All Specialties Setting: Outpatient Clinic

Ed Johnson, a 41-year-old patient with a history of hypertension, is seen in the Cardiology Clinic for a follow-up after his recent admission to rule out a myocardial infarction. His vital signs are normal except for a BP of 170/110. An ECG shows normal sinus rhythm without evidence of ischemic changes.

He states that he has been having episodic chest pain since his release, so the cardiologist decides to repeat his cardiac enzymes. His CPK is 201, and a Troponin I level is pending.

Mr. Johnson's pain resolves, and he insists on going home. The Troponin I level is still pending when Mr. Johnson is discharged with instructions to call the clinic the next day if he is still having problems.

Shortly after Mr. Johnson is discharged, the Troponin I level of 0.22 (normal <0.03), indicating myocardial ischemia, is called in to the nurse in the clinic. The nurse notifies the cardiologist of the result. No attempt is made to contact Mr. Johnson.

Later, he is found unresponsive and having difficulty breathing. His friend calls 000, and when the ambulance crew arrives, they find him apnoeic and they cannot detect a pulse.

Instructor Comments

In this scenario, the nurse and the cardiologist fail to advocate for the patient. A check-back or existing process is lacking to ensure the cardiologist and nurse both understand roles and action items, and the patient is not contacted. This failure to communicate as soon as possible may have contributed to his death.

Skills Needed

Team structure: Assign roles and responsibilities. Team structure: Identify barriers to team effectiveness. Mutual support. Communication

Potential Tools

Briefs to assign roles and develop effective communication and handover processes. Prioritisation and delegation of responsibility for follow-up or action items. Check-back to confirm that an abnormal laboratory value of significance will result in follow-up action.

Scenario: 3 Appropriate for: All Specialties Setting: Outpatient Clinic

Dr. Winston has just completed her physical exam of Sue Garber. Marie, the nurse for Clinic B, asks, "Isn't Mrs. Garber a little confused today? I think she's depressed about her daughter moving away last month. I was wondering if she should be sent back to her GP for evaluation or even seen in the geriatric assessment clinic later today."

Dr. Winston replies, "Yes, I think she may be confused, but according to her record, her confusion has existed for more than a month. I think she may have something organic going on." We need to rule out a medical cause for her confusion."

"Now that you say it," Marie observes, "her daughter mentioned that her confusion was not a new phenomenon. Maybe we need to get an appointment for a formal evaluation. Would you like me to get her in, Dr. Winston?"

Dr. Winston replies, "Yes, good idea-go ahead".

Instructor Comments

Both providers use situation monitoring to assess the status of the patient, and by discussing their different perceptions of the patient's status, the team is able to use information exchange to form a shared mental model that keeps them from working in different directions. This scenario shows examples of good communication by the nurse offering information, strong leadership, and mutual support. The doctor and the nurse were able to advocate and assert for a position, yet they communicated and outlined a plan that resulted in the development of a shared mental model without conflict.

Skills Needed

Situation monitoring: Assess status of patients. Situation monitoring: Assess environment. Mutual support: Advocate and assert a position. Mutual support: Resolve conflict. Communication: Offer and seek information.

Potential Tools

Huddle, ISBAR, Check-back, Feedback, Advocacy/Assertion, Collaboration.

Scenario: 4 Appropriate for: All Specialties Setting: Clinic or Hospital

Two members of the endoscopy suite are assessing an elderly patient who has just had conscious sedation for a colonoscopy. The monitor shows SVT at a rate of 150 and a BP

of 76/48. The nurse calls out the vital signs while the anaesthetist continues to monitor the rhythm. A nurse passing by the room hears the call-out, steps in the room, and seeing the blood pressure, asks, "Would you like me to initiate a MET call?

Instructor Comments

Reinforce the point that monitoring of both the patient and team members supports the maintenance of situation awareness. In this case, it involves observing others and using clear communication.

Monitoring is a powerful agent in responding proactively to a situation.

Skills Needed

Situation monitoring: Assess status of patients. Situation monitoring: Assess environment. Mutual support: Advocate and assert a position. Communication: Offer and seek information.

Potential Tools

Call-out, Task assistance, Collaboration, Cross monitoring

Scenario: 5 Appropriate for: All Specialties Setting: Clinic or Hospital

A patient in the General Surgery Clinic has arrested and CPR is in progress. The resuscitation team is busy working on the patient to ensure that IVs are patent and the

ET tube is properly positioned. Dr. Mitchell, the team leader, is calling out orders for drugs and blood tests. Cindy, a nurse, is at the bedside inserting an IV. Lora is the nurse at the emergency trolley drawing up the meds.

Cindy can tell by Lora's expression that she did not get the last order given by Dr. Mitchell. "Lora, he wants the adrenaline from the vial in the top drawer," Cindy calls out as she continues with her IV insertion.

Instructor Comments

Using situation awareness and call-out, the ability to be aware of what was happening with the team and to use effective communication techniques helped this team function more effectively.

Skills Needed

Situation monitoring: Assess status of patient and team and the progress toward the goal. Mutual support: Provide task-related support and verbal support. Communication: Offer information.

Potential Tools

Call-out, Task assistance, Collaboration, Cross monitoring

Scenario: 6 Appropriate for: All Specialties Setting: Clinic

Ann Tayner is assigned to work in a General Medicine Outpatients Clinic. She recently attended an educational session on infection control techniques and the importance of hand washing. She noticed that the clinic doctor, Dr. Tsu, went from patient to patient without washing his hands.

Later that morning, she meets Dr. Tsu in the corridor and says to him that she attended the hand-washing seminar recently and noticed he did not always follow the procedure she had been taught. Dr. Tsu appears surprised by the comment but agreed that hand washing is important, and he will be more careful.

Instructor Comments

Point out that challenging a team member's position is an integral part of teamwork. All members of the team and support staff have a responsibility to advocate for patient safety even if it may lead to a conflict or differing positions. In this case, situation awareness was used to identify the problem and advocate for the patients.

Skills Needed

Situation awareness. Situation monitoring: Assess environment. Mutual support: Resolve conflict. Communication: Offer information.

Potential Tools

Advocacy/Assertion, Feedback.

Scenario: 7 Appropriate for: All Specialties Setting: Clinic

A patient who is in the early stages of pregnancy is given a prescription for Doxycycline. If given to a pregnant woman, this medication can have adverse effects on the fetus.

The pharmacist notifies the clinician who chooses and prescribes a different medication. The substitute medication is dispensed to the patient.

Instructor Comments

In effective communication during a check-back, the receiver accepts the message and provides feedback or confirmation. The sender verifies. In this scenario, the pharmacist (receiver) uses situation monitoring to recognise a problem and provides Feedback to the clinician (sender). This act of checking back brings to light the fact that this drug is an incorrect choice for a pregnant woman, the unfolding error is caught, and the correct action is taken. The action in this scenario is a check-back, but it serves as the first step in the Two-Challenge rule. If the clinician had not recognised the error, the pharmacist would elevate the challenge to the second and final steps.

Skills Needed

Communication. Mutual support. Situation monitoring.

Potential Tools

Check-back, Collaboration, Cross monitoring

Scenario: 8

Appropriate for: Radiology

Setting: Hospital

Two radiographers, John and Jeremy, are at the desk during a brief lull on a busy day. They notice a third radiographer Jim, racing busily between two rooms, glancing over at them as he passes.

John says to Jeremy, "Let's see if Jim can use some help." Jeremy replies, "My patient will be back in just a few minutes and I hate to get tied up. Besides, Jim doesn't usually accept help from anyone."

"Come with me," says John, "I'll show you how we can help."

John approaches Jim and says, "Jim, I see you're busy. I have about 5 minutes before my patient gets back; I can finish this leg film for you while you tend to your other patient." "Thanks," says Jim, "The leg film has been set; you just need to take the post reduction X-ray."

After Jim leaves, John says to Jeremy, "The key to offering assistance is being clear about how much time you have and what tasks you're able to pick up."

Instructor Comments

In this scenario, situation awareness and situation monitoring are combined with mutual support to result in reinforcement of a teamwork skill through peer coaching.

Skills Needed

Situation awareness. Situation monitoring: assess environment. Communication: offer information.

Potential Tools

Collaboration, Delegation, Task assistance, Cross monitoring, Handover.

Scenario: 9

Appropriate for: All Specialties, Pharmacy Specific

Setting: Hospital, Clinic, or Pharmacy

Two Pharmacy team members are filling a new prescription in the pharmacy. The script calls for ten codeine tablets. The second pharmacist checks the dosage count and finds it to be twelve tablets rather than ten. Two tablets are removed from the container, and the order is delivered.

Instructor Comments

Reinforce the point that cross monitoring supports the maintenance of situation awareness, involves observing others, and is a powerful agent in controlling errors.

Skills Needed

Situation awareness. Situation monitoring: assess environment.

Potential Tools

Cross monitoring, Collaboration

Scenario: 10

Appropriate for: All Specialties, Laboratory Specific Setting: Hospital, Clinic, or Laboratory

Ron, the hospital's lab manager, is experiencing a sudden increase in workload. He has received fifteen requests for blood tests, seven urine specimens, a throat culture, and one stool sample. Two lab specialists are assigned to him, and they are both currently working on menial tasks. Ron, realising the level of the workload, approaches the two technicians and assigns one of them to the blood tests and the other to the urine samples. When he is sure they understand their new tasks, he proceeds to work on the culture and stool sample himself.

Instructor Comments

In this scenario, Ron uses situation monitoring to recognise a change in the workload environment and to prioritise activities to manage his escalating workload. He does this by clearly delegating tasks to the available resources with a clear handover of new responsibilities.

Skills Needed

Situation awareness. Situation monitoring: Assess environment. Mutual support, Leadership.

Potential Tools

Delegation, Collaboration, Prioritisation, Handover.

Scenario: 11

Appropriate for: All Specialties, Laboratory Specific Setting: Hospital, Clinic, or Laboratory

On an exceptionally busy afternoon in the laboratory, a patient presents for a blood test at shift change. The patient is placed in a cubicle that is not visible from the central station. A lab technician places everything needed to draw the blood on a table next to the patient but then gets pulled to assist with an urgent blood transfusion request. The patient is found 45 minutes later by the manager extremely angry and irritated. Another lab technician is called and the blood work is completed.

Instructor Comments

In this scenario, the lab technician who places the patient in the cubicle does not handover the care of the patient appropriately when he gets pulled away. This failure to delegate and advocate for the patient results in a delay. The manager uses situation awareness and monitoring to recognise that a problem exists and to seek appropriate resolution.

Skills Needed

Communication. Situation monitoring. Situation awareness.

Potential Tools

Handover, Collaboration, Delegation

Scenario: 12 Appropriate for: All Specialties Setting: Hospital, Outpatients

Sue Robbins, a laboratory technician and a part time student, is assigned to the lab. Things are a bit slow now, so she decides to catch up on an assignment. After a period of time, five urgent blood requests and samples arrive. Sue begins working on the blood requests when she gets a call to complete an urgent group and cross match for a patient haemorrhaging in the emergency department. The five urgent blood requests are put on hold until the group and cross match is completed. Shift change is nearing, and Sue has not begun her shift documentation.

Instructor Comments

This scenario illustrates the potential risks of low workload. Delayed activities may result in failing to prioritise and complete existing workload.

Skills Needed

Situation awareness. Mutual support.

Potential Tools

Prioritisation

Scenario: 13

Appropriate for: All Specialties, Pharmacy specific

Setting: Hospital, Pharmacy

The team gathers in the pharmacy after dispensing medications to a trauma patient who has developed disseminated intravascular coagulation (DIC). The pharmacist initiates the review process that occurs after each major event.

A recent pharmacy graduate says, "I didn't understand why we were giving Heparin to a patient who was bleeding."

The pharmacist responds, "Administering an anticoagulant does seem contradictory and is controversial; but in some specific cases, we do this. Who would like to explain the rationale for giving Heparin for DIC?"

An explanation is provided by one of the senior pharmacists.

Instructor Comments

In this scenario, a strong team structure uses debriefs to provide feedback and to improve future performance. In this case, a transfer of knowledge has occurred through the processes of situational teaching and learning. In this case the use of debrief will improve the knowledge base of the team in a supportive environment. It also improves the quality of awareness that this technician will have in future situations involving Heparin.

Skills Needed

Team structure. Communication. Mutual support.

Potential Tools

Debrief, Collaboration, Feedback

Scenario: 14 Appropriate for: All Specialties Setting: Hospital, Pharmacy

The day shift in the Pharmacy receives a new delivery of medication and reviews the list against what was ordered. It is not noted that one of the medications received is a new generic form of a brand drug just added to the pharmacy imprest.

The Pharmacy is currently out of the brand drug, and unaware that this was a replacement drug. The day shift team does not fill some of the prescriptions that were submitted, therefore, as a result of the misunderstanding, some of the patients do not receive their medications.

When the senior pharmacist performs her check of the order, she realises the mistake and calls the day shift team together to inform them of the correction. "Let's talk about what we could have done today that would have improved the team's communication about an unexpected change in drugs."

During the change between shifts, the new shift is informed of the new drug derivative so that there is no confusion if the medication is needed

Instructor Comments

This scenario shows the lessons learned from changes to facilitate teamwork and learning.

Skills Needed

Mutual support. Team structure. Communication.

Potential Tools

Debrief, Brief, Collaboration, Feedback

Scenario: 15 Appropriate for: All Specialties Setting: Hospital

It is 0800 in the Pharmacy, and it is time to fill the daily requests of medication for the patients. Joe, a pharmacist, has an extensive list to fill before the medications are to be dispensed. Denny approaches Joe and asks for his assistance with recounting some outdated pharmacy returns. In the meantime, Marie from ED requests 50 mg of morphine to restock her medication cupboard.

Joe looks around and sees another pharmacist sitting at the front desk of the Pharmacy reading. Joe does not say anything but proceeds to meet everyone's requests. It is now 0900 and Joe has not completed filling all the daily requests. When the Pharmacy Manager comes to check on the orders, Joe tells her that he will have them ready in twenty minutes because he has been busy with other things.

Instructor Comments

This scenario illustrates work overload both because Joe does not ask for help and because the other staff member lacks situation awareness, i.e., is not aware of what is happening and the need to offer assistance. A stronger team structure with expectations for mutual support will result in a shared mental model and prevent future occurrences of this problem.

Skills Needed

Mutual support. Team structure. Situation awareness.

Potential Tools

Collaboration, Delegation, Prioritisation, Task assistance, Cross monitoring

Scenario: 16

Appropriate for: All Specialties

Setting: Clinic

Ann Tayner is assigned to work in a General Medicine Outpatients Clinic. She recently attended an educational session on infection control techniques and the importance of hand washing. She noticed that the clinic doctor; Dr. Tsu, went from patient to patient without washing his hands.

Later that morning, she meets Dr. Tsu in the corridor and says to him that she attended the hand-washing seminar recently and noticed he did not always follow the procedure she had been taught. Dr. Tsu appears surprised by the comment but agreed that hand washing is important, and he will be more careful.

Instructor Comments

Point out that challenging a team member's position is an integral part of teamwork. All members of the team and support staff have a responsibility to advocate for patient safety even if it may lead to a conflict or differing positions. In this case, situation awareness was used to identify the problem and advocate for the patients.

Skills Needed

Situation awareness. Situation monitoring: Assess environment. Mutual support: Resolve conflict. Communication: Offer information.

Potential Tools

Advocacy/Assertion, Feedback.

Scenario: 17 Appropriate for: All Specialties Setting: Hospital

Mr. Johnson, a patient admitted for an upper GI bleed, is to receive a unit of blood run over four hours. Felicity, who is caring for Mr. Johnson, is anxious to start the unit of blood since it was delivered to the unit twenty minutes earlier. Hospital protocol requires two nurses

to verify that the correct patient is receiving the correct blood product and type before administration.

At this time, however, another patient in the unit is deteriorating, and staff availability is limited. Felicity decides to hang the blood without the double check. Shortly after the blood is hung, the patient spikes a temperature and experiences shaking chills.

Felicity has inadvertently hung blood for another patient named Johnston.

Instructor Comments

Point out that this is a breach of the standard for check-back with blood administration. The safety of the standard exists in the call-out of patient name, gender and unit record number as well as blood product information with a check-back from a second nurse. With other staff diverted to the deteriorating patient the nurse could have chosen other options, such as asking for help from a different unit, rather than proceeding without the double check. This is a failure to advocate for the patient.

Skills Needed

Mutual support.

Potential Tools

Task assistance, Advocacy/Assertion, Collaboration

Scenario: 18 Appropriate for: All Specialties Setting: Hospital

Joan Morris, a 67-year-old woman, is admitted to the coronary care unit for cerebral angiography. Another patient, a 77-year-old woman with a similar name—Jane Morrison— also is admitted to the same unit for a cardiac electrophysiology procedure.

Later that day, a call from the cardiac unit requests that "patient Morrison" is transferred. The ward clerk mistakenly informs the nurse that Joan Morris is to be sent to the cardiac unit. Neither the nursing team leader nor the patient's nurse is aware of a plan for this procedure. They assume that the study has been arranged by the cardiologist despite the absence of a written order in the chart. Mrs Morris states that she is unaware of plans for the procedure and does not want to leave. The nurse informs Mrs Morris that she can refuse the procedure after she arrives in the cardiac unit.

In the unit Mrs Morris once again refuses the procedure and the cardiologist is paged, the error identified, and the patient is sent back to her room.

Instructor Comments

This is an example of ineffective communication and failure of check-back and handover. When the patient first refuses, this should result in situation monitoring and awareness to double check on the accuracy of the order. Point out that effective teams communicate essential team information, and discuss ways the communication in this situation could have been improved. Remember to include the patient in the care team.

Skills Needed

Communication.

Potential Tools Handover, Check-back, Situation Monitoring

Scenario: 19 Appropriate for: All Specialties Setting: Hospital

Peter, a 35-year-old patient with a history of multiple sclerosis and poor motor control, is admitted to a medical unit in a large metropolitan hospital.

He is complaining of severe abdominal pain and vomiting. Peter is well known to the team on the ward as having been admitted frequently for social problems. Jack, who is allocated to admit the patient, tells the ED nurse conducting the handover that he "is well aware of the aspects" of Peter's history and really does not need too much detail.

On admission to the unit, Peter is still complaining of pain, and vomiting a small amount of 'coffee ground' material. He also has diminished bowel sounds noted on physical exam. Two hours after admission, Peter is sent to radiology for a repeat abdominal X-ray. Following the X-ray and while awaiting transportation, Peter waits unattended in the corridor. During this time, he vomits and aspirates. A short time later, he has his X-ray and is returned.

Following his return, no handover is given, nor is the team informed of his return. Approximately fifteen minutes after Peter's return, Jack finds the patient with gasping respirations, and he is markedly cyanotic. Within minutes, Peter is apnoeic and asystolic. Resuscitation is unsuccessful.

Instructor Comments

Poor information transfer and lack of a handover create consequences for this patient. In this case, a chronic patient is admitted for new symptoms that are not communicated. The receiving nurse should have been challenged and told that the patient was admitted for a new illness. Also point out that handovers are commonly used within the teams on the patient care units but emphasise the importance of handovers between units and clinical support services.

Skills Needed

Communication. Mutual support.

Potential Tools

Handover, Two-Challenge rule, Conflict resolution, Assertion

Scenario: 20 Appropriate for: All Specialties Setting: Clinic

Ed Johnson, a 41-year-old patient with a history of hypertension, is seen in the Cardiology Clinic for a follow-up after his recent admission to rule out a myocardial infarction. His vital signs are normal except for a BP of 170/110. An ECG shows normal sinus rhythm without evidence of ischemic changes.

He states that he has been having episodic chest pain since his release, so the cardiologist decides to repeat his cardiac enzymes. His CPK is 201, and a Troponin I level is pending. Mr. Johnson's pain resolves, and he insists on going home. The Troponin I level is still pending when Mr. Johnson is discharged with instructions to call the clinic the next day if he is still having problems.

Shortly after Mr. Johnson is discharged, the Troponin I level of 0.22 (normal <0.03), indicating myocardial ischemia, is called in to the nurse in the clinic. The nurse notifies the cardiologist of the result. No attempt is made to contact Mr. Johnson.

Later, he is found unresponsive and having difficulty breathing. His friend calls 000, and when the ambulance crew arrives, they find him apnoeic and they cannot detect a pulse.

Instructor Comments

In this scenario, the nurse and the cardiologist fail to advocate for the patient. A check-back or existing process is lacking to ensure the cardiologist and nurse both understand roles and action items, and the patient is not contacted. This failure to communicate as soon as possible may have contributed to his death.

Skills Needed

Team structure: Assign roles and responsibilities. Team structure: Identify barriers to team effectiveness. Mutual support. Communication

Potential Tools

Briefs to assign roles and develop effective communication and handover processes.

Prioritisation and delegation of responsibility for follow-up or action items. Check-back to confirm that an abnormal laboratory value of significance will result in follow-up action.

Scenario: 21 Appropriate for: All Specialties Setting: Clinic

Dr. Winston has just completed her physical exam of Sue Garber. Marie, the nurse for Clinic B, asks, "Isn't Mrs. Garber a little confused today? I think she's depressed about her daughter moving away last month. I was wondering if she should be sent back to her GP for evaluation or even seen in the geriatric assessment clinic later today.."

Dr. Winston replies, "Yes, I think she may be confused, but according to her record, her confusion has existed for more than a month. I think she may have something organic going on. We need to rule out a medical cause for her confusion." "Now that you say it,"

Marie observes, "her daughter mentioned that her confusion was not a new phenomenon. Maybe we need to get an appointment for a formal evaluation. Would you like me to get her in, Dr. Winston?"

Dr. Winston replies, "Yes, good idea-go ahead".

Instructor Comments

Both providers use situation monitoring to assess the status of the patient, and by discussing their different perceptions of the patient's status, the team is able to use information exchange to form a shared mental model that keeps them from working in different directions. This scenario shows examples of good communication by the nurse offering information, strong leadership, and mutual support. The doctor and the nurse were able to advocate and assert for a position, yet they communicated and outlined a plan that resulted in the development of a shared mental model without conflict.

Skills Needed

Situation monitoring: Assess status of patients. Situation monitoring: Assess environment. Mutual support: Advocate and assert a position. Mutual support: Resolve conflict. Communication: Offer and seek information.

Potential Tools

Huddle, ISBAR, Check-back, Feedback, Advocacy/Assertion, Collaboration

Scenario: 22 Appropriate for: All Specialties Setting: Hospital

A 60-year-old female is admitted to the ward with a two-day history of severe left lower abdominal pain and leukocytosis. Her white count is 13,000. Two hours after admission, she begins to experience an acute exacerbation of her abdominal pain and is believed to have a diverticular perforation and acute abdomen.

At this point, her doctor decides to send her to theatre. The ward clerk and team leader are aware of the plan, but the patient's nurse is not. The patient is transported to theatre. Moments later, the theatre calls to report that the consent form has not been signed nor have any other pre-op protocols been completed.

Instructor Comments

In this scenario, a shared mental model is not developed because information regarding the patient's plan of care is not communicated to the whole team. This lack of communication and the failure to provide an accurate handover results in a delayed start for surgery and the potential for error.

Skills Needed

Communication. Situation monitoring.

Potential Tools

Handover, Brief, Cross monitoring

Scenario: 23 Appropriate for: All Specialties Setting: Hospital

Two staff from the Surgical Unit are assessing a patient who has just been transferred from ICU. The monitor shows an SVT rate of 180 and a BP of 76/48. The nurse calls out the vital signs while the doctor continues to monitor the rhythm. A nurse passing by the room hears the call-out, steps in the room, and asks "Do you want a MET call initiated?

Instructor Comments

Reinforce the point that monitoring both the patient and the team members supports the maintenance of situation awareness. In this case, it involves observing others and using clear communication. Monitoring is a powerful agent in responding proactively to a situation.

Skills Needed

Situation monitoring: Assess status of patients. Situation monitoring: Assess environment. Mutual support: Advocate and assert a position. Communication: Offer and seek information.

Potential Tools

Call-out, Task assistance, Collaboration, Cross monitoring.

Scenario: 24 Appropriate for: All Specialties Setting: Clinic

A renal failure patient presents to their GP Clinic for a follow-up review for a UTI. Jane, the nurse places a BP cuff on the patient's arm and, at that moment, detects the thrill from a dialysis fistula.

As she removes the BP cuff, the doctor, seeing what she has done, reprimands her in front of the patient and the patient's friends, stating abruptly, "The patient has a fistula in that arm." Jane is embarrassed but does not speak to the doctor about the situation.

Later that day, the same doctor asks another nurse, for a report on one of his patients. The nurse proceeds with the report but is unable to recall the patient's BP or pulse. Jane, who knows this information, chooses not to share it with the doctor for fear he will reprimand her for speaking up.

Instructor Comments

Ineffective team leadership results in having team members who do not speak up or challenge when appropriate. In this case, mutual support is lacking; however, skill in conflict management could enhance team development.

Effective teams resolve conflicts constructively rather than allow interpersonal issues to persist without resolution. Failure to share information has a detrimental effect on patient care and may result in delayed diagnosis or an inadequate plan of care.

Skills Needed

Team structure: Identify barrier to team effectiveness. Mutual support.

Potential Tools

Collaboration, Conflict resolution.

Scenario: 25 Appropriate for: All Specialties Setting: Dental Clinic

Arriving for her 1030 appointment, Mrs Smith informs the assistant of an allergic reaction to latex gloves. The assistant reassures her that latex gloves are not used in the clinic and proceeds to prepare for the exam. The dentist commences treatment with the rubber dam in place. Mrs Smith indicates her discomfort, and the procedure is stopped when she complains that her lips are swelling. She is taken to the emergency department, where she is treated for the reaction and released.

Instructor Comments

A call-out is a tactic used to communicate critical information or an emerging event. In this scenario, the assistant fails to advocate for the patient by performing a call-out of information critical to the dentist. This communication failure results in an adverse event. The allergy should have been documented on the chart and communicated to the provider as a call-out of critical information. Situation monitoring and subsequent communication resulted in the correct decision to terminate the procedure and seek necessary care.

Skills Needed

Communication. Situation monitoring.

Potential Tools

Call-out

Scenario: 26 Appropriate for: All Specialties Setting: Dental Clinic

A wheelchair-bound patient with a known history of being unstable and confused is left alone at the desk to await treatment. The patient tries to get out of his wheelchair and falls forward, striking his head on the counter, which requires follow-up care.

Instructor Comments

A handover is a method used to transfer responsibility and accountability during individual staff or team transitions. In this scenario, either of two actions should have occurred. First, when there is no health care staff member available to accept a handover, the primary staff member must remain with the patient until someone is available. When a staff member becomes available, a handover can occur, and staff can be alerted to any safety issue(s). In view of the safety issue in this case, the patient should go directly into treatment or be placed in a safe setting with a staff member.

The principle is you must always formally handover the care of a patient to another professional, or you must remain responsible for the patient until someone is available. The nurse receiving the patient must acknowledge and accept responsibility. You must always advocate for the safety of the patient.

Skills Needed

Communication. Mutual support.

Potential Tools

Handover, Advocacy/Assertion

Scenario: 27 Appropriate for: Dental Setting: Dental Clinic

The dentist on duty is called in to treat severe post-op bleeding from a third molar extraction site. The materials and instruments needed to treat the patient could not be found in the room. For about an hour, rapid blood loss continues, and the patient has to be transferred to the emergency department. The bleeding is stopped after the socket is packed.

Instructor Comments

The term "resource" refers to the people, materials, and time that can be drawn on to accomplish a task. The goal of resource management is to prevent work overload or situations that compromise patient care and/or lead to error. In this scenario, the treatment room had not been restocked. This may be due to conditions of high or low workload. In the event of high workload, team members are expected to prioritise and assist teammates to ensure that a treatment room, such as the dental room, is stocked and ready for use. Under conditions of low workload, staff members are expected to use their time constructively to ensure that all emergency equipment or areas of care are restocked and ready to go. Teams hold individuals accountable to these standards, and ultimately, it is the role of leaders to assign and hold teams accountable for the proper allocation and use of resources.

Skills Needed

Team structure. Mutual support.

Potential Tools

Prioritisation, Task assistance, Collaboration, Shared Mental Model

Scenario: 28 Appropriate for: Dental Setting: Dental Clinic

In performing an extraction, tooth #14 instead of #15 is removed. The dentist and assistant had been discussing both teeth before the procedure.

Instructor Comments

This outcome is avoidable when using correct patient identification procedures. In this scenario, if caregivers had individually assessed the status of the patient and the planned extraction, they would have possessed individual situation awareness. Had a brief or check-back occurred, they would have shared their individual situation awareness with the patient (as appropriate) and developed a shared mental model for the planned extraction.

Skills Needed

Team structure. Shared mental model. Situation awareness. Situation monitoring.

Potential Tools Brief, Check-back, Advocacy/Assertion

Scenario: 29 Appropriate for: All Specialties Setting: Dental Clinic

A dental therapist is attempting to take a periapical X-rays on a 9-year-old with mild autism. The child is holding the film as there were no film holders available and inadvertently, the child aspirates the X-ray film and immediately exhibits signs of a partially obstructed airway. Thinking quickly, the dental therapist remembers his recent Basic Life Support training and performs a finger sweep. The child vomits and expels the film.

Instructor Comments

A situational leader is any team member who has the skills to manage the situation-at-hand. In this scenario, the therapist used situation monitoring to recognise a serious situation and performed the quick actions of situational leaders to avoid patient harm.

Skills Needed Situation monitoring. Potential Tools Advocacy/Assertion

Scenario: 30 Appropriate for: All Specialties Setting: Dental Clinic

There were two dental records open for Marie Stein and Michelle Stern. When the dentist and dental therapist are asked by the receptionist which patient they are treating, both assume Marie but Michelle is seated.

Instructor Comments

The first and most basic step in the STEP technique was omitted—identifying the patient and assessing his or her status. Additionally, the third step was omitted—assessing the environment to reveal the presence of two open charts. If even one team member used the appropriate skills, the problem would have been recognised and an error prevented.

Skills Needed

Situation monitoring. Situation awareness. Mutual support.

Potential Tools

Advocacy/Assertion

Scenario: 31 Appropriate for: Neonatal ICU Setting: Hospital

At approximately 2100, the NICU nurse who is caring for a 26-week-old infant pages the on-call registrar and tells him that she is concerned about the baby's colour and that the baby is having more apnoeic and bradycardic episodes. The registrar reluctantly goes to the bedside, examines the patient, and says he believes the infant is stable.

One hour later, the nurse contacts the registrar and again expresses her concern that the baby "just doesn't look good." The registrar reassures the nurse and says he thinks the baby is fine.

Two hours later, the nurse contacts the registrar with the results of a blood gas which she had taken. The registrar is upset because he did not order a blood gas and did not feel one was necessary. The results are ph 7.32, PCO2 60, PO2 63, Base excess -10. The registrar examines the patient again and remains unconcerned.

However the nurse states "I am concerned about the baby's condition which has deteriorated over the last four hours. She has frequent apnoeic and bradycardic episodes and her blood gas results show signs of developing respiratory acidosis. I would feel more comfortable with a consultant review".

The registrar is aware that while the neonatal consultant may agree that the blood gas results are within normal parameters for this baby, he does agree to call given the concerns of the nurse.

When the neonatologist arrives, he significantly alters the existing therapy, and the baby improves.

Instructor Comments

Successful use of Two-Challenge rule and advocacy

Skills Needed

Situation monitoring. Mutual support.

Potential Tools

Two-Challenge rule, Advocacy/Assertion

Scenario: 32 Appropriate for: Neonatal ICU Setting: Hospital

A premature infant is scheduled for surgery to have his bilateral hernias repaired. Surgery is scheduled for 0700, and the infant is ordered nil orally from 0330. The infant has IV access and IV fluids are started. Following a dose of prophylactic antibiotics at 0630, the IV tissues. Before the NICU staff are able to replace the IV access, the infant is called for surgery. Staff in Operating Theatres state they will recannulate and commence IV fluids.

Unfortunately, surgery is delayed because the surgical team is involved with an emergency trauma case. At 0930,the theatre nurse caring for the infant realises that the infant is still fasting and IV fluids have not been commenced.

The infant's BSL is 1.7. The anaesthetist is notified; the infant is recannulated and given a 10% Dextrose bolus followed by IV fluids.

Instructor Comments

This shows situation awareness, situation monitoring, and patient advocacy that resulted from a breakdown in communication.

Skills Needed

Situation Monitoring: Assess status of patient, assess progress towards a goal. Mutual support.

Potential Tools

Cross monitoring, Collaboration

Scenario: 33 Appropriate for: Neonatal ICU Setting: Hospital

In this neonatal ICU, on average there are five or six patients with only three ventilators available. The SLE 5000 Ventilator is being used to give PTV (patient triggered ventilation) to a 30-week-old infant with mild respiratory distress syndrome, the second ventilator is being used to transport a baby to another hospital and the third ventilator is under repair.

After the transfer of the baby to another hospital, the nurse is asked to clean that ventilator because it is the only one available for use. Over the next two hours, the nurse goes for his tea break and is then called away to assist in the delivery suite.

On return to the NICU he notes that he is behind on his regular rounds of giving nebuliser treatments and ventilator checks which he proceeds to complete. At the end of his shift, an emergency section occurs; the baby is delivered and intubated in the delivery room.

The NICU staff are called to place the baby on the ventilator, which has not yet been cleaned.

Instructor Comments

The nurse involved fails to exercise appropriate prioritisation of tasks. The lack of the ventilator cleaning might have been recognised by other staff if they were using optimal situation awareness. In this case, a call-out or use of the Two-Challenge rule would have helped the nurse recognise the appropriate priorities.

Skills Needed

Mutual support. Situation awareness

Potential Tools

Call-out, Two-Challenge rule, Advocacy/Assertion, Conflict resolution

Scenario: 34 Appropriate for: ICU Setting: Hospital

A 44-year-old female is admitted to the ICU in acute respiratory distress with upper and lower GI bleeding. Her past medical history includes end-stage liver disease due to alcohol abuse. The patient is intubated in response to worsening respiratory distress, aggressively resuscitated, and given a blood transfusion and vasopressor drugs. Multiple medical teams are involved in the patient's care. All recommend that the patient's NFR (Not for Resuscitation) status be addressed.

Eight hours into her stay, a member of the GI consultation team places a call to the patient's mother, who lives interstate. Her mother is aware that her daughter has end-stage liver disease and states that her daughter would "not want all these things done" and should not be actively resuscitated.

Over the next six hours, however, despite this information, the patient continues to be aggressively resuscitated. At sixteen hours into her stay, the patient's condition worsens with extremely low blood pressure and the patient dies shortly after. The ICU Consultant comes to the patient's bedside and pronounces her dead. Approximately twenty hours after the patient's arrival, the patient's mother calls to ask about her condition. She is very upset at failing to be notified of her daughter's death four hours earlier.

Instructor Comments

In this scenario, a shared mental model and advocate is lacking. When new information is obtained by a team member, it should be called-out to the team by a formal handover. No leader or team actions are taken to identify and determine the NFR status. Upon that determination, the team briefs or huddles regarding the appropriate plan of care, and everyone has a shared mental model.

Skills Needed

Team structure, Mutual support, Shared mental model,

Potential Tools

Brief, Huddle, Handover, Collaboration
ICU/ Neonatal ICU

Scenario: 35

Appropriate for: ICU/Neonatal

Setting: Hospital

At 1800, near the conclusion of a busy twelve-hour shift in the Neonatal ICU, Karen, a new resident medical officer (RMO), is preparing to start an IV on a premature infant who was admitted earlier in the day. She is expecting a new admission to be arriving momentarily from Delivery Suite and has medications to order for her other patients. Karen wants to complete her tasks by the end of the shift because her registrar has criticised her for this previously.

The infant receiving the IV is experiencing poor circulation to her right hand. Karen inserts the IV into the right arm and applies a dressing. At the change of nursing shift, the oncoming nurse, Alice, notes that the infant's fingers are cool and cyanotic. She applies warm soaks to the hand to alleviate the condition, but the condition does not improve.

One hour after the IV was inserted; the registrar is informed of the problem concerning the poor circulation and orders application of GTN paste to the infant's hand.

The order is not carried out until two hours later because Alice is busy with an unstable patient. No other treatment is used. Gradually the fingers become necrotic and eventually gangrene develops and the fingers of the infant's right hand are amputated.

Instructor Comments

In this scenario, time, nurses, and information handovers are scarce. Staff do not seek assistance from team members. This may be due to criticism received previously, patient volume and acuity. Information regarding poor circulation to the hand and the state of the IV is not discussed in the handover.

The Consultant should have been summoned to view and assess the hand. Discuss how an unmanaged workload may lead to adverse outcomes for a patient. Point out other teamwork issues, such as failure to communicate essential information on the patient's condition to the doctor or senior nurse.

Skills Needed

Team structure. Situation awareness. Situation monitoring. Mutual support.

Potential Tools

Brief, Handover, Collaboration, Advocacy/Assertion, Cross monitoring

ICU/ Neonatal ICU

Scenario: 36 Appropriate for: ICU/Neonatal Setting: Hospital

A patient in the ICU has arrested and CPR is in progress. The ICU team is busy working on the patient, ensuring IV's are patent and the ET tube is properly positioned. Dr. Matthews, the team leader, is calling out orders for drugs and blood tests.

Judy, a nurse, is at the bedside inserting an IV. Marie is the nurse at the emergency trolley drawing up the medications. Judy can tell by Marie's expression that she did not get the last order that Dr. Matthews gave. "Marie, he wants the adrenaline from the vial in the top drawer," Judy calls out as she continues inserting the IV.

Instructor Comments

Using situation awareness and call-out, the ability to be aware of what was happening with the team and to provide effective communication techniques helped this team to function more effectively.

Skills Needed

Situation Monitoring: Assess status of patient and team and the progress toward the goal. Mutual support: Provide task-related support and verbal support. Communication: Offer information.

Potential Tools

Call-out, Task assistance, Collaboration, Cross monitoring

ICU/ Neonatal ICU

Scenario: 37 Appropriate for: ICU/Paediatric Setting: Hospital

At 1300, a 5-year-old boy is admitted to the Intensive Care Unit after having electrodes implanted in his skull for long-term electroencephalographic monitoring for epilepsy. At 1900, the patient is not yet hooked up to monitoring equipment when he has a seizure. An ICU doctor is called to the bedside immediately. A resident from Neurosurgery is paged and sees the patient within minutes.

Over the telephone, the doctors and two nurses also consult a neurosurgery consultant who has been involved with the patient's case earlier. The neurosurgery consultant gives

a telephone order for Lorazepam up to 4 milligrams IV. The patient receives only 1 milligram, a quarter of a milligram at a time, over 27 minutes. The child continues to seize during this time. After 39 minutes, the patient is given two doses of a stronger drug, phenytoin, but the seizures continue.

An hour and 18 minutes into the seizure, the neurosurgery consultant arrives and notices that the patient is not breathing. The patient is quickly intubated but goes into cardiac arrest at 2055 followed by unsuccessful resuscitation efforts.

In an event review conducted the next day, the nurses express confusion regarding who was in charge of the case and cannot say why the seizure protocol was not followed. The neurosurgery consultant who was consulted by telephone later says she was surprised to hear that others thought she was managing the case, and assumed that people at the bedside would take charge. Several of the doctors and nurses say they were surprised at the time that the seizure was not being managed more aggressively but thought that was because using higher drug dosages would prevent seizures for several days, which would delay gathering data and keep the electrodes in the skull longer, increasing risk.

Continued

Instructor Comments

The failures in this case include no handover from the neurosurgery team to the ICU team coupled with poor ICU team formation. The clear lack of leadership and role definition may have contributed to the patient's death because of confusion regarding which doctor had primary accountability for the patient.

Lack of knowledge about the plan of care contributed to the team failure. Situation awareness was not maintained, nor was communication enhanced with essential check-backs or call-outs. The patient's deteriorating respiratory status was not treated until the consultant arrived on the unit.

If the ICU team, on behalf of the patient, had advocated and asserted a position to the neurosurgery consultant, clearly stating that the seizure continued; and if the ICU team had used ISBAR to clearly state the condition of the patient and the need for the consultant to come to the unit, would the outcome for this patient be different? We cannot always change outcomes, but we can ensure we meet teamwork standards.

Skills Needed

Team structure. Communication. Situation monitoring. Situation awareness. Shared mental model. Mutual support, Leadership.

Potential Tools

Brief, Call-out, Check-back, Handover, Conflict resolution, Task assistance, Advocacy/Assertion, Collaboration, Two-Challenge rule

Scenario: 38 Appropriate for: All Specialties Setting: Hospital

A 22-year-old male is brought to the ED after a motor vehicle crash in which he was a front seat passenger. He was wearing a seatbelt. He has stable vital signs but a Glasgow Coma Score (GCS) of 7. The resuscitation team prepares to intubate him before sending him to CT. The doctor orders a dose of 5 mg of vecuronium to be administered.

The airway nurse repeats the order, "10 mg vecuronium."

The resuscitation nurse, hearing the check-back, replies, "No, that's incorrect. Give 5 mg vecuronium."

The airway nurse repeats the new order to which the doctor replies, "That's correct"; and the correct dose of vecuronium is administered.

Instructor Comments

The airway nurses' use of a check-back before administering the medication, and the resuscitation nurses' situation awareness and cross monitoring break an error chain that could have resulted in a medication dosage error for this patient.

Skills Needed

Situation awareness. Situation monitoring: Assess environment. Communication: Offer information.

Potential Tools

Check-back, Advocacy/Assertion, Collaboration, Task assistance

Scenario: 39 Appropriate for: All Specialties, Lab specific Setting: Hospital, Laboratory

It is 0630 and close to change of shift. The emergency department workload has been heavy all night long, and a patient requires a blood test. The nurse begins to prepare the patient's left arm but notices there are bruises and contusions on it. After assessing the condition of the left arm, the nurse begins to prepare the right arm. Roger, the Clinical Nurse, sees the left arm, assumes the nurse caused the bruising and begins to reprimand the nurse in front of the patient. The nurse is embarrassed and feels unfairly criticised but does not speak up.

The next day, Roger asks another nurse for assistance with a patient. Roger asks for a dressing pack, but the nurse does not know where the packs are. The nurse who Roger reprimanded yesterday is aware of where they are located but chooses not to tell Roger for fear he would be reprimanded for speaking up.

Instructor Comments

Ineffective team leadership results in having team members who do not speak up or challenge when appropriate. In this case, mutual support is lacking; however, skill in conflict management would enhance team development.

Effective teams resolve conflicts constructively rather than allow interpersonal issues to persist without resolution. Failure to share information has a detrimental effect on patient care and may result in delayed diagnosis or an inadequate plan of care.

Skills Needed

Team structure – identify barriers to team effectiveness. Mutual support

Potential Tools

Collaboration, conflict resolution

Scenario: 40 Appropriate for: All Specialties Setting: Hospital, Pharmacy

It is 0800 in the Pharmacy, and it is time to fill the daily requests of medication for the patients. Joe, a Pharmacist, has an extensive list to fill before the medications are to be dispensed. Denny approaches Joe and asks for his assistance with recounting some outdated pharmacy returns. In the meantime, Marie from ED requests 50 mg of morphine to restock her medication cupboard.

Joe looks around and sees another pharmacist sitting at the front desk of the Pharmacy reading. Joe does not say anything but proceeds to meet everyone's requests. It is now 0900 and Joe has not completed filling all the daily requests. When the Pharmacy Manager comes to check on the orders, Joe tells her that he will have them ready in twenty minutes because he has been busy with other things.

Instructor Comments

This scenario illustrates work overload both because Joe does not ask for help and because the other staff member lacks situation awareness, i.e., is not aware of what is happening and the need to offer assistance. A stronger team structure with expectations for mutual support will result in a shared mental model and prevent future occurrences of this problem.

Skills Needed

Mutual support. Team structure. Situation awareness.

Potential Tools

Collaboration, Delegation, Prioritisation, Task assistance, Cross monitoring

Scenario: 41 Appropriate for: All Specialties, Emergency Department Setting: Emergency Department

An emergency department consultant has just learned that three hours earlier, one of his residents had given an incorrect dose of salbutamol to an asthmatic patient resulting in the patient becoming tachycardic and hypotensive. Although not life-threatening, the error placed the patient at unnecessary risk, delayed his recovery, and tied up resources in the emergency department for a period of time.

An emergency team member, seeing an opportunity for learning, calls the team together and discusses the importance of doing check-backs before giving nebulizer treatment with a medication.

Instructor Comments

This scenario shows that even those activities that do not result in bad outcomes can be turned into learning opportunities. In this case, a debrief using mutual support can provide constructive feedback and result in a learning opportunity.

Skills Needed

Team structure. Mutual support.

Potential Tools

Debrief, Collaboration, Feedback

Scenario: 42 Appropriate for: All Specialties Setting: Hospital

A 20-year-old male presents to the Emergency Department with severe pain in the right eye. At Triage, he is loud and obnoxious and occasionally uses offensive language. The intern tells him that if he cannot act "civil," he will not be treated. This seems to calm the patient, and his vital signs are taken: Temp 36.6 BP 136/88, P 100, and RR 30.

The intern looks briefly at the patient's eye and identifies broken vessels, but the patient becomes increasingly agitated and is unable to sit still for a lengthy examination. The patient is triaged into the ambulatory area. There he is observed pacing in the hallways and complaining of significant distress. He goes back into the waiting room and asks for assistance from the Triage Nurse because "things are not moving fast enough."

Over the course of three hours, the patient becomes progressively more agitated. He begins speaking louder and with more offensive language to both fellow patients and staff. He demands to be seen by a doctor. Security is called, and the patient is escorted off the premises without being seen by a doctor.

Three hours after the patient leaves the emergency department, the triage nurse receives a report that this patient presented to another hospital in the area, where he was diagnosed with a detached retina.

Instructor Comments

The erroneous decision to have the patient escorted off of the premises stems from team member biases associated with the patient's "loud and obnoxious" behaviour. Better situation monitoring and conflict resolution should have been used in this case.

Skills Needed

Situation monitoring. Mutual support.

Potential Tools

Conflict resolution, Prioritisation

Scenario: 43 Appropriate for: All Specialties Setting: Hospital

It is late at night during a particularly hectic shift. A distressed young female having an allergic reaction arrives in the Emergency Department (ED). She has developed a rash and is beginning to wheeze. Dr. Andrew, who is new to the ED, orders promethazine 125 mg IV.

Clara, an experienced ED nurse, questions the drug dosage. Dr. Andrew repeats his order for promethazine 125 mg IV.

Clara questions the order a second time stating, "Dr. Andrew, that dose seems high. I've never administered more than 50 mg IV at a time before."

"Yes, you're right. I was confusing the dose with that for hydrocortisone," stated Dr. Andrew.

Dr. Andrew changes his order, Clara repeats the correct order back to him, and the correct dose of promethazine is administered.

Instructor Comments

The ED nurse using cross monitoring and situation awareness, correctly questions the doctor when she is concerned about the ordered dosage. When she still does not receive an adequate response to her question, she appropriately raises the question again, which results in the correction of a potential medication error.

Skills Needed

Mutual support. Communication. Situation awareness.

Potential Tools

Two-Challenge rule, Advocacy/Assertion, Collaboration, Check-back

Scenario: 44 Appropriate for: All Specialties Setting: Hospital or Clinic

Two radiographers John and Jeremy, are at the desk during a brief lull on a busy day. They notice a third radiographer Jim, racing busily between two rooms, glancing over at them as he passes.

John says to Jeremy, "Let's see if Jim can use some help."

Jeremy replies, "My patient will be back in just a few minutes and I hate to get tied up. Besides, Jim doesn't usually accept help from anyone."

"Come with me," says John, "I'll show you how we can help."

John approaches Jim and says, "Jim I see you're busy. I have about 5 minutes before my patient gets back; I can finish this leg film for you while you tend to your other patient."

"Thanks," says Jim, "The leg film has been set; you just need to take the post reduction X-ray."

After Jim leaves, John says to Jeremy, "The key to offering assistance is being clear about how much time you have and what tasks you're able to pick up."

Instructor Comments

In this scenario, situation awareness and situation monitoring are combined with mutual support to result in reinforcement of a teamwork skill through peer coaching.

Skills Needed

Situation awareness. Situation monitoring: assess environment. Communication: offer information.

Potential Tools

Collaboration, Delegation, Task assistance, Cross monitoring, Handover

Scenario: 45 Appropriate for: All Specialties, Laboratory specific Setting: Hospital, Clinic, or Laboratory

Sue Robbins, a laboratory technician and a part time student, is assigned to the lab. Things are a bit slow now, so she decides to catch up on an assignment. After a period of time, five urgent blood requests and samples arrive. Sue begins working on the blood requests when she gets a call to complete an urgent group and cross match for a patient haemorrhaging in the ED. The five urgent blood requests are put on hold until the group and cross match is completed. Shift change is nearing, and Sue has not begun her shift documentation.

Instructor Comments

This scenario illustrates the potential risks of low workload. Delayed activities may result in failing to prioritise and complete existing workload.

Skills Needed

Situation awareness. Mutual support.

Potential Tools

Prioritisation

Scenario: 46 Appropriate for: All Specialties Setting: Hospital, Radiology

During a very busy shift, Joe, a new radiographer, is taking X-rays of an Emergency patient with pain in his lower back. When it is time to return the patient to the ED, the wrong film is delivered. When the patient is examined by the doctor, it is noted that the X-rays are of a

hand and arm. The doctor calls radiology about the error and someone from the Emergency Department must now track down the original film.

Instructor Comments

This scenario illustrates how high workload in radiology may have resulted in the inadequate supervision of a new radiographer. Lack of a check-back by the radiographer results in additional work for the ED staff, who must track down the other set of films.

Skills Needed

Mutual support. Communication.

Potential Tools

Check-back, Task assistance, Collaboration

Scenario: 47 Appropriate for: All Specialties, Pharmacy specific Setting: Hospital, Clinic, or Pharmacy

Two Pharmacy team members are filling a new prescription in the pharmacy. The script calls for ten codeine tablets. The second pharmacist checks the dosage count and finds it to be twelve tablets rather than ten. Two tablets are removed from the container, and the order is delivered.

Instructor Comments

Reinforce the points that cross monitoring supports the maintenance of situation awareness, involves observing others, and is a powerful agent in controlling errors.

Skills Needed

Situation awareness. Situation monitoring: assess environment.

Potential Tools

Cross monitoring, Collaboration

Scenario: 48 Appropriate for: All Specialties Setting: Hospital

A 34-year-old male who had a ruptured appendix nine days previously presents at Triage with a complaint of back and neck pain, increasing shortness of breath and a feeling of dread. At Triage, the patient's vital signs are p temp 37.8, HR 120, RR 28 and BP 100/60. The Triage Nurse discusses the case with one of the interns who recommends a blood gas and a STAT portable chest X-ray.

The X-ray is abnormal with changes consistent but not diagnostic for a pulmonary embolism. The Registrar orders a CT-PA in the Radiology Department. The patient's tachypnoea and tachycardia are exacerbated, and the nurse is concerned about sending the patient out of the ED without a monitor. She voices her concern to the Registrar, who re-evaluates the patient and judges him to be safe to travel to Radiology without a monitor. She again voices her concerns, and the Registrar tells her to get the patient to Radiology.

The unmonitored patient becomes unresponsive in Radiology and is rushed back to the ED, where an arrest is called.

Advanced life support protocols are followed, but the patient dies.

Instructor Comments

Lacking mutual support and a method for Conflict resolution, a teamwork failure results despite the use of the Two-Challenge rule. The possibility for further patient advocacy exists in this case.

Skills Needed

Mutual support. Team structure. Shared mental model.

Potential Tools

Two-Challenge rule, Advocacy/Assertion, Collaboration

Scenario: 49 Appropriate for: All Specialties Setting: Hospital

A patient presents to Triage complaining of severe upper back pain and a ripping sensation in the chest. The patient is assessed promptly by an experienced nurse and registrar. The nurse is concerned about the patient but is unable to identify anything specifically. She decides to update the Registrar frequently; the registrar orders a PA/Lateral CXR. While the patient waits for X-ray, he continues to complain of worsening chest pain. The registrar and nurse begin to press for the X-ray to be completed, but the X-ray department is backlogged with patients. The nurse makes multiple trips to the X-ray Department but is unable to get the radiographer to advance this patient.

The patient continues to complain of pain and becomes increasingly restless. The nurse insists that he be moved ahead of others in X-ray. Within moments after the X-rays are taken, the patient becomes diaphoretic and complains of severe chest and abdominal pain. A wet reading of the X-rays shows a thoracic aneurysm and changes consistent with acute dissection.

The patient is immediately transferred to the Resuscitation Room, and the thoracic surgeon is called. The patient is resuscitated and rushed to surgery.

Instructor Comments

In this scenario, although the nurse and registrar effectively use situation awareness and situation monitoring to stay concerned enough about the patient to press for the X-ray, they fail to use the Two-Challenge rule and to advocate effectively for the patient. They are unsuccessful in developing a shared mental model with the radiographer on the urgency of the situation.

Options would have included going to the next level of authority in Radiology and to involve a consultant

Skills Needed

Situation awareness. Situation monitoring: assess status of patient and progress toward a goal. Mutual support: resolve conflict.

Potential Tools

Two-Challenge rule, Advocacy/Assertion

Scenario: 50 Appropriate for: All Specialties Setting: Hospital

At shift change on an exceptionally busy night in the Emergency Department (ED), a middleaged female is triaged with chest pain and shortness of breath. A graduate registered nurse relieving in the ED and unaware of the patient's presenting complaint is told to put the patient in the overflow area, which is not visible from the main ED, and connect the patient to a monitor. The graduate nurse then leaves the area to attend to a patient in the main bay. Forty-five minutes later, the team leader discovers the patient, who is complaining of severe chest pain and shortness of breath.

The patient is immediately transferred to the resuscitation area, where she has a cardiac arrest. Advanced Life Support protocols are initiated and the patient is resuscitated.

Electrocardiogram (ECG) findings are consistent with an acute inferior wall myocardial infarction.

Instructor Comments

Change of shift creates high workload. Incoming staff or patients create chaos and high-volume conditions where communication can be incomplete and information can be dropped. In this scenario, the person who placed the patient in the overflow area was not aware of the diagnosis and the possible consequences.

The task should not have been delegated to a staff member who was unfamiliar to the unit and protocols. The results were life threatening. If there is no choice but to delegate a task (e.g., when several critically injured patients arrive at the same time), ensure that you communicate a sense of urgency to that person. When possible, speak directly to the allocated nurse or doctor caring for the patient. Using Identify, Situation, Background, Assessment, and Recommendation (ISBAR), communicate the presenting complaint/diagnosis and intervention.

If a senior staff member is not immediately available, put the patient in your line of vision. Assign a staff member to monitor the patient but oversee the monitoring and initiate the standard plan of care. Handover the care as soon as appropriate.

Skills Needed

Team structure. Communication. Situation monitoring: Assess environment and status of team. Mutual Support.

Potential Tools

Debrief, ISBAR, Cross monitoring, Delegation, Advocacy, Collaboration.

Scenario: 51 Appropriate for: All Specialties Setting: Hospital

A 45-year-old patient lies quietly on a barouche while a new intern attempts to gain IV access. The patient's vein starts to 'roll,' and the intern becomes frustrated at his inability to complete the task. A nurse enters and observes the difficulty the intern is experiencing. She moves closer and says, "I have found that it is helpful to pull down just a little on the skin to help stabilise the vein while you insert the cannula."

The intern follows her advice and is able to successfully insert the cannula.

Instructor Comments

Growing individual skills strengthens team contributions. In this case, cross monitoring is used to recognise a problem. An established team structure allows the nurse to offer information and provide support and feedback.

Skills Needed

Situation monitoring: Assess status of team, patient, and environment. Communication. Mutual support. Team structure.

Potential Tools

Cross monitoring, Task assistance, Advocacy/Assertion, Collaboration.

Scenario: 52 Appropriate for: All Specialties Setting: Hospital or Clinic

Two nurses, Jo and Jenny, are at the desk during a brief lull on a busy day. They notice a third nurse Hannah, racing busily between two rooms, glancing over at them as she passes.

Jo says to Jenny, "Let's see if Hannah can use some help."

Jenny replies, "My patient will be back in just a few minutes and I hate to get tied up. Besides, Hannah doesn't usually accept help from anyone."

"Come with me," says Jo, "I'll show you how it's done."

Jo approaches Hannah and says, "Can I help? I can see you're busy. I have about five minutes before my patient gets back from the X-ray. I can take this blood while you start on your new admission."

"Thanks," says Hannah, "the request forms are over on the counter, it's just a CBP and electrolytes.

After Hannah leaves, Jo says to Jenny, "The key to offering assistance is being clear about how much time you have and what tasks you are able to pick up."

Instructor Comments

In this scenario, situation awareness and situation monitoring are combined with mutual support to result in reinforcement of a teamwork skill through peer coaching.

Skills Needed

Situation awareness. Situation monitoring: Assess environment. Communication: Offer information.

Potential Tools

Collaboration, Delegation, Task assistance, Cross monitoring, Handover

Scenario: 53 Appropriate for: All Specialties Setting: Hospital

Cathy a registered nurse is working in the Emergency Department this evening. Having transferred all but one patient, she takes a few moments to catch up on her nursing notes. Before transferring her final patient she goes over to talk to the nurses on the other (B) side of the department. Several minutes later, her attention is drawn to loud screaming in the Triage area, where a mother has brought in her injured and hysterical five year old child.

Cathy offers to assist the Triage nurse by bringing the child and her mother directly to one of Cathy's empty cubicles. Cathy comforts the child and then prepares the paper work to transfer her patient. At that time a code blue for B side is called over the intercom. Meanwhile, a family member of the patient waiting to be transferred approaches to complain that the patient's IV has stopped dripping and that she is anxious to move to the ward.

Instructor Comments

This scenario illustrates the potential risks of low workload. Delayed activities may result in failing to prioritise and complete existing workload.

Skills Needed

Situation awareness. Mutual support.

Potential Tools

Prioritisation.

Scenario: 54 Appropriate for: All Specialties Setting: Hospital

The Emergency Team is divided into two core teams—Blue Team and Green Team. The Blue Team has a 46-year-old male who complains of an episode of chest pain prior to arrival. An electrocardiogram (ECG) reveals an anterior myocardial infarction (AMI).

His immediate transfer to the cardiac unit is requested, but the nurse on the Blue Team is overwhelmed by the tasks that she must simultaneously accomplish. She requests assistance through the coordinating team, and a nurse on the Green Team is designated to assist. For the next fifteen minutes, the two nurses work together to care for the patient. When the immediate tasks are completed, the Green Team nurse returns to her patients.

Instructor Comments

Using a shared mental model and mutual support, any team member can temporarily provide support to another team when time and workload permit. However, team members must return to their assigned team upon completion of delegated tasks. Permanent reallocation of staff from one team to another occurs under the direction of the coordinating team.

Skills Needed

Shared mental model. Team structure. Communication. Situation monitoring: Assess environment. Mutual support.

Potential Tools

Handover, Cross monitoring, Prioritisation, Delegation, Task assistance, Advocacy/Assertion, Collaboration.

Scenario: 55 Appropriate for: All Specialties Setting: Hospital

It is 0700, and a shift to shift handover is occurring. Suddenly, ambulance communications announce a one-minute estimated time of arrival (ETA) of the retrieval helicopter with one patient. The trauma consultant is expected to commence at 0800 but has been contacted and is on his way. Both shifts initiate preparation, including getting an emergency team to the helipad. The patient arrives, and the retrieval intensive care specialist hands over a 36-year-old male sole occupant in a car whose car hit a Stobie pole.

Upon arrival in the resuscitation room, the retrieval specialist relays the patient's current situation as follows: "The patient was the driver and has suffered bilateral leg crush injuries with the lower left leg amputated by the force of the collision. Current vitals are Temp 35.5, BP 90/60, P 126, R 28. The upper left leg is continuing to bleed and now has pressure dressings applied. The patient has contusions across his lower abdomen, and it is distended."

Walking past the Resuscitation Room, John a senior registered nurse notices that the team leader and the entire emergency team are focused on the patient's legs. They seem overwhelmed by the extent of the patient's leg injuries. Quickly, John throws a sheet over the patient's legs and asks loudly, "ABCs people, what's the patient's respiratory status? This patient needs a STAT chest X-ray (CXR) and CT of the spine".

The team leader refocuses and says, "You're right; let's get busy."

Instructor Comments

In this scenario, John emerges as the situational leader when the team becomes temporarily immobilised by the sight of the patient's injuries. John should continue to provide leadership until it becomes clear that the trauma consultant has arrived and is ready to assume charge of the case.

Skills Needed

Situation awareness. Situation monitoring: Assess status of patient, status of team, and progress toward a goal. Communication. Mutual support. Team structure. Leadership.

Potential Tools

Call-out, Cross monitoring, Prioritisation, Delegation, Collaboration.

Scenario: 56 Appropriate for: All Specialties Setting: Hospital

An injured 5-year-old boy and his mother present to the hospital. The mother states that the child was injured after falling off his bike and she is very concerned that he is seriously injured. The child has an actively haemorrhaging eight centimetre laceration on his right

lower leg but no other obvious signs of injury. Vital signs at Triage are BP 112/56, HR 106, RR 22, and T 36.5. Leg X-rays are completed and, after extensive cleaning and exploration, the laceration is repaired. The doctor remains concerned about possible infection and asks that the boy return in twelve hours.

While the doctor is explaining the wound care with the mother, the child complains of nausea and vomits. The doctor asks the child about pain, but the child quickly denies any and insists on "going home now."

The mother in a worried voice, states that her son never vomits. The doctor assures her that children often vomit after being so upset and tells her to come back if the child has more problems.

The nurse prepares to discharge the patient while the doctor goes off to see another patient. The nurse takes the child's vital signs and repeats them: BP 100/78, HR 128, and RR 28.

The nurse tells the child's mother that her son is "still just a little uptight and nervous from being here."

The nurse does not report the child's vital signs, believing that it is just as the doctor said—a reaction from being in the Emergency Department (ED). The child is discharged, but he returns two hours later pale, weak, vomiting, and complaining of left shoulder pain. A CT scan reveals a splenic laceration.

Instructor Comments

The nurse fails to advocate for the patient by informing the doctor of the child's vital signs prior to discharge.

Skills Needed

Communication. Mutual support. Situation monitoring.

Potential Tools

Advocacy.

Scenario: 57 Appropriate for: Neonatal ICU/ ED Setting: Hospital

The on call registrar is sitting in the tea room talking with a senior registrar when both of their arrest pagers go off. They run to the Emergency Department resuscitation room. The senior registrar arrives first and is receiving information about the patient while assessing the patient. The on-call registrar then reaches the room and without examining the patient or receiving a handover, begins calling out orders to the resuscitation team.

The registrars give contradictory orders, and the resuscitation team becomes confused about whose orders they should follow. The registrars begin to argue because each feels his plan of action is correct. Critical orders are not carried out because no one knows who is in charge. Ultimately, the on-call paediatrician arrives and takes over the arrest.

Instructor Comments

The case represents teamwork failure, a missing shared mental model, poor communications, and failure of Conflict resolution.

Skills Needed

Team structure. Communication. Mutual support

Potential Tools

Call-out, Handover, Cross monitoring, Delegation, Collaboration, Advocacy/Assertion, Task assistance

Scenario: 58 Appropriate for: All Specialties Setting: Hospital

A 20-year-old female presents to the ED with a displaced right ankle fracture. Two hours after admission, the staff in ED are still unable to achieve a satisfactory reduction of the ankle fracture. At this point, the patient's doctor decides to send her to theatre for reduction under anaesthesia.

The ward clerk is aware of the plan, but the patient's nurse is not. The patient is transported to theatre without adequate paperwork. Moments later, theatre calls to report that the patient has no signed consent form nor have any other pre-op forms been completed.

Instructor Comments

In this scenario, a shared mental model is not developed because information regarding the patient's plan of care is not communicated to the whole team. This lack of communication and the inability to provide an accurate handover results in a delayed start for surgery and the potential for error.

Skills Needed

Communication. Situation monitoring.

Potential Tools

Handover, Brief, Debrief, Cross monitoring

Scenario: 59 Appropriate for: All Specialties Setting: Hospital

At 1000, a 45-year-old, Vietnamese-speaking male with hypoglycemia is admitted to the Emergency Department. At 1200, the patient's doctor notes a blood sugar level of 1.8. He writes an order for an ampoule of 50% dextrose stat and a CXR. He does not mention this to the nurse and hands the chart to the ED clerk. The afternoon nurse comes on just as the patient leaves for X-ray.

Ten minutes later, X-ray calls to say they will not X-ray him because he does not have a wristband on, and he does not speak English. The nurse goes to X-ray and cannot positively identify the patient, so she calls the interpreting service for a Vietnamese interpreter. The interpreter states that the patient is confused; the nurse returns the patient to his room

and checks the chart. She finds the order for 50% dextrose, which has not been given, and administers the medication immediately. The patient recovers and becomes alert and oriented.

Instructor Comments

In this scenario, the doctor does not tell the nursing staff about the patient's low blood sugar level and subsequent new orders. The opportunity to communicate information and form a plan that would develop a shared mental model is missed. Therefore, this information is not part of the information handover to the nurse. As a result of the inadequate exchange of communication and handover, the patient is placed at risk and care is delayed. In X-ray, the nurse used effective situation awareness and situation monitoring to identify a problem. She then prioritises her actions to check the chart and identify necessary actions to implement.

Skills Needed

Shared mental model. Communication.

Potential Tools Handover, Prioritisation

Scenario: 60

Appropriate for: All Specialties

Setting: Hospital

A 63-year-old woman is undergoing cataract surgery. The surgeon calls for the lens, and the scout nurse, just returning from lunch, presents what he thinks is the correct lens. Without looking at the small count sheet, the surgeon asks the nurse to open the lens container.

The lens he inserts turns out to be the lens intended for the next patient on the list. This error is discovered by the scout immediately after the lens is inserted, and he promptly informs the surgeon.

Instructor Comments

This scenario demonstrates the potential results of failing to conduct a handover and check back. In this case, the nurse returning from lunch should have received a handover and a check-back on the accuracy of the lens.

Skills Needed

Communication.

Potential Tools

Handover, Check-back

Scenario: 61 Appropriate for: All Specialties Setting: Hospital

Frank Smith, a 65-year-old, is scheduled for a major surgical procedure at 1230 the next day. Helen, the theatre manager, identifies a free operating space on the theatre list for the following day and moves Mr. Smith's case from 1230 to 0730 but does not check with the office of the surgeon, Dr. West.

The next morning, Dr. West is paged, and the patient is brought into the room.

Dr. West then calls from a different hospital, "I'm in theatre across town all morning, that's why this case is not scheduled to start until the afternoon."

The patient is taken back to his room and is told what has happened.

Instructor Comments

The information that should have been passed along to everyone in the unit was that the surgeon would not be able to operate until later that day. The Theatre Manager should have checked with the theatre team, including surgeon and anaesthetist, before changing the scheduled time. The failure in information exchange was not caught because there was no check-back performed before bringing the patient into the room.

Skills Needed

Communication. Situation awareness.

Potential Tools

Handover, Check-back

Scenario: 62 Appropriate for: All Specialties Setting: Hospital

A 35-year-old male is scheduled for a right ankle arthroscopy. The patient arrives in the holding bay about two hours prior to surgery. The perioperative nurse performs patient verification, including identity verification with the chart, ID band, and verbally with the patient.

The procedure and site are verified verbally with the patient, the consent form, medical orders, history and physical examination. Three previous ankle surgeries were performed that day on the left ankles of other patients, but this procedure is scheduled for the right ankle.

An emergency arises that must be addressed immediately, therefore postponing the ankle arthroscopy. Because of the delay, the surgeon leaves the operating room understanding he will be contacted when the emergency surgery is complete and the ankle arthroscopy can proceed.

The emergency turns out not to be an emergency; plans are made to proceed immediately with the orthopaedic case. The patient is taken to the operating room and induced by an anaesthetist.

The scout nurse places a tourniquet on the left thigh. The staff and orthopaedic surgeons arrive and perform a final adjustment of the tourniquet and patient positioning, and inject the ankle with a local anaesthetic. An arthroscopy of the left ankle is performed, and the patient is sent to recovery.

Upon awakening, the patient asks why surgery was performed on his left ankle when he had consented to surgery on his right ankle. The surgeon is notified. Surgery for the correct ankle is performed at a later date.

Instructor Comments

The lack of check-back or cross-check by the scout nurse and surgeon leads to a procedure being performed on the wrong ankle. Each provider has an inherent role for patient advocacy and an obligation to perform redundant checks whenever laterality is a potential issue.

Skills Needed

Communication. Mutual support.

Potential Tools

Check-back, Handover, Advocacy/Assertion

Scenario: 63

Appropriate for: All Specialties

Setting: Hospital

A theatre nurse, scout, anaesthetic nurse and anaesthetist are providing care for elective surgical cases. The team is collaborating with the surgeon on ways to minimise between-case delays.

The next patient is in the pre-operative area and has been seen by the anaesthetic nurse. The anaesthetist knows he has to complete the present case, deliver the patient to the recovery, and process the next patient, including starting the intravenous (IV) therapy.

The anaesthetic nurse asks the anaesthetist if the scout nurse can site the IV. The anaesthetist initially declines, but the nurse suggests that the scout nurse is becoming proficient in IV placement and is looking for opportunities to perfect the skill. The anaesthetist delegates the cannulation of the next patient to the scout while he takes the current patient to the recovery.

Instructor Comments

This case represents an example of mutual support by using a Two-Challenge rule to improve collaboration by effective delegation. By not accepting the initial refusal, the nurse convinces the doctor to delegate the less critical task, thus allowing the doctor to use his time for the most critical task. The outcome is improvement in overall efficiency, and development of a shared mental model.

Skills Needed

Mutual support. Situation awareness. Shared mental model.

Potential Tools

Two-Challenge rule, Collaboration, Prioritisation, Delegation, Task assistance

Scenario: 64 Appropriate for: Theatre Setting: Hospital

Three C-Arm machines are dedicated to the theatre. Two are being used for orthopaedic cases, and one for a cholecystectomy with an intraoperative cholangiogram.

An urgent neurological case is scheduled and shortly after that a paediatric emergency, both requiring a C-Arm. The addition of these two cases results in the need for five C-Arms at once.

The theatre manager contacts the orthopaedic and pain management clinics to ask whether their machines are currently in use, and if not, whether they could be used in the theatre.

Neither site is currently using its C-Arm, and the machines are moved to the theatre. The two additional cases proceed in a timely manner.

Instructor Comments

This scenario illustrates the potential risks of not managing your resources properly. In this case, some equipment has high usage demands and becomes scarce throughout the unit. Through situation awareness and providing mutual support, the nurse is able to prioritise resources and resolve potential conflict.

Skills Needed

Mutual support. Situation awareness.

Potential Tools

Prioritisation, Task assistance, Collaboration

Scenario: 65 Appropriate for: All specialties Setting: Hospital

After the elective theatre scheduled is completed, the instrument nurse, Frank, receives three instrument sets from a company representative who states, "These need to be processed tonight for the first case in room 18 tomorrow." "I'll take care of it," states Frank. Frank puts the sets aside and returns to his routine administrative duties. At 2200, two emergency trauma cases arrive.

Frank and the rest of the team go into action and finish both cases at 0715. A core team member from room 18 calls for the specialty gear and is told that it has not been processed and is unsterile. The case is delayed for thirty minutes while the equipment is properly processed.

Instructor Comments

This scenario demonstrates how managing resources can prevent inefficiency or potential injury. Had Frank promptly prepared the instruments when they were received, the case requiring the special instruments would not have been delayed.

Skills Needed

Mutual support.

Potential Tools

Prioritisation

Scenario: 66 Appropriate for: Theatre Setting: Hospital

A 30-year-old depressed, chronic pain patient jumps from the hospital roof and sustains severe and multiple life-threatening injuries. She is briefly resuscitated in the Emergency Department.

The trauma surgeons request access to the theatre for immediate laparotomy and other repairs. The emergency theatre team begins additional line placement for fluid and blood administration but is quickly overwhelmed with high acuity tasks and complex problem solving.

The team asks for additional anaesthesia personnel to assist. After the liver laceration is packed off, the orthopaedic team applies an external fixator to the pelvis; and a second team assists with simultaneous lower extremity long bone stabilisation to expedite the surgery.

Instructor Comments

This scenario demonstrates how to use mutual support to manage resources and create a shared mental model.

Skills Needed

Mutual support. Shared mental model.

Potential Tools

Prioritisation, Task assistance, Collaboration.

Theatre/ICU

Scenario: 67 Appropriate for: All Specialties Setting: Hospital

A 24-year-old female with a history of asthma is admitted to the Intensive Care Unit (ICU) with acute bronchospasm. The ICU consultant intubates the patient and gives orders for bronchodilators, steroids, and ventilation with 100-percent oxygen. Multiple staff are around the bed, including the respiratory consultant and resident, two ICU nurses, a ward clerk and the ICU registrar, who is ventilating the patient.

The patient appears extremely anxious and has a pulse of 140–150 beats/minute and a pulse oxygen saturation of 90–92 percent. An anaesthetist, who is delivering another postoperative patient to the ICU, offers to help and assesses the situation. The patient's oxygen saturation progressively decreases to < 80 percent, and the tachycardia is replaced by severe bradycardia < 40 beats/minute. The anaesthetist moves to the head of the bed and performs a laryngoscopy. She sees that the endotracheal tube is actually in the oesophagus.

She immediately pulls out the tube, successfully intubates the patient, and then rapidly gives orders for intravenous adrenaline and ventilation with 100-percent oxygen. The anaesthetist then orders one nurse to handle crowd control, one ICU nurse to record, and one ICU nurse for all medication administration. The anaesthetist warns the team to anticipate, but not be concerned about, an upcoming tachycardia that will rapidly resolve. The patient's pulse oxygen saturation rapidly returns to the high 90s, and the ventilations becomes progressively easier.

Instructor Comments

In this scenario, someone emerges as the situational leader when, through situation awareness, she realises a potential problem exists, advocates to correct the problem, communicates to develop a shared mental model, and performs a handover for specific duties.

Skills Needed

Team structure. Communication. Situation monitoring. Situation awareness. Shared mental model. Mutual support. Leadership.

Potential Tools

Handover, Cross monitoring, Prioritisation, Advocacy/Assertion, Collaboration, Conflict resolution

Scenario: 68 Appropriate for: Theatre Setting: Hospital

A 36-year-old male undergoes induction in preparation for a laparoscopic cholecystectomy. The anaesthetic registrar has tried to intubate the patient three times. The patient develops laryngospasm and is ventilated by hand-bag. He is retaining oxygen saturations > 94 percent. The anaesthetic registrar has called for the fibreoptic intubation set and is preparing to perform fibreoptic intubation.

The surgeon and anaesthetic register request an anaesthetic consultant to assist. The consultant walks into the room and is asked by the team to "stand-by" while they perform fibreoptic intubation. The consultant is concerned about the continuing upper airway obstruction and requests that she take over the airway and ventilate the patient by hand. Able to confirm that air movement is adequate, although difficult, she orders 100 mg suxamethonium. The laryngospasm subsides, and the patient becomes easier to ventilate. The anaesthetist assesses that the head/neck could be placed in a more ideal position that might facilitate successful intubation and requests assistance in repositioning.

After repositioning, she orders 1.2 mg atrophine and a repeat does of 100mg suxamethonium. She then performs the laryngoscopy while instructing the anaesthetic nurse to provide firm cricoid pressure and having the anaesthesic registrar assist withhead extension. The patient is successfully intubated.

Instructor Comments

In this scenario, the anaesthetic consultant uses situation awareness and teamwork and emerges as the situational leader. She uses communication to develop a team structure and shared mental model. She also provides mutual support and prioritises and delegates actions for task assistance.

Skills Needed

Team structure. Communication. Situation monitoring. Situation awareness. Shared mental model. Mutual support. Leadership.

Potential Tools

Cross monitoring, Prioritisation, Delegation, Task assistance, Collaboration
Scenario: 69 Appropriate for: All Specialties Setting: Hospital

While waiting for a surgical patient to awaken from general surgery, the staff anaesthetist and her resident tend to the patient and discuss different concepts related to anaesthesia. The patient seems to be taking longer than expected to awaken. The scout nurse glances over at the anaesthesia machine and notices that the nitrous oxide is still on and informs the anaesthetist.

Instructor Comments

This scenario demonstrates how monitoring the environment can help patient care. This scenario uses situation awareness, shared mental model, and teamwork.

Skills Needed

Communication. Situation monitoring: assess status of patient. Situation awareness. Mutual support.

Potential Tools

Task assistance, Advocacy/Assertion, Collaboration, Cross monitoring

Scenario: 70 Appropriate for: Theatre Setting: Hospital

A 56-year-old obese female undergoes general anaesthesia induction, and the incision is made for planned complex vertebral surgery. Antibiotics do not accompany the patient to the theatre, orders are not in the chart, and the surgeon does not request antibiotics.

The anaesthetist, realising that antibiotics are normally given in these cases, asks the nurse to check whether any were given on the ward before transfer to theatre. On finding no antibiotics were given, the anaesthetist asks the surgeon whether antibiotics are indicated.

The surgeon does want antibiotic prophylaxis, which is promptly given.

Instructor Comments

This scenario provides an example of advocacy/assertion for the patient using situation awareness. It also demonstrates the value of a consistent team that picks up variation from routine

Skills Needed

Communication. Situation awareness. Mutual support.

Potential Tools

Advocacy/Assertion, Collaboration, Cross monitoring.

Scenario: 71 Appropriate for: Theatre Setting: Hospital

The patient is in theatre, prepped and draped for a left knee arthroscopy. The anaesthetic registrar is reviewing the preoperative section of the anaesthesia record, which indicates the proposed surgery is for a right knee arthroscopy.

He asks the surgeon to verify whether the surgery is on the left knee because his record states right knee. The scout nurse checks the patient's chart, and the surgeon re-examines the X-rays.

The surgery should be performed on the right knee. The drapes are removed, the correct extremity (right) is prepped and draped, and the surgery completed.

Instructor Comments

This scenario demonstrates how situation awareness and patient monitoring can be used successfully to advocate for the patient.

Skills Needed

Communication. Situation awareness. Mutual support.

Potential Tools

Advocacy/Assertion, Collaboration, Cross monitoring.

Scenario: 72 Appropriate for: Theatre Setting: Hospital

It is a busy day in theatre. John is the perioperative scout nurse working with Larissa as the scrub nurse for a patient who requires an AV vascular graft for dialysis. John is providing supplies and assisting the surgeon. The vascular surgeon requests a gortex graft. John opens the correct size but does not notice a notation on the outside of the package that it is now past the expiration date to safely use the graft.

Larissa is assisting the vascular surgeon and does not give her full attention to the package when shown by John. The expired graft is opened on the back table and used. It is not until the next day that the mistake is discovered.

Instructor Comments

This scenario demonstrates how cross monitoring team members can help prevent error, damage, or injury. Unfortunately, John's team members fail to monitor his performance or check-back, which could have prevented the error with the graft.

Skills Needed

Communication. Situation awareness.

Potential Tools

Check-back, Advocacy/Assertion, Collaboration, Task assistance, Cross monitoring

Scenario: 73 Appropriate for: Theatre Setting: Hospital

During a particularly long case, both the anaesthetist and the scout nurse notice blood loss increasing throughout the case from 150 cc to 800 cc in a half-hour period.

The surgeon is made aware and finds a bleeding point on the edge of the operative field. The anaesthetist instructs the circulating nurse to contact blood transfusion for a group and cross-match and bring the blood to theatre.

Instructor Comments

This scenario provides an example of effective monitoring of the patient's status. It demonstrates how team members can use monitoring to assess problems and develop a plan of care. The surgeon was focused on the centre of the surgical field and simply needed to be made aware of the "bigger picture".

Skills Needed

Communication. Situation monitoring: assess status of patient. Situation awareness. Shared mental model. Mutual support.

Potential Tools

Cross monitoring, Collaboration

Scenario: 74 Appropriate for: Theatre Setting: Hospital

A spinal surgeon spends ten minutes properly positioning his patient on a complex surgical table when a new nurse asks why this takes so long. The anaesthetist and surgeon take a few minutes to explain the need to avoid pressure on the eyes, which might cause blindness, and how the ulnar nerves and brachial plexus can be damaged by pressure or incorrect arm positioning.

Further, the external genitalia, bony prominences, and face are at risk.

The surgeon asks whether that helped to understand the importance of positioning for the patient, and the nurse confirms her understanding.

Instructor Comments Teaching Example Skills Needed N.A. Potential Tools N.A.

Scenario: 75 Appropriate for: Theatre Setting: Hospital

A 64-year-old male with an open ankle fracture and probable recent myocardial infarction presents to theatre for a debridement and lavage. A radial artery is difficult to palpate, and an arterial catheterisation cannot be performed despite attempts by the registrar. A consultant shows the resident how to perform a brachial arterial catheterisation using a single needle/wire/catheter technique and then replacing with a longer catheter via a modified Seldinger technique.

Instructor Comments

Teaching Example Skills Needed N.A. Potential Tools N.A.

Scenario: 76 Appropriate for: Theatre Setting: Hospital

An experienced scout nurse is observing an inexperienced scrub struggle with passing loaded ties to the surgeon, with frustration growing for the surgeon and scrub.

At a point during the surgery when the scout is able to converse with the scrub, she explains that he should "pass the ties with the short end near the surgeon's thumb. This technique allows the surgeon not to have to reposition the suture before passing it around the clamp, resulting in a more expeditious flow during surgery."

The novice passes the tie as described and the surgery progresses smoothly.

Instructor Comments Teamwork and Coaching example Skills Needed N.A. Potential Tools N.A.

Scenario: 77 Appropriate for: Theatre Setting: Hospital

During a long, difficult craniotomy, the neurosurgeon, Dr. Gluck, is unaware that he contaminated his right glove while adjusting the microscope. A new scout nurse, Andrew, notices the break in sterile technique.

He states, "Dr. Gluck, let's change out your glove before you contaminate the instruments."

Dr. Gluck responds, "You're wrong. Don't bother me I am busy"

Andrew reiterates the need to change gloves by pointing out a hole in the microscope drape to the surgeon.

"Yes, you're right. I didn't see the hole in the drape," Dr. Gluck responds. He changes his glove, and the contaminated instruments are removed and replaced.

Instructor Comments

This scenario shows successful use of situation awareness and the Two-Challenge rule.

Skills Needed

Communication. Shared mental model. Situation awareness. Situation monitoring: assess environment. Mutual support.

Potential Tools

Conflict resolution, Two-Challenge rule, Advocacy/Assertion, Collaboration

Scenario: 78 Appropriate for: Labour and Delivery Setting: Hospital

Sue Jones a 28-year-old G1 P0 at term is undergoing an induction of labour for elevated blood pressure. The patient is receiving a syntocinon infusion and is experiencing contractions every three minutes. The fetal heart rate has a baseline of 150 bpm with recurrent variable decelerations. Her cervix is dilated 4-5 cm, and it has not changed in more than an hour. The obstetrician asks the midwife to increase the rate of the infusion. The midwife expresses her concerns about the variable decelerations and states there are adequate contractions. The obstetrician says, "The baby is OK; increase the synt."The midwife is uncomfortable with the request. She again expresses her concerns regarding the variable decelerations but does acknowledge that the patient may need stronger contractions. She informs the obstetrician that if she could assess the baby's well-being

through fetal scalp electrode (FSE) she would feel more comfortable increasing the infusion.

The obstetrician agrees to this plan and places the FSE. The midwife slowly increases the syntocinon infusion and the patient has a vaginal delivery.

Instructor Comments

In this scenario, the midwife expresses her concern about the doctor's request and offers an alternative after using the Two-Challenge rule. A favourable outcome ensues because she advocates for the patient.

Skills Needed

Communication. Situation monitoring: assess status of patient. Situation awareness.

Potential Tools

Conflict resolution, Two-Challenge rule, Advocacy/Assertion, Collaboration

Scenario: 79 Appropriate for: Labour and Delivery Setting: Hospital

Sally Rodgers, is a 25-year-old primip in labour at term who is 3 cm dilated. This is a change from 2 cm over the previous 90 minutes. Sally is having frequent, strong to palpation contractions that are extremely uncomfortable. She is trembling, complaining of nausea, and begging her midwife for pain relief. The midwife believes epidural anaesthesia would be appropriate and informs the obstetrician who states he wants the patient to be dilated 4–5 cm before she receives the epidural.

The midwife reiterates to the obstetrician that her assessment is that the patient is in active labour. Although Sally's cervix has not demonstrated active labour yet, her midwife believes the pain relief and relaxation resulting from an epidural would be beneficial for the patient. The obstetrician agrees to the epidural insertion.

The patient is fully dilated and begins pushing three hours after the epidural is inserted.

Instructor Comments

In this scenario, the midwife uses the Two-Challenge rule to advocate for a position different from that of the doctor. She assertively provides information received through situation monitoring that supports her assessment that the patient should receive pain medication.

Skills Needed

Communication. Situation monitoring: assess status of patient. Situation awareness.

Potential Tools

Conflict resolution, Two-Challenge rule, Advocacy/Assertion, Collaboration

Scenario: 80 Appropriate for: Labour and Delivery Setting: Hospital

Thuy Nguyen, a 36-year-old Vietnamese speaking G1 P0 with an in vitro fertilization (IVF) pregnancy at 27 weeks gestation is admitted to delivery suite at 0200 from the antenatal unit with preterm labour. She is started on nifedipine, and the contractions stop. Her vaginal exam at this time shows she is dilated 1 cm. The patient is transferred back to the antenatal unit at 0800.

At 0915, the midwife from the antenatal unit calls the resident medical officer (RMO) to come and see the patient because she is uncomfortable. The resident examines the patient and finds her to be dilated 3 cm. The obstetrician is called, and the decision is made to transfer her back to delivery suite and perform a caesarean section (c/s). On arrival to delivery suite, the patient is brought to the recovery room, and the obstetrician tells the senior midwife

that it is not an emergency section and they can wait for theatre B to be available.

An interpreter is requested. A registrar who speaks Vietnamese happens to be on delivery suite seeing one of her patients. She is asked to act as interpreter and, because of the language barrier, is asked to perform an ultrasound and a vaginal exam on the patient.

Unexpectedly she finds the patient to be 4–5 cm dilated and requiring a stat section. She tells the midwife that they must go back to theatre right away, but she does not call the consultant. The midwife states that they are waiting for the patient's husband to arrive and does not call the consultant. The urgency of the situation is finally communicated to the appropriate staff, and an emergency section is performed.

The patient is examined in the theatre and is dilated 7 cm. It is a very difficult delivery requiring assistance to pushup vaginally. Seven minutes pass between uterine incision and the delivery of the baby. The baby dies from ventricular haemorrhage caused by trauma.

Instructor Comments

In this scenario, there is a barrier to communication related to language and multiple providers. Checkbacks and handovers are not performed, and opportunities for advocacy/assertion are missed.

Skills Needed

Communication. Situation monitoring. Situation awareness.

Potential Tools

Handover, Check-back, Cross monitoring, Advocacy/Assertion

Scenario: 81 Appropriate for: All Specialties Setting: Hospital

Midwife 1 : "I need John Smith to check a CTG in room 2." Midwife 2: "You need Dr. Smith to check a CTG in room 2?" Midwife 1: "Yes." Doctor: "I need a fetal scalp electrode." Midwife: "You need a fetal scalp electrode?" Doctor: "Yes."

Instructor Comments

Skills Needed

Potential Tools

This scenario is a classic example of check-back.

Communication.

Check-back

Scenario: 82 Appropriate for: All Specialties Setting: Hospital

Midwife to team leader: "My patient is getting an epidural so I will not be available for half an hour." Team Leader to Midwife: "OK, I will take this patient until you return."

Instructor Comments

This scenario is a classic example of the communication used in a handover

Skills Needed

Communication.

Potential Tools

Handover

Scenario: 83 Appropriate for: Labour and Delivery Setting: Hospital

Ann Goodwin, a patient at term with oligohydramnios is admitted for induction of labour. She is examined by the registrar who determines she has an unfavourable cervix and is therefore a candidate for cervical ripening. The registrar tells the resident medical officer (RMO) to order and insert prostaglandin. The RMO has never inserted prostaglandin except in second trimester terminations.

He therefore orders a 10mg misoprostol tablet instead of Cervidil®. The order is placed by the midwife, and the misoprostol is sent to the delivery suite by the Pharmacy. The RMO asks the midwife whether the prostaglandin has arrived. She replies that it has, and the RMO inserts the tablet vaginally. The nurse thinks it is "strange" but never questions the use of a 10mg misoprostol tablet used intravaginally in a term pregnancy with a live fetus.

The patient experiences hyperstimulation that leads to a non-reassuring fetal heart rate pattern and an emergency caesarean section.

Instructor Comments

This teamwork failure is the result of a series of communication breakdowns. A check-back is not performed, and the medical order for misoprostol is never clarified for route or acknowledged for accuracy. Even when the midwife personally questions the use of the misoprostol tablet, she does not use the Two-Challenge rule to voice her concern. The use of simple communication techniques taught in this module could have avoided placing this patient at unnecessary risk.

Skills Needed

Communication. Mutual support.

Potential Tools

Check-back, Two-Challenge rule, Conflict resolution

Scenario: 84 Appropriate for: Labour and Delivery Setting: Hospital

Denise Whitaker, a 36-year-old G2 P1 with a history of a postpartum haemorrhage and who had a D&C in her first pregnancy is being managed by her family doctor. Denise is at term and delivers vaginally but retains the placenta. A manual removal of the placenta is attempted forty minutes after delivery. This attempt is made under conscious sedation and is unsuccessful, with a resulting 1500–2000 cc blood loss. The obstetrician is contacted, and the decision is made to perform a spinal anaesthesia, where a manual removal of the placenta is conducted. Three-quarters of the placenta is removed.

The remaining placenta is abnormally adhered to the uterine wall. This adherence is confirmed by ultrasound and a decision is made to perform a hysterectomy. Blood arrives in theatre labelled with the correct first name of the patient but the wrong last name.

The midwife who ordered the blood states that the transfusion lab technician said, "I know the patient," before the midwife was able to give the medical record number.

After a delay, the correct blood arrives, and Denise receives a transfusion.

Instructor Comments

An avoidable communication breakdown including lack of Check-Back or Two-Challenge rule causes an unnecessary delay in this patient's transfusion. Effective teams employ several standards of effective communication that are known to prevent communication related errors.

Skills Needed

Communication. Mutual support.

Potential Tools

Check-back, Two-Challenge rule, Advocacy/Assertion

Scenario: 85 Appropriate for: Labour and Delivery Setting: Hospital

At a team meeting, one of the obstetricians states that he is going to theatre for a caesarean section. He also states that he has another patient, Mary, in labour with her second child, dilated 8 cm. Another obstetrician offers to be available in case Mary delivers. This information is shared with the midwife caring for Mary so she knows whom to call.

Mary is slowly progressing and may end up requiring a caesarean section. The anaesthetist meets with the obstetrician and the midwife to tell them that the patient has a class 3 airway and therefore she does not want to administer general anaesthesia to this patient if it can be avoided.

The midwife repeats back that general anaesthesia should be avoided, and it is confirmed. The team decides that it is best to monitor the patient's epidural carefully so that general anaesthesia can be avoided if the patient requires a caesarean section.

Instructor Comments

In this scenario, the use of effective communication and team structure includes handover, check- back, and the team huddle, resulting in the delivery of optimal care.

Skills Needed

Team Structure. Communication.

Potential Tools

Huddle, Handover, Check-Back

Scenario: 86 Appropriate for: Labour and Delivery Setting: Hospital

The Triage midwife is overloaded with the arrival of three patients within fifteen minutes of each other. She calls the team leader seeking help. A second midwife arrives in the Triage unit to offer assistance.

The Triage midwife asks the second midwife to perform an assessment, initiate electronic fetal monitoring, and obtain blood and urine specimens on a patient presenting for a pre- eclampsia evaluation. This process takes approximately fifteen minutes, and the second midwife then reports her findings to the Triage midwife, hands over the patient, and returns to her patient in delivery suite once she is sure the Triage midwife has assumed care of the patient.

Instructor Comments

This scenario depicts the proper use of delegation in which specific tasks are delegated to those who have the skills to complete them.

Also, follow-up and adequate communication ensure a positive outcome.

Skills Needed

Communication. Shared mental model. Situation awareness. Situation monitoring: assess environment. Mutual support.

Potential Tools

Handover, Cross monitoring, Prioritisation, Advocacy/Assertion, Collaboration, Task assistance, Delegation

Scenario: 87 Appropriate for: Labour and Delivery Setting: Hospital

Annie Compton is admitted at term for an induction of labour. The obstetrician asks the team leader to assist him with the placement of Prostin gel (3 mg).

The midwife replies,"I am not available at this time, labour ward is just too busy."

The doctor then asks a student midwife to obtain a Cervidil® pessary for induction. The doctor then places the Cervidil® pessary vaginally, not aware that it is a 10-mg dose. Within ten minutes, there is a prolonged deceleration of the fetal heart rate that does not respond to resuscitative measures. The patient requires an emergency caesarean section.

Instructor Comments

An unmanaged workload situation within the team resulted in the obstetrician requesting assistance from someone outside the patient's team without communicating essential information or using a check-back. Effective use delegation is essential to manage workload, but you must determine that the individual to whom work is being delegated has all the essential information and the skills to complete the task without risk.

Skills Needed

Communication.

Potential Tools

Check-back

Scenario: 88 Appropriate for: All Specialties Setting: Hospital

The junior midwife thinks the patient needs a fetal scalp electrode (FSE) but the team leader is not present. The junior midwife asks Marie, a senior midwife to insert the FSE.

The senior midwife thinks that the team leader has been notified and inserts the FSE. When the team leader finds out, he is angry at the junior midwife and yells at her in front of other staff.

- D: I (junior midwife) feel that you are upset with me for asking Marie to place a FSE.
- E: When you question my judgment in the middle of the nursing station, it made me feel awkward
- S: If you have a question regarding my care and the decision I made, I would appreciate it if you would speak to me in private.
- C: Speaking privately would be much more useful to me because I would feel less embarrassed and would be able to answer your concerns and provide you with the information that you need.

Instructor Comments

This example shows a good approach to Conflict resolution and use of the DESC script.

Skills Needed

Communication.

Potential Tools

DESC script, Conflict resolution

Scenario: 89 Appropriate for: All Specialties Setting: Hospital

Carol McCarthy, a 32-year-old Gravida 4 Para 2 patient is admitted to delivery suite with vaginal bleeding at 32 weeks. She is diagnosed with a placenta praevia. The obstetrician holds a team meeting with the team leader, anaesthetist, and registrar outside the patient's room. The decision is made to deliver Carol by caesarean section in delivery suite theatre rather than general theatres, and blood is ordered from transfusion. The midwife caring for Carol is not included in the discussion because she is with Carol.

The midwife is not advised of the new plan and feels completely out of the loop.

After Carol is delivered and in recovery, the midwife asks the obstetrician if she can speak with her and says, "When the plan was made to deliver your patient by caesarean, I was not informed until we were going to the theatre. I had no idea that blood had been ordered already. I felt out of the loop, and it was difficult for me to take care of your patient without being aware of the plan."

Instructor Comments

In this case, a shared mental model is not formed, and lack of communication results in a conflict. The conflict is resolved by using feedback that was timely (directly following the delivery when the patient was stable), behavioural (the plan of care needs to be communicated to the midwife caring for the patient), specific (it was important for patient care for the midwife to know that the patient would be delivered by caesarean in the delivery suite theatre and that blood had been ordered), directed toward improvement (suggestions for future conduct provided), and non-judgmental (said respectfully in a manner focused on patient care/safety not personality).

Skills Needed

Communication.

Potential Tools

Conflict resolution

Scenario: 90 Appropriate for: Labour and Delivery Setting: Hospital

Amy Bliss, a 31-year-old is transferred back to delivery suite 18 hours after a caesarean delivery of triplets at 32 weeks gestation. She has a heart rate (HR) in the 120s, a blood pressure (BP) of 110/70, and an oxygen saturation (O2 sat) of 97 percent. Amy is pale and diaphoretic. Her haemoglobin has fallen from 100 to 70.

After evaluating Amy, her midwife discusses the plan of care with the resident medical officer (RMO). The plan includes a 12-lead ECG, repeat blood tests, a vaginal exam, and an abdominal ultrasound. The midwife is unable to obtain the blood and asks for assistance from an anaesthetist. Within minutes, the RMO and anaesthetist are called to the theatre for an emergency section and are therefore unavailable to help with the venipuncture and placement of a second intravenous line. The midwife discovers that the ECG machine is broken and calls the ECG Lab to come to delivery suite to perform a 'formal' ECG.

After the ECG is completed, the midwife approaches a second RMO to follow up with the planned vaginal exam and abdominal ultrasound. The second RMO states that she will call the obstetrician for input to the plan, but she gets called to a delivery. The midwife wonders why she has not received any feedback.

A short time later, Amy's status deteriorates. Her BP is 86/52, HR is 132, and her O2 sat is 95 percent. The patient is complaining of shortness of breath with a RR of 32. The midwife pages the obstetrician and the anaesthetist. The patient's BP is now 70/40, and she is rushed to the theatre with the anaesthetist providing volume resuscitation. An exploratory laparotomy reveals massive intra-abdominal haemorrhage requiring a hysterectomy and blood product transfusions to stabilise Amy.

Instructor Comments

This teamwork failure depicts the absence of a clearly defined leader and lack of handover or checkbacks. Although the midwife attempts to engage several doctors during the course of the patient's unfolding event, no one assumes leadership for the case and the patient is placed at unnecessary risk.

Skills Needed

Team structure. Communication. Situation monitoring. Situation awareness. Shared mental model. Mutual support. Leadership

Potential Tools

Huddle, Call-out, Check-back, Handover, Cross monitoring, Prioritisation, Advocacy/Assertion, Collaboration

Scenario: 91 Appropriate for: Labour and Delivery Setting: Hospital

Kim Tran, a 23-year-old G1 P0 at 42 weeks gestation presents to Triage in questionable labour. Kim and her family speak limited English. The busy Triage midwife does a quick assessment and determines that the patient can wait for the next available room. Forty-five minutes later, Kim is escorted to a room in Triage. The Triage midwife places the patient on an electronic fetal monitor and is then urgently called away by a patient having an asthma attack. The Triage midwife returns to Kim thirty minutes later and is concerned that there is a non-reassuring fetal heart rate (FHR) tracing. She decides that Kim should be further evaluated in delivery suite. The Triage midwife seeks out the midwife team leader in delivery suite who is occupied with a patient in active labour.

The Triage midwife says, "I have a nullip at 42 weeks in questionable labour with some CTG issues who needs to come down to delivery suite." The team leader accepts the transfer.

The team leader assigns Kim to Julie, a midwife and informs her that Kim needs "monitoring." Julie had a delivery about an hour previously and is about to transfer that patient and baby to the post-natal ward. Julie asks another midwife, Larissa, if she could "admit" the new patient for her and she will be right back.

Larissa with two other patients, places the patient back on the fetal monitor. She is concerned with her assessment of the FHR pattern and decides to put in an IV. She is unsuccessful in her first two attempts, but then Julie returns and inserts the IV. Julie is also concerned with the FHR pattern and notifies a registrar who is in theatre. After theatre, the registrar evaluates Kim and decides to perform an ultrasound. The ultrasound is performed more than three hours after the patient's arrival at the Triage desk. Based on the ultrasound and the FHR pattern, an emergency section is performed for a live born male with low Apgar scores.

Instructor Comments

Several work overload situations within the team created a dangerous delay in this patient's treatment. Effective teams use huddles, handover, check-backs, and cross monitoring to manage workload situations that compromise patient safety.

Skills Needed

Team structure. Communication. Situation monitoring. Situation awareness. Shared mental model. Mutual support.

Potential Tools

Huddle, Call-out, Check-back, Handover, Cross monitoring, Prioritisation, Delegation, Task assistance, Advocacy/Assertion, Collaboration

Labour and Delivery

Scenario: 92 Appropriate for: All Specialties Setting: Hospital

The Triage midwife approaches a resident medical officer (RMO) to assess a patient. The patient presented to Triage thirty minutes earlier with vague complaints of abdominal pain at 34 weeks gestation. The Triage midwife has established that the patient is not contracting, does not have ruptured membranes, has no urinary symptoms, and does not have a fever.

A detailed assessment, some reassurance, and development of a follow-up plan are all that is needed for this patient. The RMO asks whether she can have "fifteen minutes to eat lunch." Agreeing to this, the Triage midwife tells the patient she will be seen soon by the doctor.

Forty-five minutes later, the RMO has not shown up, but the midwife does nothing. Sixty minutes later, the RMO begins assessing the patient. At exactly that moment, the Triage midwife receives a call that a preterm patient in acute distress is being brought up from the Emergency Department.

This patient ties up three midwives, the RMO, and the registrar for the next hour. More than three hours after her arrival in the Triage unit, an unhappy, disgruntled patient is seen and discharged home.

Instructor Comments

In this scenario, the three hour delay of the patient in Triage could have been avoided if staff had used their slow period to stay ahead of the workload, or if the midwife had shown stronger advocacy/ assertion to get the patient seen by the resident.

Skills Needed

Situation awareness. Mutual support. Communication.

Potential Tools

Conflict resolution, Advocacy/Assertion, Cross monitoring

Scenario: 93 Appropriate for: Labour and Delivery Setting: Hospital

The Triage midwife is on a busy evening shift with four patients: a pregnant asthmatic, a patient presenting for pre-eclampsia monitoring, a patient with abdominal pain awaiting medical review, and a patient with ruled out ruptured membranes ready to go home.

The Triage midwife is paged to the admission desk for a non-English-speaking patient who is at 42 weeks gestation and in labour. The midwife determines that the patient can wait for an available room in the Triage unit. Forty-five minutes later, the midwife places the patient on fetal monitor and is urgently called away, without a handover, by the asthmatic patient. The midwife returns thirty minutes later to identify a non-reassuring fetal heart rate pattern.

Instructor Comments

The use of several resource management strategies such as handover, prioritisation, delegation, and workload redistribution could have effectively avoided placing this patient at risk.

Skills Needed

Communication. Mutual support.

Potential Tools

Handover, Delegation, Collaboration, Task assistance

Scenario: 94 Appropriate for: Labour and Delivery Setting: Hospital

Christine Joseph, a 37-year-old G4 P3 at 39 weeks gestation enters delivery suite in labour. Christine is dilated 6 cm with intact membranes. Christine receives an epidural anaesthesia and states, "My water just broke."

The fetal heart rate baseline, which had been 140, begins to fall. A prolonged deceleration occurs, and the midwife calls in a resident medical officer (RMO). The RMO examines Christine and feels a pulsating umbilical cord. She relieves the compression by elevating the presenting part. The patient is placed in knee-chest position, and an emergency section is called. Christine's midwife remains with the patient, and the team leader becomes the situational leader assigning and confirming tasks (scrubbing, setting up sterile field, assisting with transporting the patient to theatre, prepping patient, placing a Foley catheter, etc.) to all available midwives.

Within minutes, the section has begun, and the extra staff is no longer needed. When formally released, the midwives then return to the care of their own patients.

Instructor Comments

This scenario depicts workload management through a reallocation of resources and the proper delegation of tasks to members of the newly formed contingency team. It includes the use of handovers, check-backs, situation awareness, and cross monitoring to develop a shared mental **model**.

Skills Needed

Communication. Situation monitoring: assess status of patients, team, and environment. situation awareness. Shared mental model. Mutual support

Potential Tools

Call-out, Check-back, Handover, Prioritisation, Delegation, Task assistance, Advocacy/Assertion, Collaboration

Scenario: 95

Appropriate for: Labour and Delivery

Setting: Hospital

Telephone call

- I: Hello John, It's Marie Jones, Midwife from Delivery Suite, ringing about Anita Freeman admitted today under Dr Frankton DOB 26/12/90; MRN 216428
- S: I am concerned about Anita Freeman's admission fetal heart rate tracing. B: She is a primip who is being induced for post dates.
- A: I think she is having late decelerations. I have stopped the syntocinon, and she is on her left side with oxygen on.
- R: I would like you to come and review her CTG. When are you able to see her?

Instructor Comments

This scenario is a classic example of using ISBAR (Identify, Situation, Background, Assessment, and Recommendation).

Skills Needed

Team structure. Communication.

Potential Tools

ISBAR

Scenario: 96

Appropriate for: Labour and Delivery

Setting: Hospital

Lauren Jobst, a 30-year-old nullip is experiencing protracted labour with clearly inadequate contractions, and her temperature is beginning to rise. The obstetrician decides to augment her labour and orders syntocinon. Whenever the midwife tries to increase the syntocinon, the baby exhibits heart rate abnormalities, so the contractions remain inadequate.

The obstetrician becomes frustrated with the slow progress and states that he just wants the midwife to 'push the synt.' If Lauren gets into better labour, that is great. Alternatively, if the baby is compromised, then they will need to do a section.

The midwife understands and repeats the order but also suggests that a fetal scalp electrode and an epidural might make this situation safer. He agrees to her suggestions, and they then carry out the plan.

Instructor Comments

The midwife confirms the initial plan using check-back but also advocates by sharing her assessment of the situation with the obstetrician. As a result of this discussion, they have a shared mental model for the care for this patient.

Skills Needed

Communication. Situation monitoring: assess status of patient. Mutual support.

Potential Tools

Check-back, Advocacy/Assertion, Collaboration

Scenario: 97 Appropriate for: Labour and Delivery Setting: Hospital

A diabetic multiparous patient is about to deliver a baby thought to weigh more than 5kg.

The team leader overhears the obstetrician discussing with the resident medical officer (RMO) the possibility of shoulder dystocia.

As the doctors walk toward the labour room the team leader asks, "Would you like an anaesthetist and a second midwife in the room for the delivery in case you have trouble with shoulder dystocia? Should we have theatre on standby?"

Instructor Comments

In this situation, the team leader becomes aware of a potential risk for the patient through the process of cross monitoring. She advocates for the patient by her intervention and by offering resources to help manage the situation. Cross monitoring goes beyond situation awareness in that the monitoring individual takes action to interrupt or avoid an impending error.

Skills Needed

Situation awareness. Mutual support. Shared mental model.

Potential Tools

Scenario: 98

Appropriate for: Labour and Delivery

Setting: Hospital

The team leader arrives in theatre two minutes after the uterine incision is made on a patient undergoing a caesarean section. She notes that the doctors are having a difficult time delivering the infant's head. Two more minutes elapse, and the doctors are still struggling. The midwife asks whether they would like her to call in the obstetrician to assist. She asks whether they might apply forceps to facilitate the delivery and calls the neonatal unit to be on standby for the baby.

Instructor Comments

In this scenario, the team leader is cross monitoring the actions of the team as they struggle to deliver the infant's head. She is aware of the time lapse and intervenes by asking a question that initiates a new course of action.

Skills Needed

Situation awareness. Mutual support.

Potential Tools

Scenario: 99 Appropriate for: All Specialties Setting: Hospital

During an initial evaluation of a patient in active labour, the midwife determines that there is a noncephalic presentation. The only obstetrician on site is in theatre. The midwife proceeds to notify the anaesthetist and neonataologist, as well as theatre of the pending section delivery. Once the obstetrician verifies the diagnosis, the team is prepared to quickly proceed to surgical intervention.

Instructor Comments

In the absence of the only obstetrician, the midwife emerges as a situational leader, organises a team to manage the patient's impending section, thus creating a shared mental model.

Skills Needed

Situation awareness. Mutual support. Shared mental model. Leadership.

Potential Tools

Scenario: 100 Appropriate for: Labour and Delivery Setting: Hospital

A patient with an arrest of dilation is brought to theatre in preparation for a section under a spinal. Before any anaesthetic can be administered, the obstetrician and midwife are called to an emergency delivery, leaving the anaesthetist alone with the patient during which time the fetal heart rate (FHR) exhibits a prolonged deceleration. The anaesthetist repositions the patient, increases the intravenous rate, and administers oxygen. As a last intervention, he places the patient into a knee-chest position. The FHR recovers.

Instructor Comments

In the absence of the designated team leader, the anaesthetist recognises a dangerous change in the clinical status and assumes a situational leader role in managing the patient's deteriorating condition. Any member of the team with the skills to manage the situation at hand can become a situational leader.

Skills Needed

Situation monitoring: assess status of patient. Team structure. Leadership.

Potential Tools

Prioritisation, Advocacy/Assistance

Scenario: 101 Appropriate for: Labour and Delivery

Setting: Hospital

Dr. Allen, a tired anaesthetist is asked to place an epidural at 0300. Midway through the procedure, Mary, the midwife, notices that the anaesthetist is drawing up lignocaine into the epidural syringe instead of saline.

She states,"Dr. Allen, would you like me to hand you the saline?"

The anaesthetist looks at his hands, notices the error, and corrects it.

Instructor Comments

In this scenario, the midwife, using cross monitoring, notices that the anaesthetist is exhausted and mistakenly selects the wrong medication. The midwife is able to provide the appropriate support to the anaesthetist by alerting him to the error.

Skills Needed

Situation awareness. Mutual support. Shared mental model.

Potential Tools

Cross monitoring, Advocacy/Assertion, Collaboration, Two-Challenge rule

Scenario: 102 Appropriate for: Labour and Delivery Setting: Hospital

A midwife notices that a colleague is assigned to prepare a patient for theatre, but that the colleague also must care for another patient who recently delivered. The midwife asks her colleague if she can assist in placing the IV for the patient who has been consented for a caesarean section to help get things moving.

Instructor Comments

In this scenario, the midwife is able to provide useful support to her colleague by paying attention to the overall situation of the unit.

Skills Needed

Situation awareness. Mutual support. Shared mental model.

Potential Tools

Scenario: 103 Appropriate for: All Specialties Setting: Hospital

A coordinating team meeting is held at 0900, with the midwife, registrar, obstetrician, and anaesthetist present. They discuss the situation: delivery suite is full; three of the patients are delivered but cannot go to post-natal ward because that is also full and no discharges have left yet. Rooms need to be made available for the labouring patients who are expected.

The coordinating team decides to convert the Triage unit into a temporary postnatal unit with one midwife to care for the three delivered patients. This will free three labour rooms. All patients presenting will be sent directly to delivery suite instead of to the Triage unit until the postpartum patients can be transferred.

Instructor Comments

In this scenario, the coordinating team assesses the reality of the situation on the unit and is able to reorganise the flow of patients to deal with the room shortage.

Skills Needed

Team structure. Communication. Situation awareness. Shared mental model. Mutual support.

Potential Tools

Huddle, Conflict resolution, Handover, Prioritisation, Delegation, Task assistance, Collaboration.

Scenario: 104 Appropriate for: Labour and Delivery Setting: Hospital

Sandy Bliss, a 30-year-old nulliparous woman is in active, spontaneous labour. She plans childbirth without an epidural. The baby begins to experience frequent, deep, variable decelerations, raising concerns that an emergency section may be needed. The anaesthetist evaluates Sandy and determines that the airway is unfavourable, and a difficult intubation is likely if general anaesthesia is required.

The team discusses the situation, and the obstetrician then speaks with Sandy and they agree that an epidural will be used.

Instructor Comments

In this scenario, the team assesses the patient's condition and possible alternatives. Having agreed in their assessment of the situation, they are able to inform the patient of their concerns. The anaesthetist discussed the problems with the obstetrician and midwife to develop a shared mental model for the plan to properly ensure a safe delivery for the patient.

Skills Needed

Team structure. Situation monitoring: assess status of patient. Shared mental model. Communication.

Potential Tools

Huddle, Advocacy/Assertion

Scenario: 105 Appropriate for: Labour and Delivery Setting: Hospital

A caesarean section is being performed at 1100. The placenta does not detach, the uterus fails to contract, and massive haemorrhage ensues. Many staff are needed to resuscitate the patient, leaving the rest of the unit understaffed.

The team gets together, and the decision is made to reallocate the patient load to ensure patient safety on the floor for the remaining patients. This includes allocating a relieving midwife to low risk patients and admissions for the next two hours to enable an additional senior midwife to attend to the patient in theatre.

Instructor Comments

In this scenario, the coordinating team has assessed the situation and is able to make changes in the care plans for other patients on the unit to ensure adequate use of human resources.

Skills Needed

Team structure. Situation awareness. Shared mental model. Mutual support.

Potential Tools

Huddle, Prioritisation, Collaboration

Scenario: 106

Appropriate for: Labour and Delivery

Setting: Hospital

During the admission assessment of a multip patient in spontaneous labour, the midwife asks the patient about her last labour at another hospital. The patient states that it was strange because "people were running all over, they pulled my legs way back, and someone started pushing down on my belly really hard."

The midwife asks whether anyone had said she had "shoulder dystocia."

The patient says "yes."

The midwife relays this information to the team and confirms that they have received and understood the message so they can be prepared for possible recurrent shoulder dystocia.

Instructor Comments

In this scenario, the midwife learns vital information about the patient's past pregnancy that may impact the progression of this current delivery. The midwife appropriately relays and confirms receipt and understanding of this information by other team members.

Skills Needed

Communication. Shared mental model. Situation awareness. Situation monitoring: assess status of patient. Mutual support.

Potential Tools

Scenario: 107 Appropriate for: Labour and Delivery Setting: Hospital

Jane Meyers, a 36-year-old G3 P2 patient at 35 weeks gestation enters the Triage unit from her obstetrician's office for evaluation of elevated blood pressure. In the obstetrician's office, her blood pressure (BP) was 140/96; on admission it is 130/88. Jane does not have any symptoms and has no clinical evidence of pre-eclampsia.

The Triage midwife reviews Jane's prenatal record and notes that the patient's BP at her first prenatal visit was 120/84 with several subsequent diastolic readings in the 80s. The Triage registered midwife calls the obstetrician and relays her observations.

She states, "Could this be chronic hypertension not pre-eclampsia?"

The obstetrician replies, "It could be. Let's complete the assessment and consider treating her with an antihypertensive."

Instructor Comments

In this scenario, the Triage midwife offers information to the obstetrician that alters his mental model of the patient's presenting problem. A shared mental model between members of the team is reached through open and direct dialogue.

Skills Needed

Shared mental model. Mutual support.

Potential Tools

Advocacy/Assertion, Collaboration

Scenario: 108 Appropriate for: Labour and Delivery Setting: Hospital

During a delivery, the obstetrician experiences difficulty delivering the infant's shoulders. He asks the midwife to provide fundal pressure.

The midwife states, "Don't you mean suprapubic pressure?"

The obstetrician replies, "I said fundal pressure!"

The midwife says, "Once again, don't you mean suprapubic pressure? Fundal pressure could trap the shoulders even more."

The obstetrician replies, "Oh, you are right. I meant to say, suprapubic pressure."

Instructor Comments

In this scenario, the midwife, detecting what she believes is a simple error, questions the doctors order. When her challenge is rejected, she vocalises her concern a second time to ensure that it has been heard. The obstetrician, realising his error, takes corrective action. It is the responsibility of every team member to challenge any course of action that they believe may place the patient at risk.

Skills Needed

Situation awareness. Shared mental model. Mutual support.

Potential Tools

Two-Challenge rule, Collaboration.

Scenario: 109 Appropriate for: Labour and Delivery Setting: Hospital

Dora Johnson, G1 P0 is in spontaneous labour. Her baseline CTG is reactive and a reassuring fetal heart rate (FHR) pattern occurs throughout the first stage of labour. Dora has a prolonged second stage with a resulting FHR tachycardia with decelerations. The registrar and the midwife are both present during the last two-hours of the second stage.

The team leader on the unit is concerned about the FHR pattern and expresses concern to the registrar and the midwife at the patient's door. Both providers in the room state that everything is OK and that delivery is imminent. After a three-hour second stage, a severely compromised infant is delivered from a posterior occipital position. The infant subsequently dies.

Instructor Comments

In this scenario, the team has developed diminished situation awareness. Through situation monitoring, the team leader becomes aware of the FHR and expresses her concern. The error occurs when the team dismisses this information and is allowed to continue on their current course of action, which leads to a disastrous outcome.

Skills Needed

Situation awareness. Situation monitoring: assess status of patient, status of team, and progress toward a goal. Communication. Mutual support. Team structure.

Potential Tools

Cross monitoring, Conflict resolution, Two-Challenge rule, Advocacy/Assertion