

Lesson 7

High-Performance Teams

30 minutes

Learning Objectives

- Model effective communication as a member or leader of a high-performance team
- Recognize the impact of team dynamics on overall team performance

Instructor Tips

- Clearly communicate the objectives of this lesson to help the students gain a better understanding of the lesson
- This team dynamics section is a great way to further engage the students
- Change the inflection in your voice and also change your pace to help change the energy level in the room



Play High-Performance Teams

Video (In-hospital, Out-of-Hospital, or Both)

- Ask students to open the *ACLS Provider Manual* to Part 3 (High-Performance Teams)
- Address what students will learn from the video
- Play the video



Discussion

- Ask students what questions they have about high-performance teams
 - What behaviors did they observe?
 - Discuss **timing** and **measurement** in relationship to impact on survival
 - Discuss the H's and T's that can help providers to arrive at a diagnosis in this case
 - Experienced providers may consider conducting an ultrasound analysis, although its usefulness has not been well established

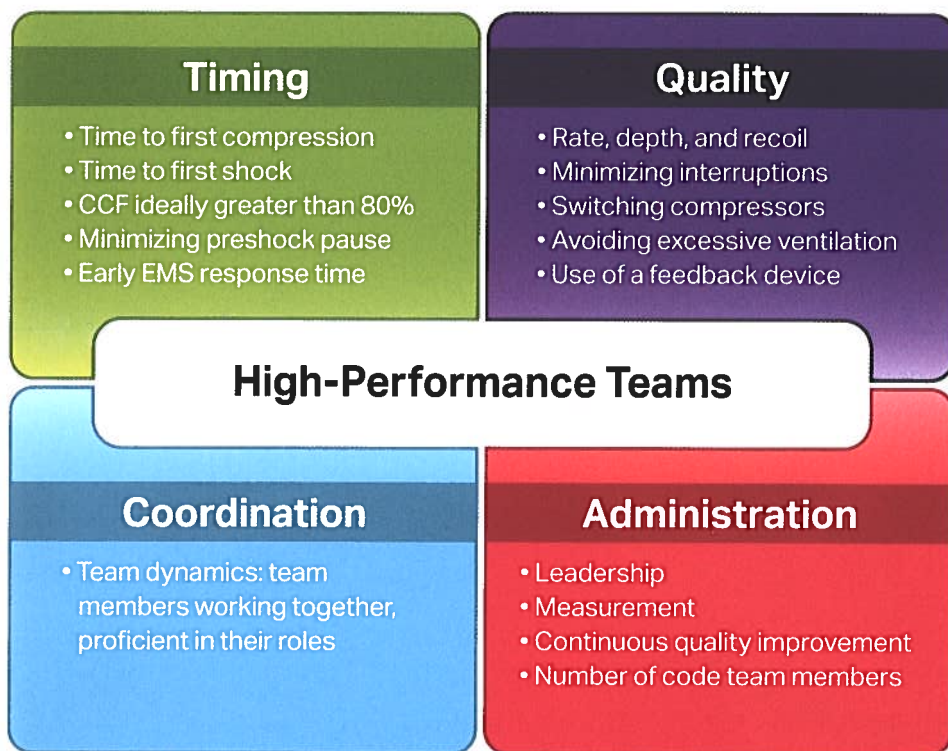


Review/Summarize Key Points

- Team dynamics are critical during a code or resuscitation attempt
- The interaction among team members has a profound impact on the effectiveness of each individual as well as on the patient's overall survival
- The better you work as a team (timing, quality, coordination, and administration), the better the potential outcome for your patient
- That's why it's so important that you understand not just what to do in a resuscitation attempt but how to communicate and perform as an effective team, regardless of your role as team member or Team Leader

- The ability to follow and move through multiple algorithms is important
- Emphasize the importance of understanding the choreography of a resuscitation attempt as a team and the impact on timing
- Discuss the integration of high-quality BLS and ACLS care
- Remind students that they will be functioning as Team Leaders and as different members in the learning and testing stations and will need to apply these concepts
- Review critical aspects of high-performance teams (Figure 3)

Figure 3. Key areas of focus for high-performance teams to increase survival rates.



Lesson 8A

Learning Station: High-Performance Teams: Cardiac Arrest and Post-Cardiac Arrest Care

148 minutes

Learning Objectives

- Model effective communication as a member or leader of a high-performance team
- Recognize the impact of team dynamics on overall team performance
- Recognize cardiac arrest
- Perform early management of cardiac arrest until termination of resuscitation or transfer of care, including post-cardiac arrest care
- Evaluate resuscitative efforts during a cardiac arrest through continuous assessment of CPR quality, monitoring the patient's physiologic response, and delivering real-time feedback to the team

Instructor Tips

- This activity can be performed with 6 students and 1 instructor
 - If you have fewer than 6 students, you can assign multiple roles to individual students or substitute other instructors for those roles
- Transitional language: After showing the videos, be sure to provide a recap of what the video covered and what is next
- Encourage students to use their provider manual, pocket reference cards, or Handbook of ECC early on during the cases but to become less reliant on those resources as the cases progress
- The instructor should have working knowledge of all vasopressors associated with the students' workplace
- Conduct **prebriefing** before starting the case
 - Team should discuss the plan for managing each case including **objective timing goals**
- **Conduct learning station cases in real time**
- If possible, use real equipment in a realistic setting for your students
- Monitor rate and depth of chest compressions along with CCF by using an audiovisual feedback device with real-time feedback. In addition, monitor chest recoil if possible and ventilations
- High-quality CPR should be performed with real-time feedback throughout the cardiac arrest case-based scenario
- When debriefing students:
 - Ask open-ended questions to engage group discussion and allow for greater details
 - Discuss **prebriefing** goals (eg, CCF 82%,) vs actual results, with reflection on how they can perform better for the next case
 - When answering a question, acknowledge the individual with eye contact, and then answer to the entire room, coming back to the questioner periodically



Optional: Play Cardiac Arrest Algorithm Video and Post-Cardiac Arrest Algorithm Video

- Address what students will learn from the video
- Play the video
- Answer students' questions



Discussion

- Monitor/defibrillator technology review if needed
- Review team roles, responsibilities, and assignments for each case (refer to Lesson Plans 8B and 8C)
 - Case scenarios can be found in the Appendix of the instructor manual or in the Instructor Reference Material
- Students may use the Handbook of ECC, pocket reference cards, posters, or crash cart cards
- To show the continuum of care, all VF case scenarios must achieve ROSC
- 4 cases will be VF/pVT resulting in ROSC (post-cardiac arrest care)
- 2 cases will be split between PEA and asystole
- Ask students to recall the post-cardiac arrest care priorities
 - Maximize oxygenation and ventilation
 - Maximize hemodynamics
 - Obtain a 12-lead ECG; move to the cath lab if ST-segment elevation myocardial infarction (STEMI) is present
 - Implement targeted temperature management
- For post-cardiac arrest care, ensure that students address
 - Oxygenation and ventilation
 - Hemodynamic optimization (blood pressure, 12-lead, glycemic control)
 - Targeted temperature management
 - Criteria for percutaneous coronary intervention
- Advise that students will perform debriefing
 - Refer to Debriefing Tools in the instructor manual
- Select cases for each student to demonstrate appropriate management
- Discuss local protocol
- Highlight effective patient management through the Adult Post-Cardiac Arrest Care Algorithm

Lesson 8B

Learning Station: High-Performance Teams: Cardiac Arrest and Post-Cardiac Arrest Care—Rotations

Instructor Tips

It is important that every student have a role in each case

- Student role assignments may vary depending on the number of students at the station. However, every student must function as the Team Leader for 1 case
- Cases may be run in a different order, but ensure that no single student always goes first in subsequent learning stations
- Any additional students may be given roles as additional recorders



Students Practice



Student Rotations in Learning Station Cases According to Resuscitation Team Roles

- The **Team Leader** will direct the actions of the other team members. For example, the Team Leader will coach the Airway team member if performance of bag-mask ventilation is not making the chest rise.
- **Team members** will perform interventions as directed by the Team Leader. This is an opportunity for students to practice skills and receive feedback from the Team Leader. Students will demonstrate effective team behaviors (eg, closed-loop communication, clear messages)
- The **Timer/Recorder** will use a stopwatch to time 2-minute intervals for case management, announce each 2-minute interval for switching roles, and record critical action times on the ACLS Code Timer/Recorder Sheet (in the Appendix of the instructor manual or in the Instructor Reference Material) or on a whiteboard



Students Practice

- Select the cases for the students to manage individually in this station (Table 11)
- Run the scenario and perform the debriefing for all cases (case scenarios can be found in the Appendix of the instructor manual or in the Instructor Reference Material)



Discussion

- Provide feedback on the students' debriefing (Table 12)
 - What was challenging?
 - What worked well in this case?

Table 11. Student Rotations for Cardiac Arrest and Post-Cardiac Arrest Care Learning Station

Team role	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6
Team Leader	Student 1	Student 2	Student 3	Student 4	Student 5	Student 6
Airway	Student 2	Student 3	Student 4	Student 5	Student 6	Student 1
IV/IO/Medications	Student 3	Student 4	Student 5	Student 6	Student 1	Student 2
Monitor/ Defibrillator/ CPR Coach	Student 4	Student 5	Student 6	Student 1	Student 2	Student 3
Compressor	Student 5	Student 6	Student 1	Student 2	Student 3	Student 4
Timer/Recorder	Student 6	Student 1	Student 2	Student 3	Student 4	Student 5

Table 12. Structured and Supported Debriefing Process for Cardiac Arrest and Post-Cardiac Arrest Care Learning Station

Phase	Goal	Actions
Gather	Ask what happened during the case, to develop a shared mental model of the events. Listen to students to understand what they think and how they feel about the simulation	<ul style="list-style-type: none"> Request a narrative from the Team Leader Request clarifying or supplementary information from the high-performance team
Analyze	Facilitate students' reflection on and analysis of their actions	<ul style="list-style-type: none"> Review an accurate record of events Report observations (both correct and incorrect steps) Assist students in thoroughly reflecting on and examining performance during the simulation as well as in reflecting on their perceptions during the debriefing Direct and/or redirect students during the debriefing to ensure continuous focus on session objectives
Summarize	Facilitate identification and review of the lessons learned that can be taken into actual practice	<ul style="list-style-type: none"> Summarize comments or statements from students Have students identify positive aspects of their high-performance team or individual behaviors Have students identify areas of their high-performance team or individual behaviors that require change or correction

Lesson 8C

Learning Station: High-Performance Teams: Cardiac Arrest and Post-Cardiac Arrest Care— Details for Case Rotations



Students Practice

Use Table 13 to determine case rotations for this learning station

Table 13. Timing and Tasks for Cardiac Arrest and Post-Cardiac Arrest Care Learning Station

Case rotation (6 rotations, 25 minutes each)	Directions for case rotations (Instructors must conduct the scenario in real time)
Case prebriefing (Figure 4) (5 minutes)	<ul style="list-style-type: none">• Set timer to 5 minutes• Set case plan and goals including objective timing goals
Start case scenario (10 minutes)	<ul style="list-style-type: none">• Review assigned team roles from the rotation chart for this case<ul style="list-style-type: none">– Ensure that students understand the expectations for their assigned roles (eg, “Your role is to use the bag-mask device to give ventilations that cause the chest to rise”)• Introduce the case by reading the case scenario• Set the timer to 10 minutes• Ask the Team Leader to begin managing the case• Observe and coach<ul style="list-style-type: none">– Effective team performance– Appropriate case management– High-quality skills performance, including high-quality CPR in real time throughout the scenario with real time audiovisual feedback on CPR quality• Guide the Team Leader through management of the case• Stop the case after 10 minutes
Case debriefing (10 minutes)	<ul style="list-style-type: none">• Set the timer to 10 minutes• Conduct a team debriefing at the end of the case<ul style="list-style-type: none">– Refer to Debriefing Tools in the instructor manual

Repeat for each of the remaining 5 cases.

Figure 4. Prebriefing and structured debriefing tasks: a flow chart.



Lesson 9A

Learning Station: High-Performance Teams: Megacode Practice

138 minutes

Instructor Tips

- Organize into stations of 6 students each, with 1 instructor per station
- **Conduct learning station cases in real time (do not skip through the case)**
- Each scenario should last 10 minutes, with prebriefing lasting 5 minutes and debriefing should take place for 10 minutes
- Learning can be achieved just as effectively during structured debriefing as during the scenario



Discussion

- Highlight effective patient management through several algorithms
- **Demonstrate a Megacode case as a Team Leader**
- Review team roles, responsibilities, and assignments for each case (refer to Lesson Plans 9C and 9D)
 - Case scenarios can be found in the Appendix of the instructor manual or in the Instructor Reference Material
- Present a Megacode practice case for each student to manage (refer to Lesson Plan 9C)
- Students may use the Handbook of ECC, pocket reference cards, or crash cart cards
- Conduct **prebriefing** before starting the case
 - Team should discuss the plan for managing each case including **objective timing goals**
- If possible, use real equipment in a realistic setting for your students
- Monitor the rate and depth of chest compressions along with CCF by using an audiovisual feedback device with real time feedback. In addition, monitor chest recoil if possible and ventilations
- High-quality CPR should be performed with feedback throughout the cardiac arrest case-based scenario
- Advise students that they will perform **structured debriefing**

Lesson 9B

Learning/Testing Station: High-Performance Teams: Megacode Practice—Instructor Demo

Instructor Tips

When debriefing students:

- Ask your audience open-ended questions that focus on their perspectives to engage their minds and increase energy focus
- When answering a question, acknowledge the individual with eye contact, and then answer to the entire room, coming back to the questioner periodically



Students Practice

Use Table 14 to determine timing and tasks for this learning station

Table 14. Timing and Tasks for Instructor Case Scenario Demonstration

Demonstrate a case scenario with you as Team Leader and students playing team roles	
Case prebriefing (5 minutes)	<ul style="list-style-type: none">• Set timer to 5 minutes• Set case plan and goals, including objective timing goals
Start demonstration of a case scenario (10 minutes)	<ul style="list-style-type: none">• Introduce the case• Assign a Team Leader• Assign team member roles to students• Set the timer to 10 minutes• Begin the case• Students should demonstrate case management, showing<ul style="list-style-type: none">– Effective team performance– Appropriate application of algorithm– High-quality skills performance, including high-quality CPR in real time throughout the scenario• Stop the case after 10 minutes
Case debriefing (10 minutes)	<ul style="list-style-type: none">• Set the timer to 10 minutes• Go over the Megacode Practice Learning Station Checklist
Total time for case demonstration: 25 minutes	<ul style="list-style-type: none">• Discuss prebriefing goals vs actual results• Discuss applying learning to the next case• Summarize the case, emphasizing proper roles of Team Leader and team members

Lesson 9C

Learning Station: High-Performance Teams: Megacode Practice—Practice Cases

Instructor Tips

- **Make sure students understand their roles and responsibilities in managing a Megacode case**
- This is the last opportunity to facilitate learning before the Megacode Testing. Use this time to address critical areas where students may still be weak



Students Practice

Present Megacode practice cases for each student, one at a time, 25 minutes each (5-minute prebriefing, 10-minute case, 10-minute debriefing)



- Determine the Team Leader for the first case (refer to rotations on the next lesson plan)
- Team Leader organizes other students into team roles
- Perform case prebriefing: set goals for the case, including objective timing goals
- Provide the team with an individual case
- Students may use the Handbook of ECC, pocket reference cards, or emergency crash cart cards
- Team Leader assigns and directs the team through the entire Megacode case
- Rotate through all students practicing as Team Leader for remaining 5 cases, depending on the number of students
- Timer/Recorder announces 2-minute intervals and checks off critical actions on the Megacode Testing Checklist
- Give feedback and answer questions
- Perform structured debriefing and have students apply learning to the next case

Lesson 9D

Learning Station: High-Performance Teams: Megacode Practice—Rotations

Instructor Tips

- Cases may be run in a different order, but assigned Team Leader roles should not be changed
- Each student must have the opportunity to run a complete Megacode case as a Team Leader
- When students have to rotate roles during practice, be sure to designate areas of the room to which students can move to have more space during practice and that allow the instructor to clearly observe and monitor student performance



Students Practice

Use Table 15 to determine case rotations for this learning station

Table 15. Student Rotations for High-Performance Teams Learning Station

Team role	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6
Team Leader	Student 2	Student 3	Student 4	Student 5	Student 6	Student 1
Airway	Team Leader assigns other students to each team role					
IV/IO/Medications						
Monitor/Defibrillator/ CPR Coach						
Compressor						
Timer/Recorder						