Chapter 9 study guide

1. Core Concepts of Crew Resource Management (CRM) in EMS

- **CRM Definition**: Effective use of all available resources (people, equipment, information) to minimize errors, reduce stress, and improve team performance and patient outcomes.
- **Key Principles**:
    - Situational awareness (know what's happening now and anticipate future).
    - Decision-making (avoid premature diagnosis; use structured process).
    - Communication (closed-loop, inquiry/advocacy).
    - Leadership/followership (team leader coordinates; all members contribute).
    - Teamwork (shared goals, role clarity, mutual support).
    - Error management (catch and correct mistakes early).
- **Group vs. Team**:
    - **Group** (independent): Members work separately; one failure affects only them.
    - **Team** (interdependent): Shared goals; one failure impacts the whole team; better outcomes through collaboration.
- **Pit Crew CPR**: Highly effective when roles are assigned clearly, practiced, and timed (e.g., compressions, ventilations, defibrillation).
- **Continuum of Care**: Consistent care from first contact to discharge — requires good handoff and communication.

2. Team Roles & Leadership

- **Effective Team Leader**: Assigns tasks, coordinates, oversees, supports team, helps accomplish goals (not just commands or does all hard tasks).
- **Followership**: Speak up respectfully if error noticed (e.g., correct ventilation rate).
- **Independent Group**: Individual accountability only.
- **Interdependent Team**: Failure of one affects all.

Key Questions & Answers:

- A team of EMTs is caring for a critically injured patient. The team leader advises... transport will not begin until... forearm fracture is splinted. Utilizing the crew resource management model, the EMT should: **Respectfully question the team leader** (advocate for priority of rapid transport in critical trauma; "load and go" for unstable patients).
- An effective team leader should: **Help the team accomplish goals**.
- During a resuscitation attempt, the team leader asks... ventilate at 20 breaths/min, and the EMT replies, “Actually, sir, the correct ventilation rate is 10 breaths/min.” This is an example of: **Closed-loop communication** (or inquiry/advocacy — speaking up to correct error).
- In an independent group, you would have: **Individual accountability only**.
- In an interdependent group, when one person fails: **The whole team is affected**.

- In contrast to a health care group, a health care team: **Works interdependently toward shared goals**.

3. Communication & Decision-Making

- **Closed-loop communication**: Sender → receiver repeats → sender confirms (ensures accuracy).
- **Premature diagnosis**: Often due to **anchoring bias** (fixating on first impression) or **tunnel vision**.
- **EMS Decision-Making Steps**:
    1. Scene safety/primary assessment first.
    2. History/exam.
    3. Treatment/transport.
    4. Reassessment/handover.
    5. Documentation/review after transfer.
- **Pit crew CPR effectiveness**: Depends on **clear role assignment and practice**.

Key Questions & Answers:

- Which of the following is an example of closed-loop communication? **Receiver repeats back order and sender confirms**.
- Premature diagnosis during a call can be due to what error? **Anchoring bias** (or cognitive error).
- Which comes first in EMS decision making? **Scene safety and primary assessment**.
- Which step in EMS decision making comes after a patient has been transferred? **Documentation and quality review**.
- The effectiveness of pit crew CPR is dependent on: **Clear role assignment and team practice**.
- While providing care... EMT informs partner that a shotgun is leaning against the wall... demonstrates: **Situational awareness**.

4. Patient Handoff & Transfer of Care

- **Handoff best practices**: Use structured format (e.g., SBAR or MIST), be professional, concise, accurate; avoid interference.
- **When transferring care**: Be **clear and concise**.
- **EMT advising nurse on syncopal episode patient**: Include **initial presentation** (syncopal episode) even if resolved.

Key Questions & Answers:

- For patient handoff, it is important for EMTs and hospital staff to use: **A common structured format** (e.g., SBAR).
- While transferring patient care to another health care provider, you should be: **Clear and concise**.

- EMTs arrive... EMR advises syncopal episode... patient remains alert... when transferring to ED nurse, the EMT should advise: **That the patient had a syncopal episode**.
- While transferring a patient to ALS staff, interference should be: **Minimized**.
- After assuming care of a cardiac arrest patient from an EMT, the paramedic should remember that: **The EMT can provide valuable information** (or continue prior interventions as appropriate).

5. Team Dynamics & Error Prevention

- **Infrequently working teams**: Function best in environment that **supports mutual respect and communication**.
- **Problem with team member not affecting care**: Team leader should **address privately after call**.
- **When assisting ALS**: BLS EMT performs skill outside scope → **Liable for negligence**.
- **Assisting paramedic with advanced intervention**: Focus on **supporting the procedure** (e.g., cricoid pressure for intubation).
- **Paramedic LEAST likely to ask EMT**: **Perform endotracheal intubation** (ALS skill).
- **When assisting paramedic with endotracheal intubation**: EMT most likely asked to **Apply cricoid pressure** (Sellick maneuver).
- **To be a great EMT, strive for**: **Continuous improvement and teamwork**.
- **Health care teams that infrequently train/work together**: **May have communication challenges** (or reduced effectiveness).
- **Health care providers who infrequently work together**: Function effectively if environment **supports and promotes mutual respect**.
- **EMT states "Why even splint... only going to remove it"**: Indicates **Lack of understanding of continuum of care** (or poor team mindset).

Quick Reference Table (High-Yield Answers)

Question Theme	Key Answer
Critically injured, delay for splint forearm	Respectfully question team leader (advocate for rapid transport)
Effective team leader	Help the team accomplish goals
Ventilate 20 vs 10 breaths/min correction	Closed-loop communication
Independent group	Individual accountability only
Interdependent group failure	Whole team affected
Group vs team	Team works interdependently

Premature diagnosis error	Anchoring bias
Continuum of care	Consistent care from contact to discharge
Pit crew CPR dependent on	Clear roles and practice
Great EMT strive for	Continuous improvement/teamwork
BLS performs ALS skill	Negligence/liability
Assisting advanced intervention focus	Supporting the procedure
Independent group member expect	Individual responsibility
EMS decision making first	Scene safety/primary assessment
Closed-loop example	Repeat back and confirm
Facilitate accurate handoff	Structured format (e.g., SBAR)
Assist intubation	Apply cricoid pressure
Paramedic least likely ask EMT	Perform intubation
Step after patient transferred	Documentation/review
"Why splint if they'll remove it"	Lack of continuum of care understanding
Shotgun observation	Situational awareness
Transfer to ALS interference	Minimized
Transferring care	Clear and concise

Study Tips for Chapter 9

- **Memorize CRM principles** — think aviation: Situational awareness, communication, leadership/followership, decision-making.
- Practice **closed-loop** examples — repeat back orders.
- Focus on **team vs group** — interdependent wins in EMS.
- Know **handoff** — structured, professional, include key history.
- Review **advocacy** — speak up respectfully for patient safety.