Wisconsin Standardized Emergency Medical Responder (EMR) Curriculum

Core Content

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Wisconsin Department of Health Services
EMS Unit

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2013 – Wisconsin Emergency Medical Responder (EMR)
Core Content Curriculum

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0.0 – Introduction

0.1 – Wisconsin Emergency Medical Responder (EMR) Program Outcomes

Upon successful completion of a Wisconsin EMR program, the student should be able to:

1. Prepare for incident response and EMS operations.
2. Integrate pathophysiological principles and assessment findings for a variety of patient encounters.
3. Demonstrate EMR skills associated with established standards and procedures for a variety of patient encounters.
4. Communicate effectively with others.
5. Demonstrate professional behavior.
6. Meet state and national competency requirements for EMR credentialing.

0.2 – Curriculum Background and EMS Training Center Adaptation

The Wisconsin 2013 EMR Curriculum was adapted from the January 2009 "National Emergency Medical Services Education Standards – Emergency Medical Responder Instructional Guidelines" as published by the National Highway Traffic Safety Administration, under the United States Department of Transportation.

The Wisconsin First Responder Scope of Practice integrated into this document was defined by the State EMS Board Physicians Advisory Committee, based upon their modifications to the February 2007 "National EMS Scope of Practice Model" as published by the National Highway Traffic Safety Administration, under the United States Department of Transportation.

It is recognized that additional content may be added at the discretion of the EMS Training Center to meet local needs or requirements.

Objectives are divided into Cognitive, Psychomotor, and Affective domains (denoted by a C, P, and A, respectively, before the objective number).

0.3 – Contribution Acknowledgement

This curriculum document adaptation is based upon the work of the following individuals (listed alphabetically):

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0.4 – Course Pre-/Co-Requisites and Additional Modules

On numerous occasions, the EMR curriculum will reference American Heart Association ("AHA") guidelines. As a pre- or co-requisite (as determined by the respective WI Department of Health Services (DHS) -approved EMS Training Center) to the EMR course, students are required to complete an AHA BLS for Healthcare Provider (or equivalent) course. Students cannot successfully complete the EMR course unless credentialed to the AHA BLS for Healthcare Provider (or equivalent) level. Local WI Department of Health Services (DHS)-approved EMS Training Centers may denote a specific deadline date for acquiring such a credential so long as such a date is prior to the conclusion of the EMR course offering. Hours associated with completing an AHA BLS or Healthcare Provider (or equivalent) course are considered separate from those denoted as a part of the EMR course.

The National Education Standards stipulate completion of both IS-700 (NIMS) and I-100 (ICS) training. While included within the curriculum, it is the responsibility of the student's affiliated service/employer to ensure all employees are appropriately trained in NIMS and ICS disciplines. While individual WI DHS-approved EMS Training Centers have the ability to include these disciplines within their EMR course offerings, such inclusion is not mandated and has not been considered in the calculation of potential course hours.

The National Education Standards stipulate completion of Hazardous Waste Operations and Emergency Response (HAZWOPER) training compliant with 29 CFR 1910.210 (q)(6)(i), First Responder Awareness Level. While included within the curriculum it is the responsibility of the student's affiliated service/employer to ensure all employees are appropriately trained in hazardous materials awareness principles. While individual WI DHS-approved EMS Training Centers have the ability to include this training within their EMR course offerings, such inclusion is not mandated and has not been considered in the calculation of potential course hours.

The WI DHS EMS Unit recognizes a statewide EMR scope of practice that exceeds the requisite knowledge contained within the "base" EMR curriculum given the inclusion of several optional skills. Services and personnel wishing to expand their local scope of practice to include any of these optional disciplines must complete additional training beyond that of the "base" EMR curriculum. Optional modules are denoted as such toward the end of this document and are not to be taught as a part of a "base" EMR course.

0.5 – Course Structure and Topical Hour Guidelines

While the curriculum contained within this document is structured/organized as provided in the Educational Standards, the following topic progression and associated hours are recommended (*the following table does not include hours associated with clinical and/or field experiences*):

Topic	Didactic	Laboratory	Total
1.0 – Preparatory	3.5	2	5.5
2.0 – Pharmacology	0.5	0	0.5
3.0 – Airway Management, Respiration, and Artificial Ventilation	4	6	10
4.0 – Patient Assessment	4	5.5	9.5
5.0 – Medicine	1	2	3
6.0 – Shock and Resuscitation	1	2	3
7.0 – Trauma	3.5	2	5.5
8.0 – Special Patient Populations	4	2	6
9.0 – EMS Operations	6	0	6
Total	**27.5**	**21.5**	**49**

It is recognized that state-approved EMS training centers have the ability, and are highly encouraged, to provide instruction using various educational methodologies (e.g., traditional classroom lecture, hybrid, online, open labs, interactive television, clinical/field partnerships, and simulation). Nothing within this curriculum document is intended to mandate minimum contact hours (didactic or lab) or to limit individual state-approved EMS training centers from employing various educational methodologies as they deem appropriate so long as the curriculum objectives contained herein are delivered.

The hours delineated above are general guidelines or recommendations, not mandates. Time associated with any clinical and/or field experiences (if included or required by the local EMS Training Center) is in addition these hours.

Within the curriculum, students are often asked to "demonstrate the assessment and management" of patients with varying medical complaints. Given that no clinical or field time is mandated at the EMR level, such patient experiences may be simulated (using live actors, high-fidelity mannequins, or low-fidelity mannequins). Scenario-based demonstrations are encouraged unless the demonstration is of a specific skill.

All skills and procedures are required to be taught in compliance with the current *State of Wisconsin Standards & Procedures of Practical Skills Manual*.

1.0 – Preparatory

Uses simple knowledge of the Emergency Medical Services (EMS) system, safety/well-being of the Emergency Medical Responder (EMR), and medical/legal issues at the scene of an emergency while awaiting a higher level of care

1.1 EMS Systems

Objective	Educational Standard
1.1.1 – The Emergency Medical Services (EMS) System	
C 1.1.1.1 – Explore current EMS systems	1. Types of systems in EMS a. Fire-based b. Third service c. Hospital-based Delivery may be different, but the goal is the same (based upon community needs/resources)
C 1.1.1.2 – Recognize the National highway Traffic Safety Administration (NHTSA) as the lead coordinating agency	
C 1.1.1.3 – Identify methods to access emergency medical services	1. Public Safety Access Point (PSAP) a. Most communities access through 9-1-1
C 1.1.1.4 – Examine the educational components within the EMS system	1. National scope of practice model a. Description of the profession b. Prehospital personnel levels 2. National EMS education standards
C 1.1.1.5 – Examine mechanisms by which authorization is provided to practice emergency medicine	1. State EMS office a. Wisconsin State Statute 256 b. Wisconsin Administrative Rule DHS 110 c. Determines scope of practice d. Licenses prehospital personnel 2. Medical oversight a. Protocols b. Quality improvement c. Administrative 3. Local credentialing 4. Employer policies and procedures
1.1.2 – Roles, Responsibilities, and Professionalism of EMS Personnel	
C 1.1.2.1 – Differentiate the roles and responsibilities of EMRs	1. Maintain equipment readiness 2. Safety a. Personal b. Patient c. Others on scene 3. Provide scene evaluation and summon additional resources as needed 4. Gain access to the patient 5. Perform patient assessment 6. Administer emergency medical care while awaiting arrival of additional medical resources 7. Provide emotional support a. Patient b. Patient family

	c. Other responders 8. Maintain continuity of care a. Definition b. EMR is the first step in the EMS care ladder 9. Maintain medical and legal standards and assure patient privacy 10. Maintain community relations
C 1.1.2.2 – Summarize professionalism as it applies to the EMR	1. Characteristics of professional behavior a. Integrity b. Empathy c. Self-motivation d. Appearance and hygiene e. Self-confidence f. Knowledge of limitations g. Time management h. Communications i. Teamwork j. Respect k. Tact l. Patient advocacy m. Careful delivery of service 2. Maintaining certification a. Personal responsibility b. Continuing education c. Skill competency d. Criminal implications e. Fees
A 1.1.2.3 – Model professional behavior	1. Integrity 2. Empathy 3. Self-motivation 4. Appearance and personal hygiene 5. Self-confidence 6. Communications 7. Time management 8. Teamwork and diplomacy 9. Respect 10. Patient advocacy 11. Careful delivery of service
A 1.1.2.4 – Relate the importance of maintaining a professional appearance when on duty in view of the public	
A 1.1.2.5 – Incorporate diversity and non-discriminatory conduct into routine activities	1. Race 2. Ethnic 3. Culture 4. Age 5. Gender 6. Orientation (sexual) 7. Socioeconomic status
1.1.3 – Quality Improvement	
C 1.1.3.1 – Illustrate how quality improvement is a dynamic system for continually evaluating and improving care	1. Patient safety 2. Significant – one of the most urgent health care challenges 3. How errors happen a. Skills-based failure

	b. Rules-based failure c. Knowledge-based failure 4. How the EMR can help reduce errors a. Debrief calls b. Constantly question assumptions c. Use decision aids d. Ask for help

1.2 – Research

Objective	Educational Standard
1.2.1 – Impact of Research on EMR Care	
C 1.2.1.1 – Defend how research findings are important to identify what should be changed in EMS assessment and management and to improve patient care and outcomes (i.e., CPR guidelines change based on current research)	
C 1.2.1.2 – Summarize how quality assurance research for an EMS system can improve service delivery	
C 1.2.1.3 – Investigate data collection methods as they apply to EMS research	

1.3 – Workforce Safety and Wellness

Objective	Educational Standard
1.3.1 – Standard Safety Precautions	
C 1.3.1.1 – Defend the importance of a baseline health assessment for EMRs	1. Before working in health care, have a physical examination to determine baseline health status 2. Immunizations should be current while practicing in health care: a. Tetanus b. Hepatitis B c. Measles/Mumps/Rubella (German Measles) d. Chicken Pox (Varicella) e. Influenza f. Screening for Tuberculosis recommended
C 1.3.1.2 – Support the importance of hand washing	
C 1.3.1.3 – Justify adherence to standard precautions and OSHA regulations	
C 1.3.1.4 – Explain the importance of safe operation of EMS/patient care equipment	
C 1.3.1.5 – Explore the need for environmental control	
C 1.3.1.6 – Summarize the need for occupational health activities and blood borne pathogens precautions	1. Immunizations 2. Sharps
1.3.2 – Personal Protective Equipment	
C 1.3.2.1 – Explain how exposure to diseases spread through blood, body fluids, or respiratory droplets are best prevented by the use of standard precautions	
C 1.3.2.2 – Differentiate between recognized standard precautions	1. Hand hygiene a. The most important measure to prevent the spread of infection b. Wash hands after gloves are removed c. Hand cleansing i. Soap and water ii. Alcohol-based hand rub d. Cleanse hands with soap and dry hands thoroughly e. Cleanse hands and other exposed skin immediately if they are exposed to contaminants, such as blood and body fluids, or after use of the toilet 2. Gloves a. Wear gloves for patient contacts where there is a risk of exposure to blood or body fluids b. If EMR has a latex allergy, use an alternative type of glove 3. Eye protection or face shield a. Goggles or full-face shield b. Use if there is a risk of splash or spray of

	body fluids i. Reduces risk of contamination of eyes, nose, or mouth ii. Examples include care of patients who are: 1. Bleeding profusely 2. Delivering a baby 4. Masks a. High-efficiency particulate air (HEPA) or N95 mask on EMR b. Surgical mask on patient 5. Gown a. In situations with large amounts of blood or body fluids, disposable gown should be worn b. If clothing becomes contaminated i. Remove as soon as possible ii. Shower as soon as possible iii. Wash clothes in a separate load iv. Preferably at work v. Sharps (needles)
C 1.3.2.3 – Outline the steps to follow if an exposure occurs	1. Clean the contaminated area thoroughly with soap and water 2. If eyes are involved, flush with water for 20 minutes 3. Report the exposure to the EMS providers who take over care of the patient 4. Report the exposure to the appropriate person identified in your department infection control plan 5. Seek immediate follow-up care as identified in your department infection control plan 6. Document: a. Time and date of the exposure, b. Circumstances of the exposure, c. Actions taken after the exposure, and d. Other information required by your department
C 1.3.2.4 – Determine the appropriate process for addressing soiled equipment or vehicles	1. Cleaning 2. Disinfection 3. Disposal
A 1.3.2.5 – Incorporate the routine and proper use of personal protective equipment (PPE) within personal practice	
1.3.3 – Stress Management	
C 1.3.3.1 – Distinguish EMS situations that can be stressful for EMS personnel	1. Dangerous situations 2. Physical and psychological demands 3. Critically ill or injured patients 4. Dead and dying patients 5. Overpowering sights, smells, and sounds 6. multiple-patient situations 7. Angry or upset patients, family, and bystanders
C 1.3.3.2 – Appraise the need for EMR to be supportive	

C 1.3.3.3 – Specify appropriate EMR actions during and immediately after a stressful incident	1. Administer appropriate medical care 2. Cooperate with other personnel a. Law enforcement b. Other EMS providers 3. Be calm, supportive, and nonjudgmental a. Allow patients to express feelings, unless their behavior is harmful to themselves or others
C 1.3.3.4 – Contrast the warning signs of personal stress	1. Difficulty sleeping and nightmares 2. Irritability with coworkers, family, and friends 3. Feelings of sadness, anxiety, or guilt 4. Indecisiveness 5. Loss of appetite 6. Loss of interest in sexual activity 7. Isolation 8. Loss of interest in work 9. Physical symptoms 10. Feelings of hopelessness 11. Alcohol or drug misuse or abuse 12. Inability to concentrate
C 1.3.3.5 – Outline strategies to manage personal stress	1. Talk about feelings 2. See a professional counselor 3. Make lifestyle changes that can reduce stress (i.e., dietary changes, limiting caffeine and alcohol intake, exercise, and the use of relaxation techniques)
C 1.3.3.6 – Investigate realities of dealing with death and dying	1. Attempt to resuscitate patients without a pulse or not breathing unless: a. Do not resuscitate (DNR) order that meets local guidelines is present at scene b. Obvious signs of death i. Tissue decay (putrefaction) ii. Rigor mortis 1. Stiffening of joints that occurs after death 2. Assess two or more joints to verify iii. Injuries not compatible with life c. Attempting resuscitation would endanger life of EMR 2. How to assist grieving patients or family members a. Responses to death and dying are very individual b. People do not always experience them all or in any particular order i. Denial ii. Anger 1. Patient or family projects feelings of anger toward other people, especially those closest to them 2. Do not take anger personally, even though it may seem to be directed toward you 3. Be alert to anger that may become

	physical and endanger EMR or others iii. Bargaining 1. Patient or family may attempt to negotiate with a spiritual being or even with EMS providers in an effort to extend life 2. Be non-judgmental at this time iv. Depression 1. Patient or family exhibits sadness and grief 2. Affected person is usually withdrawn, sad, and may cry continually 3. Allow the affected person to express his or her feelings and to help him or her understand that these are normal feelings associated with death v. Acceptance 1. Patient or family ultimately accepts the situation and incorporates the experience into the activities of daily living in an effort to survive 2. Use good listening skills and a non-judgmental attitude in this phase
A 1.3.3.7 – Evaluate the importance of recognizing human responses to death and dying	
A 1.3.3.8 – Justify EMR use of stress-reduction techniques	
1.3.4 – Prevention of Response-Related Injuries	
C 1.3.4.1 – Examine exposures to infectious diseases	1. How infectious diseases are spread a. Through the air by coughing b. Direct contact with infected blood or body fluid c. Needle sticks d. Contaminated food e. Sexually transmitted 2. Exposure a. Contact with blood or body fluids of a person with an infectious disease i. Patient's blood enters a cut on the EMR's hand ii. EMR is stuck with a needle used by a patient iii. Bloody saliva splashes into the EMR's eyes or mouth b. Close contact with a person with an airborne disease (i.e., Influenza, Tuberculosis, etc.)
C 1.3.4.2 – Relate common injury prevention methods	1. Good personal habits a. Sleep b. Nutrition c. Current immunization status d. Fitness 2. Safe response to vehicle collisions

	a. Traffic hazards b. Deployment of air bags c. Power lines d. Vehicle stability e. Other hazards i. Fire ii. Leaking fluids f. Violent or potentially violent persons g. Risk factors for violence h. Safe response i. Law enforcement ii. Awareness iii. Restraint 3. Hazardous material a. Definition b. Assess the scene for signs of hazardous materials if suspected i. Binoculars ii. Look for placards iii. Notify dispatch c. Do not approach the scene if hazardous materials release is suspected i. Remain uphill and upwind a safe distance from the scene ii. Await specialized resources
C 1.3.4.3 – Analyze the proper lifting and moving of patients	1. Body mechanics a. Keep back straight b. Maintain a firm grip on stretcher or patient c. Avoid twisting of the body d. Maintain firm footing e. Communicate next move clearly to partner or team f. Use good posture 2. Know your own physical limitations a. Safe lifting of cots and stretchers i. Power lift ii. Squat lift b. Carrying i. Determine the weight to be lifted ii. Know Your own limitations c. Communicate with partner or team d. Keep the weight close to the body e. Flex at hips and bend at knees, not waist 3. Reaching a. General guidelines b. Correct reaching for log rolling 4. Pushing and pulling techniques
C 1.3.4.4 – Explain the use of emergency moves	1. Immediate danger to the patient a. Fire or danger of fire b. Close proximity of explosives or other imminent hazards c. To gain access to others who need lifesaving care d. Cardiac arrest patient

	2. Types of emergency moves a. Pull toward the long axis of the body if possible b. Clothing drag c. Blanket drag d. Firefighter's drag e. Firefighter's carry 3. Urgent moves a. Patients with altered mental status b. Inadequate breathing or shock c. Other situations that are potentially dangerous to the patient 4. Techniques a. Direct ground lift b. Extremity lift c. Moving patients from a bed to stretcher i. Direct carry ii. Draw sheet
C 1.3.4.5 – Differentiate between ways of positioning patients	1. Position of comfort a. Indications for use b. Techniques 2. Recovery position a. Indications for use b. Techniques 3. Supine a. Indications for use b. Techniques
C 1.3.4.6 – Explore the use of patient restraints	1. Consider medical or trauma as cause for altered mental status 2. Restrain only if patient is a danger to self or others a. When using restraints, have police present if possible b. Get approval from medical direction c. Follow local protocols 3. If restraints must be used: a. Have adequate help b. Plan activities c. Use only the force necessary for restraint d. Estimate range of motion of patient's arms and legs and stay beyond range until ready e. Once decision has been made, act quickly f. Have one EMR talk to patient throughout restraining g. Approach with four persons, one assigned to each limb, all at the same time h. Secure limbs with equipment approved by medical direction i. Never secure a patient face down; maintain access to the airway at all times j. Consider the use of oxygen by non-rebreather mask k. Reassess airway, breathing, and circulation frequently

	l. Document indications for restraining patient and technique of restraint m. Avoid unnecessary force 4. Types of restraints
P 1.3.4.7 – Demonstrate an emergency move of a patient	
P 1.3.4.8 – Demonstrate a non-emergency move of a patient	
P 1.3.4.9 – Demonstrate the use of appropriate equipment to move a patient	

1.4 – Documentation

Objective	Educational Standard
1.4.1 – Recording Patient Findings	
C 1.4.1.1 – Explain the importance of prehospital care reports	1. Functions 2. Continuity of care 3. Administrative 4. Legal 5. Patient care worksheet 6. Wisconsin Ambulance Run Data System (WARDS) 7. Required reporting – advanced skills use
C 1.4.1.2 – Summarize items to be documented on a prehospital care report	1. Time of events 2. Assessment findings 3. Emergency medical care provided 4. Changes in the patient after treatment 5. Observations at the scene 6. Disposition a. Refused care b. Transferred care to…
A 1.4.1.3 – Defend the importance of completing documentation completely and within a timely fashion	

1.5 – EMS System Communication

Objective	Educational Standard
1.5.1 – Communications	
C 1.5.1.1 – Defend the need to be an effective communicator as an EMR	1. Call for resources 2. Transfer care of patient a. When other EMS personnel arrive on scene, identify yourself and give a verbal report including: i. Current patient condition ii. Patient's age and gender iii. Chief complaint iv. Brief, pertinent history of what happened v. How the patient was found vi. Major past illnesses vii. Vital signs viii. Pertinent findings of the physical exam ix. Emergency medical care given x. Patient's response to care 3. Interact within the team structure a. Communicate concerning the patient and scene to: i. Law enforcement ii. Other responders

1.6 – Therapeutic Communication

Objective	Educational Standard
1.6.1 – Principles of Communicating with Patients in a Manner that Achieves a Positive Relationship	
C 1.6.1.1 – Investigate factors for effective communication	1. Introduction a. Self b. Partners/team c. Patient introduction 2. Privacy 3. Interruptions 4. Physical environment a. Lighting b. Noises and outside interference c. Distracting equipment d. Distance e. Equal seating, eye level 5. Note-taking
C 1.6.1.2 – Summarize interviewing techniques	1. Using questions a. Open-ended questions b. Closed or direct questions c. One question at a time d. Choose language the patient understands 2. Hazards of interviewing a. Providing false assurance or reassurance b. Giving advice c. Leading or biased questions d. Talking too much e. Interrupting f. Using "Why" questions
A 1.6.1.3 – Portray empathetic communication techniques with patients	
A 1.6.1.4 – Ensure compassion when providing care	

1.7 – Medical/Legal and Ethics

Objective	Educational Standard
1.7.1 – Consent	
C 1.7.1.1 – Determine conditions for consent	1. Decision-making capacity a. Intellectual capacity b. Age of majority (18 years old in most states) c. Ability to make decisions d. May be impaired in cases of: i. Intoxication (alcohol/drugs) ii. Serious injury or illness iii. Mental incompetence iv. Legal incompetence
C 1.7.1.2 – Explain expressed consent	1. Patient gives permission for care a. Informed consent b. Understanding implications of actions
C 1.7.1.3 – Explain implied consent	1. Inability to consent arising from medical condition 2. Pediatrics
C 1.7.1.4 – Identify criteria to be considered an emancipated minor	1. Civil rights obtained by person below age of majority (i.e. ,marriage) 2. Economic self-sufficiency 3. Military service 4. Not formally/commonly recognized in Wisconsin
C 1.7.1.5 – Examine consent as it applies to pediatric patients	1. Parental control 2. Courts assume parental control
C 1.7.1.6 – Explain refusal of care	1. Patients with decision-making capacity of legal age have a right to refuse care 2. Follow local policies related to refusal of care 3. If care is refused, tell the patient: a. Treatment that is needed i. Why it is needed ii. Alternative treatments b. Risks of refusing care c. That he/she may call EMS again if he/she changes his/her mind d. Follow local protocols related to refusal under supervision of EMR 4. Notify a. Responding EMS providers b. Medical direction (if required in local policies) 5. Document the refusal according to local policy a. Have patient sign refusal documentation b. Have a witness to patient's signature
1.7.2 – Confidentiality	
C 1.7.2.1 – Examine the obligation to protect patient information	
C 1.7.2.2 – Summarize patient confidentiality provisions within the Health Information Portability and Accountability Act (HIPAA)	1. Description 2. Protected health information (PHI) a. Identifies the patient b. Relates to physical health, mental health, and treatment

	c. Can be written or verbal 3. Permitted disclosures of PHI without written patient consent a. Treatment, payment, and operations b. Special situations i. Mandatory reporting ii. Public health iii. Law enforcement (specific situations only) iv. Certain legal situations
1.7.3 – Advanced Directives	
C 1.7.3.1 – Differentiate between types of advanced directives	1. Do not attempt resuscitation (DNAR)/do not resuscitate (DNR) order a. Wisconsin Administrative Rule DHS 154 b. Terminal disease c. Medical futility (as discussed in the current International Liaison Committee on Resuscitation [ILCOR] consensus statement) 2. Living wills/declarations to physicians a. Advance directives indicating a patient's wishes b. May not address the EMR in all states 3. Surrogate decision-makers a. Durable power of attorney for healthcare b. Healthcare proxy c. Next of kin
A 1.7.3.2 – Evaluate the need for advanced directives and end-of-life planning	
1.7.4 – Types of Court Cases	
C 1.7.4.1 – Differentiate various civil (tort) actions that may involve an EMR	1. Abandonment 2. Negligence a. A failure to follow the standard of care or worsens the patient's injury or illness b. Four elements: i. Duty to act ii. Breach of duty 1. Definition 2. Failure to perform care needed 3. Performing care incorrectly iii. Harm (damage to patient) iv. Proximate causation 3. Abandonment
C 1.7.4.2 – Differentiate various criminal actions that may involve an EMR	1. Assault 2. Battery
1.7.5 – Evidence Preservation	
C 1.7.5.1 – Outline evidence preservation considerations for the EMR	1. Emergency medical care of the patient is the EMR's priority 2. Do not disturb any item at the scene unless it is required for providing emergency medical care 3. Observe and document anything unusual at the scene 4. Do not cut through bullet or knife holes in clothing

	5. Work closely with the appropriate law enforcement authorities
1.7.6 – Statutory Responsibilities	
C 1.7.6.1 – Explain scope of practice as it applies to the EMR	1. Definition 2. Authority to practice (Medical Practice Act as applicable) 3. Professional responsibility 4. Duties to patient, medical director, and public 5. Government and medical oversight a. Intended to protect the public b. Role of medical oversight i. On-line medical direction ii. Off-line medical direction
1.7.7 – Mandatory Reporting	
C 1.7.7.1 – Defend mandatory reporting requirements	1. Varies by state 2. Follow state requirements 3. Legally compelled to notify authorities a. Abuse or neglect (child, elder, or domestic) b. Some infectious diseases c. Certain crimes 4. Legal Liability for failure to report 5. Fully document objective findings
1.7.8 – Ethical Principles	
C 1.7.8.1 – Explore ethical principles	1. Morals – concept of right and wrong 2. Ethics – branch of philosophy or study of morality 3. Applied ethics – use of ethical values
C 1.7.8.2 – Contrast ethical decision-making models	1. Do no harm 2. In good faith 3. Patient's best interest
A 1.7.8.3 – Model ethical behavior	

1.8 – Anatomy and Physiology

Objective	Educational Standard
1.8.1 – Anatomy and Body Functions	
C 1.8.1.1 – Explain standard anatomic terms	1. Patient-oriented directions (patient's left and patient's right) 2. Anterior and posterior 3. Midline, medial, lateral, inferior, and superior 4. Distal and proximal
C 1.8.1.2 – Identify skeletal system components	1. Components a. Skull b. Face c. Vertebral column d. Thorax i. Ribs ii. Breastbone e. Pelvis f. Upper extremities g. Lower extremities 2. Joints
C 1.8.1.3 – Explain the function of the muscular system	
C 1.8.1.4 – Identify respiratory system components and function	1. Upper airway a. Nose b. Mouth/teeth c. Tongue/jaw d. Throat/pharynx e. Voice box/larynx f. Epiglottis 2. Lower airway a. Trachea/windpipe b. Bronchi c. Lungs and bronchioles d. Alveoli 3. Structures that support ventilation a. Chest wall b. Diaphragm c. Intercostal muscles 4. Function a. Ventilation b. Respiration c. Alveolar/capillary gas exchange
C 1.8.1.5 – Identify circulatory system components and function	1. Heart a. Chambers b. Coronary arteries 2. Blood vessels a. Arteries b. Veins c. Capillaries 3. Blood a. Red blood cells b. Other blood cells c. Plasma 4. Function

	a. Blood flow b. Tissue/cell gas exchange c. Blood clotting
C 1.8.1.6 – Identify the structures and function of the skin	1. Structures a. Epidermis b. Dermis c. Subcutaneous layer 2. Functions of the skin a. Protection b. Temperature control
1.8.2 – Life Support Chain	
C 1.8.2.1 – Differentiate the fundamental elements of the life support chain	1. Oxygenation a. Alveolar/capillary gas exchange b. Cell/capillary gas exchange 2. Perfusion a. Oxygen b. Glucose c. Removal of carbon dioxide and other waste products 3. Cells need oxygen and glucose to make energy so they can perform their functions
C 1.8.2.2 – Identify potential issues that may impact the fundamental elements of the life support chain	1. Composition of ambient air 2. Patency of the airway 3. Mechanics of ventilation 4. Regulation of respiration 5. Transport of gases 6. Blood volume 7. Effectiveness of the heart as a pump 8. Blood vessel size and resistance
1.8.3 – Age-Related Variations for Pediatrics and Geriatrics	
C 1.8.3.1 – Differentiate age-related variations in anatomy and physiology for pediatric and geriatric patients	

1.9 Medical Terminology

Objective	Educational Standard
1.9.1 – Medical Terminology	
C 1.9.1.1 – Construct medical terms through the use of simple medical prefixes, suffixes, and roots	1. Cardio- 2. Neuro- 3. Hyper- 4. Hypo- 5. Naso- 6. Oro- 7. Arterio- 8. Hemo- 9. Therm- 10. Vaso- 11. Tachy- 12. Brady-

1.10 – Pathophysiology

Objective	Educational Standard
1.10.1 – Respiratory Compromise	
C 1.10.1.1 – Compare the impact of impaired airway, respiration, or ventilation	1. Airway a. Movement of oxygenated air into and out of the lungs is blocked b. Possible causes: i. Foreign body airway obstruction (FBAO) ii. Tongue blocks airway in unconscious patient iii. Blood or secretions iv. Swelling v. Trauma to the neck 2. Respiration a. Inadequate oxygen in air that is inhaled b. Possible causes: i. Low oxygen environment ii. Poison gases iii. Infection of the lungs iv. Illness that narrows the airway and causes wheezing v. Excess fluid in the lungs vi. Excess fluid between the lungs and blood vessels vii. Poor circulation 3. Ventilation a. Rate or depth of breathing is not adequate b. Insufficient volume of air moved into and out of the lungs c. Possible causes: i. Unconscious or altered level of consciousness ii. Injury to the chest iii. Poisoning or overdose iv. Diseases
1.10.2 - Shock	
C 1.10.2.1 – Contrast pathophysiological reasons for impaired blood flow to the organs and cells	1. Heart a. Rate is too slow or very fast b. Contractions are too weak c. Related to heart disease, poisoning, excessive rate, or depth of artificial ventilation 2. Blood vessels a. Unable to constrict b. Related to neck fractures with spinal cord injury, infection, or anaphylaxis 3. Blood a. Decrease in the amount of blood or blood components in the blood vessels b. Related to bleeding, vomiting, diarrhea, or burns

1.11 – Life Span Development

Objective	Educational Standard
1.11.1 – Infancy (Birth to One Year)	
C 1.11.1.1 – Summarize normal infant physiological findings	1. Vital signs a. Normal heart rate in newborns is between 140 and 160 bpm b. Normal respiratory rate in newborns is between 40 and 60 rpm and drops to 30 to 40 rpm after first few minutes of life c. Average systolic blood pressure increased from 70 mmHg at birth to 90 mmHg at one year 2. Weight a. Normally 3.0 to 3.5 kg at birth 3. Pulmonary system a. Airways are more easily obstructed b. Infants are primarily nose breathers until four weeks c. Rapid respiratory rates lead to rapid heat and fluid loss 4. Nervous system a. Strong, coordinated suck and gag b. Well-flexed extremities c. Extremities move equally when infant is stimulated
1.11.2 – Toddler (12 to 36 Months) and Preschool-Age (Three to Five Years)	
C 1.11.2.1 – Summarize normal toddler and preschool-age physiological findings	1. Vital signs a. Normal heart rate is between 80 and 130 bpm in toddlers and between 80 and 120 bpm in preschool-age children b. Normal respiratory rate is between 20 and 30 rpm in both toddlers and preschool-age children c. Normal systolic blood pressure is between 70 and 100 mmHg in toddlers and between 80 and 110 mmHg in preschool age children d. Normal temperature is between 96.8 and 99.6°F 2. Nervous system
1.11.3 – School-Age Children (Six to 12 Years)	
C 1.11.3.1 – Summarize normal school-age physiological findings	1. Vital signs a. Normal heart rate is between 70 and 110 bpm b. Normal respiratory rate is between 20 and 30 rpm c. Normal systolic blood pressure is between 80 and 120 mmHg d. Normal temperature is 98.6°F 2. Bodily functions a. Loss of primary teeth and replacement with permanent teeth begins
1.11.4 – Adolescence (13 to 18 Years)	
C 1.11.4.1 – Summarize normal adolescent	1. Normal heart rate is between 55 and 105 bpm

physiological findings	2. Normal respiratory rate is between 12 and 20 rpm 3. Normal systolic blood pressure is between 80 and 120 mmHg
1.11.5 – Early Adulthood (19 to 40 Years)	
C 1.11.5.1 – Summarize normal early adulthood physiological findings	
1.11.6 – Middle Adulthood (41 to 60 Years)	
C 1.11.6.1 – Summarize normal middle adulthood physiological findings	1. Normal heart rates average 70 bpm 2. Normal respiratory rates average 16 to 20 rpm 3. Normal blood pressure average 120/80 mmHg 4. Vision and hearing become less effective 5. Cardiovascular health becomes a concern 6. Cancer strikes in this age group often 7. Weight control becomes more difficult 8. Menopause in women in late forties and early fifties
C 1.11.6.2 – Summarize normal middle adulthood psychological findings	1. Approach problems more as challenges than threats 2. Empty-nest syndrome 3. Often burdened by financial commitments to elderly parents as well as young adult children
1.11.7 – Late Adulthood (61 Years and Older)	
C 1.11.7.1 – Summarize normal late adulthood physiological findings	1. Normal vital signs are dependent on the patient's physical health status 2. Cardiovascular function changes a. Circulation efficiency decreases b. Tachycardia not well tolerated c. Functional blood volume decreases 3. Respiratory system a. Chest wall weakens b. Gas exchange through alveoli is diminished c. Lung capacity is diminished

1.12 – Public Health

Objective	Educational Standard
1.12.1 – Basic Principles of Public Health	
C 1.8.3.1 – Determine how EMS interfaces with public health	1. EMS is a public health system a. EMS provides a critical public health function b. Collaborations with other public health agencies 2. Roles for EMS in public health a. Health prevention and promotion i. Primary prevention – preventing disease development 1. Vaccination 2. Education ii. Secondary prevention – preventing the complications and/or progression of disease b. Disease surveillance i. EMS providers are first-line caregivers ii. Patient care reports may provide information on epidemics of disease 3. Injury prevention a. Safety equipment b. Education i. Car seat safety ii. Seat belt use iii. Helmet use iv. Driving under the influence v. Falls vi. Fire

2. 0 – Pharmacology

Uses simple knowledge of the medications that EMR may self-administer or administer to a peer in an emergency

2.1 – Medication Administration

Objective	Educational Standard
2.1.1 – Self Administration (IM Injection by Auto-Injector)	
C 2.1.1.1 – Analyze the advantages, disadvantages, and techniques associated with the self-administration of auto-injected medications	
2.1.2 – Peer Administration (IM Injection by Auto-Injector)	
C 2.1.2.1 – Analyze the advantages, disadvantages, and techniques associated with the peer administration of auto-injected medications	

2.2 – Emergency Medications

Objective	Educational Standard
2.2.1 – Specific Medications (i.e., Chemical Antidote Auto-Injector Devices)	
C 2.1.1.1 – Outline the names, effects, indications, routes of administration, and dosages for emergency medications included within the WI EMR scope of practice	1. Oral glucose

3.0 – Airway Management, Respiration, and Artificial Ventilation

Applies knowledge (fundamental depth, foundational breadth) of anatomy and physiology to assure a patent airway, adequate mechanical ventilation, and respiration while awaiting EMS response for patients of all ages

3.1 – Airway Management

Objective	Educational Standard
3.1.1 – Airway Anatomy	
C 3.1.1.1 – Explore the anatomy of the upper airway tract	1. Nose 2. Mouth and oral cavity a. Alternate airway, especially in emergency b. Entrance to the digestive system c. Also involved in the production of speech d. Tongue 3. Jaw 4. Throat/pharynx a. Oropharynx b. Epiglottis c. Larynx/voice box i. Vocal cords ii. Thyroid cartilage iii. Cricoid cartilage
C 3.1.1.2 – Explore the anatomy of the lower airway tract	1. Trachea/windpipe a. Hollow tube that passes air to the lower airways b. Supported by cartilage rings 2. Bronchi a. Hollow tubes that further divide into lower airways of the lungs b. Supported by cartilage 3. Lungs a. Bronchioles i. Thin, hollow tubes leading to the alveoli ii. Remain open through smooth muscle tone b. Alveoli i. The end of the airway ii. Millions of thin-walled sacs iii. Each alveolus surrounded by capillary blood vessels iv. Site where oxygen and carbon dioxide (waste) are exchanged
3.1.2 – Airway Assessment	
C 3.1.2.1 – Outline signs of an adequate airway	1. Airway is open (can hear and feel air move in and out) 2. Patient is speaking in full sentences 3. Sound of the voice is normal for the patient
C 3.1.2.2 – Outline signs of an inadequate airway	1. Unusual sounds are heard with breathing (i.e., stridor or snoring) 2. Awake patient is unable to speak or voice sounds

	Hoarse 3. No air movement 4. Apnea 5. Airway obstruction a. Tongue b. Food c. Vomit d. Blood e. Teeth f. Foreign body
C 3.1.2.3 – Identify swelling due to trauma or infection	
3.1.3 – Techniques of Assuring a Patent Airway (Refer to Current AHA Guidelines)	
C 3.1.3.1 – Contrast manual airway maneuvers	1. Head tilt/chin lift a. Purpose b. Indications c. Contraindications d. Complications e. Procedure f. Limitation 2. Jaw thrust maneuver a. To open airway when cervical spine injury is suspected b. Procedure c. If airway is not open and jaw thrust maneuver does not open it, use head tilt/chin lift maneuver 3. Modified chin lift a. Purpose b. Indications c. Contraindications d. Complications e. Procedure f. Limitation
C 3.1.3.2 – Contrast mechanical airway devices	1. Oropharyngeal a. Purpose b. Indications c. Contraindications d. Complications e. Procedure f. Limitation
C 3.1.3.3 – Explain the techniques associated with the relief of a foreign body airway obstruction (FBAO)	
C 3.1.3.4 – Explore the technique of upper airway suctioning	1. Purpose 2. Indications 3. Contraindications 4. Complications 5. Procedure a. Mechanically powered suction devices i. Purpose ii. Indication iii. Contraindications

	iv. Complications v. Procedure vi. Limitations b. Hand-powered suction i. Purpose ii. Indication iii. Contraindications iv. Complications v. Procedure vi. Limitations 6. Limitations
P 3.1.3.5 – Demonstrate the opening and maintenance of an airway	1. Head tilt, chin lift 2. Jaw thrust 3. Modified jaw thrust 4. Suctioning 5. Oropharyngeal airway 6. Nasopharyngeal airway
3.1.4 – Consider Age-Related Variations in Pediatric and Geriatric Patients	
C 3.1.4.1 – Differentiate age-related variations in airway anatomy in pediatric and geriatric patients	

3.2 – Respiration

Objective	Educational Standard
3.2.1 – Anatomy of the Respiratory System	
C 3.2.1.1 – Review all airway anatomy covered in the Airway Management section	
C 3.2.1.2 – Examine additional respiratory system anatomy	1. Chest cage (Includes ribs and muscles) a. Intercostal muscles b. Diaphragm
C 3.2.1.3 – Examine vascular structures that support respiration	1. Pulmonary capillaries a. Picks up oxygen from the alveoli b. Releases carbon dioxide (waste) to the alveoli 2. Heart and blood vessels a. Circulates unoxygenated blood to lungs to pick up oxygen b. Circulates oxygenated blood from lungs through heart to cells of the body
3.2.2 – Physiology of Respiration	
C 3.2.2.1 – Examine the physiology of pulmonary ventilation	1. Ventilation is defined as the movement of air Into and out of the lungs 2. Patients with adequate ventilation are moving normal (or near-normal) volumes of air into and out of the lungs
C 3.2.2.2 – Examine the physiology of oxygenation	1. Refers to the amount of oxygen dissolved in blood and body fluids 2. Blood that is almost fully saturated with oxygen might be described as well-oxygenated blood
C 3.2.2.3 – Examine the physiology of respiration	1. The process by which the body captures and uses oxygen and disposes of carbon dioxide 2. External respiration 3. Internal respiration 4. Cellular respiration a. Each cells of the body performs a specific function b. Oxygen and sugar are essential to produce energy for cells to perform their function c. Produce carbon dioxide as a waste product
3.2.3 – Pathophysiology of Respiration	
C 3.2.3.1 – Examine the pathophysiology of pulmonary ventilation	1. Interruption of nervous control a. Drugs b. Trauma c. Muscular dystrophy 2. Structural damage to the thorax 3. Bronchoconstriction 4. Disruption of airway patency a. Infection b. Trauma/burns c. Foreign body obstruction d. Allergic reactions e. Unconsciousness (loss of muscle tone)
C 3.2.3.2 – Examine the pathophysiology of oxygenation	

C 3.2.3.3 – Examine the pathophysiology of respiration	1. External respiration a. Deficiencies due to closed environments b. Deficiencies due to toxic or poisonous environments 2. Internal respiration 3. Cellular respiration a. Ineffective circulation i. Shock ii. Cardiac arrest
3.2.4 – Assessment of Adequate and Inadequate Respiration (Refer to Current AHA Guidelines)	
C 3.2.4.1 – Explain the assessment of an unresponsive patient	1. Medical patients a. Open and maintain the airway using head tilt, chin lift technique 2. Trauma patients a. Open and maintain the airway using modified jaw thrust technique while maintaining manual cervical stabilization
C 3.2.4.2 – Explain the assessment of a responsive patient	1. If the patient speaks, the airway is functional But may still be at risk a. Foreign body or substances in the mouth may impair the airway and must be removed i. Finger sweep (solid objects) ii. Suction (liquids) 2. If the upper airway becomes narrowed, Inspiration may produce a high-pitched whistling sound known as stridor a. Foreign body b. Swelling c. Trauma 3. Airway patency must be continually reassessed 4. Breathing status a. Normal adult breathing b. Abnormal adult breathing i. Characteristics 1. The respiratory rate is too fast or too slow for the age of the patient ii. Management 1. Administer oxygen to all patients with abnormal breathing 2. Consider assisting breathing with a bag-valve mask with supplemental oxygen if: a. Unresponsive b. Skin is blue (cyanotic) in color 3. Rate issues a. Breathing is too fast for the age of the patient b. Breathing is too slow for the age of the patient i. Does verbal or painful stimulus increase the rate to normal? ii. Assist breathing with a bag-

	valve mask with supplemental oxygen iii. Treat patients who are occasionally gasping as if they are not breathing at all c. Breathing is absent d. Assist ventilation with a pocket mask or bag-valve mask with supplemental oxygen iii. Chest rise and fall is shallow iv. Breathing is noisy 1. Gurgling noise without secretions in the mouth 2. Wheezing v. Effort of breathing 1. Accessory muscles a. Neck b. Between ribs c. Abdomen 2. Nasal flaring 3. Tripod position
3.2.5 – Management of Adequate and Inadequate Respiration	
C 3.2.5.1 – Summarize techniques for assuring patent airway (as described in Airway Management section)	
C 3.2.5.2 – Explain techniques for assuring adequate respirations	
3.2.6 – Supplemental Oxygen Therapy	
C 3.2.6.1 – Outline portable oxygen cylinder considerations	1. Cylinder size a. D: 350 liters b. E: 625 liters 2. Regulators 3. Assembly and use of cylinders 4. Changing a cylinder a. Safe residual for operation is 200 psi 5. Securing and handling cylinders
C 3.2.6.2 – Differentiate oxygen delivery devices	1. Nasal cannula a. Purpose b. Indications c. Procedure d. Limitations 2. Non-rebreather (NRB) mask a. Purpose b. Indications c. Procedure d. Limitations
P 3.2.6.3 – Demonstrate the delivery of supplemental oxygen	1. Nasal cannula 2. Non-rebreather mask
3.2.7 – Consider Age-Related Variations in Pediatric and Geriatric Patients	
C 3.2.7.1 – Differentiate age-related variations in airway assessment and management for pediatric and geriatric patients	

3.3 – Artificial Ventilation

Objective	Educational Standard
3.3.1 – Assessment of Adequate and Inadequate Ventilation	
C 3.3.1.1 – Summarize signs adequate ventilation	1. Respiratory rate is normal 2. Respiration depth is normal 3. Effort of breathing is normal
C 3.3.1.2 – Outline signs and symptoms of inadequate ventilation	1. Abnormal work (effort) of breathing a. Muscles between ribs pull in on inhalation b. Nasal flaring c. Excessive use of abdominal muscles to breathe d. Sweating e. Sitting upright and leaning forward (tripod position) f. Fatigue from work of breathing 2. Abnormal breathing sounds a. Stridor b. Wheezing heard when patient breathes 3. Depth of breathing a. Shallow b. Markedly increased 4. Rate of breathing a. Very slow b. Very fast 5. Chest wall movement or damage a. Paradoxical b. Splinting c. Penetrating d. Asymmetric 6. Irregular respiratory pattern
3.3.2 – Oxygenation	
C 3.3.2.1 – Characterize adequate oxygenation	1. Mental status considered normal for patient 2. Skin color normal
C 3.3.2.2 – Characterize inadequate oxygenation	1. Ambient air is normal a. Enclosed space b. High altitude c. Poison gas 2. Mental status considered abnormal or altered for patient 3. Skin color/mucosa is not normal a. Cyanosis b. Pallor c. Mottling
3.3.3 – Management of Adequate and Inadequate Ventilation	
C 3.3.3.1 – Summarize management of patients with adequate ventilation	
C 3.3.3.2 – Explain management of patients with inadequate ventilation	1. May be conscious or unconscious 2. EMR must assist ventilation during respiratory Distress/failure a. Pocket mask i. Purpose ii. Indications iii. Procedure

	iv. Limitations v. Pocket mask with oxygen inlet 1. Advantages 2. Oxygen flow rate b. Bag-valve mask with reservoir i. Purpose ii. Indications iii. Procedure iv. Limitations v. Indications 1. Apnea 2. Cardiac arrest vi. Procedure 1. See manufacturer's Instructions for the specific device 2. Explain the procedure to the patient 3. Place the mask over the patient's nose and mouth 4. Initially assist at the rate at which the patient begins to inhale 5. Adjust the rate and the delivered tidal volume vii. Limitations 1. Requires oxygen 2. Difficult to maintain adequate mask seal with one-rescuer operation 3. Must have bag-valve mask device available 4. May interfere with timing of chest compressions during CPR 5. Must monitor to assure full exhalation 6. Inadequate mask seal 7. Difficult to accomplish in combative/hypoxic patients c. Sellick's maneuver (cricoid pressure) i. Use during positive pressure ventilation ii. Reduces amount of air in stomach iii. Procedure 1. Identify cricoid cartilage 2. Apply firm backward pressure to cricoid cartilage with thumb and index finger iv. Do not use if: 1. Patient is vomiting or starts to vomit 2. Patient is responsive 3. Breathing tube has been placed by advanced level providers
3.3.4 – Ventilation of an Apneic Patient	
C 3.3.4.1 – Explain the ventilation of an apneic patient	1. To oxygenate and ventilate the patient 2. Indications a. No breathing is noted b. Occasional gasping breathing is noted 3. Monitoring patient

	4. Limitations
P 3.3.4.2 – Demonstrate manual techniques for relieving a foreign body airway obstruction	1. Heimlich maneuver 2. Abdominal thrusts 3. Finger sweep 4. Back blows 5. Chest compressions
P 3.3.4.3 – Demonstrate the ventilation of a patient	1. Bag-valve mask (with supplemental oxygen) a. One person b. Two person c. Stoma 2. Pocket mask 3. Mouth-to-mouth with barrier device 4. Sellick's maneuver (cricoid pressure)
3.3.5 – Differentiate Normal Ventilation from Positive Pressure Ventilation	
C 3.3.5.1 – Differentiate normal and positive pressure ventilation	1. Air movement a. Normal ventilation i. Creates negative pressure inside the chest ii. Air is sucked into the lungs b. Positive pressure ventilation with pocket mask or bag-valve mask 2. Blood movement a. Normal ventilation i. Blood returns to the heart from the body ii. Blood is pulled back to the heart during normal breathing b. Positive pressure ventilation i. Blood return to the heart is decreased when lungs are inflated ii. Less blood is available for the heart to pump iii. Amount of blood pumped out of the heart is reduced 3. Esophageal opening pressure a. Normal ventilation i. Esophagus remains closed during normal breathing ii. No air enters the stomach b. Positive pressure ventilation with a pocket mask or bag-valve mask i. Air is pushed into the stomach during ventilation ii. Excess air in stomach may lead to vomiting 4. Excess rate or depth of ventilation using pocket mask or bag-valve mask can harm the patient as ventilating too fast or too deep may cause low blood pressure, vomiting, or decreased blood flow when the chest is compressed during CPR
3.3.6 – Consider Age-Related Variations in Pediatric and Geriatric Patients	
C 3.3.6.1 – Differentiate age-related variations in the artificial ventilation of pediatric and geriatric patients	
P 3.3.6.2 – Ventilate a pediatric patient	1. Infant/neonate

2. Toddler

4.0 – Patient Assessment

Use scene information and simple patient assessment findings to identify and manage immediate life threats and injuries within the scope of practice of the EMR

4.1 – Scene Size-Up

Objective	Educational Standard
4.1.1 – Scene Safety	
C 4.1.1.1 – Summarize common scene hazards	1. Environmental 2. Hazardous substances a. Chemical b. Biological 3. Violence a. Patient b. Bystanders c. Crime scenes 4. Rescue a. Motor vehicle collisions i. Extrication hazards ii. Roadway operation dangers b. Special situations
C 4.1.1.2 – Explain evaluation of the scene	1. Is the scene safe? a. Yes: establish patient contact and proceed with patient assessment b. No: is it possible to quickly make the scene safe? i. Yes: assess patient ii. No: do not enter any unsafe scene until minimizing hazards c. Request specialized resources immediately
4.1.2 – Scene Management	
C 4.1.2.1 – Explore the impact of the environment on patient care	1. Medical a. Determine nature of illness b. Hazards at medical emergencies 2. Trauma a. Determine mechanism of injury b. Hazards at the trauma scene 3. Environmental considerations a. Weather or extreme temperatures b. Toxins and gases c. Secondary collapse and falls d. Unstable conditions
C 4.1.2.2 – Generalize the addressing of on-scene hazards	1. Protect the patient a. After making the scene safe for the EMR, the safety of the patient becomes the next priority b. If the EMR cannot alleviate the conditions that represent a health or safety threat to the patient, move the patient to a safer environment 2. Protect the bystanders a. Minimize conditions that represent a hazard

	for bystanders b. If the EMR cannot minimize the hazards, remove the bystanders from the scene 3. Request resources a. Multiple patients need additional ambulances b. Fire hazard necessitates fire department response c. Traffic or violence issues need law enforcement involvement 4. Scan the scene for information related to: a. Mechanism of injury b. Nature of illness
C 4.1.2.3 – Explain the need for violence awareness	1. EMRs should not enter a scene or approach a patient if the threat of violence exists 2. Park away from the scene and wait for the appropriate law enforcement officials to minimize the danger
C 4.1.2.4 – Identify the need for additional or specialized resources	1. A variety of specialized protective equipment and gear is available for specialized situations a. Chemical and biological suits can provide protection against hazardous materials and biological threats of varying degrees b. Specialized rescue equipment may be necessary for difficult or complicated extrications c. Ascent or descent gear may be necessary for specialized rescue situations 2. Only specially-trained responders should wear or use specialized equipment
C 4.1.2.5 – Explain the need for standard precautions	1. Overview a. Based on the principle that all blood, body fluids, secretions, excretions (except sweat), non-intact skin, and mucous membranes may contain transmissible infectious agents b. Includes a group of infection prevention practices that apply to all patients, regardless of suspected or confirmed infection status, in any healthcare delivery setting c. Universal precautions were developed for protection of healthcare personnel d. Standard precautions focus on protection of patients 2. Implementation a. The extent of standard precautions used is determined by the anticipated blood, body fluid, or pathogen exposure i. Hand washing ii. Gloves iii. Gowns iv. Masks v. Protective eyewear 3. Personal protective equipment a. Personal protective equipment includes

	clothing or specialized equipment that provides some protection to the wearer from substances that may pose a health or safety risk b. Wear PPE appropriate for the potential hazard i. Steel-toe boots ii. Helmets iii. Heat-resistant outerwear (turnout gear) iv. Self-contained breathing apparatus (SCBA) v. Leather gloves

4.2 – Primary Assessment

Objective	Educational Standard
4.2.1 – Primary Assessment/Survey	
C 4.2.1.1 – Outline the components of a primary assessment/survey	1. The primary assessment/survey quickly attempts to identify those conditions that represent an immediate threat to the patient's life 2. Level of consciousness a. While approaching the patient or immediately upon patient contact, attempt to establish level of consciousness i. Speak to the patient and determine the level of response ii. EMR should identify himself or herself iii. EMR should explain that he or she is there to help b. Patient response i. Alert 1. The patient appears to be awake 2. The patient acknowledges the presence of the EMR ii. Responds to verbal stimuli 1. The patient opens his/her eyes in response to the EMR's voice 2. The patient responds appropriately to a simple command iii. Responds to painful stimuli 1. The patient neither acknowledges the presence of the EMR, nor responds to loud voice 2. Patient responds only when EMR applies some form of irritating stimulus a. Pinch the patient's ear b. Trapezius squeeze c. Others iv. Unresponsive (patient does not respond to any stimulus) 3. Airway status (refer to the current AHA guidelines) a. Unresponsive medical patient – open and maintain the airway with head tilt, chin lift technique b. Unresponsive trauma patient – open and maintain the airway with modified jaw thrust technique while maintaining manual cervical stabilization c. Responsive patient i. Foreign body or substances in the mouth may impair the airway and must be removed 1. Finger sweep (solid objects) 2. Suction (liquids) ii. If the upper airway becomes narrowed,

inspiration may produce a high-pitched whistling sound known as Stridor
1. Foreign body
2. Swelling
3. Trauma

iii. Airway patency must be continually reassessed

4. Breathing status
   a. Normal adult breathing
      i. Characteristics
         1. The respiratory rate will not be too fast or too slow
         2. Breathing will produce a visible chest rise and fall
         3. Breathing will be quiet
         4. The adult will not be expending much energy to breathe
      ii. Continue maintaining airway, if needed
   b. Abnormal adult breathing
      i. Characteristics
      ii. Management
         1. Administer oxygen to all patients with abnormal breathing
         2. Consider assisting breathing with a bag-valve mask with supplemental oxygen if:
            a. Unresponsive
            b. Skin is blue (cyanotic) in color
         3. Rate issues
            a. Breathing is too fast for the age of the patient
            b. Breathing is too slow for the age of the patient
               i. Does verbal or painful stimulus increase the rate to normal?
               ii. Assist breathing with a bag-valve mask with supplemental oxygen
               iii. Treat patients who are occasionally gasping as if they were not breathing at all
            c. Breathing is absent
            d. Assist ventilation with a pocket mask or bag-valve mask with supplemental oxygen
      iii. Chest rise and fall is shallow
      iv. Breathing is noisy
         1. Gurgling noise without secretions in the mouth
         2. Wheezing
      v. Effort of breathing
         1. Accessory muscles
            a. Neck
            b. Between ribs

c. Abdomen
2. Nasal flaring
3. Tripod position

5. Circulatory status
   a. Is a radial pulse present?
      i. Yes
         1. Normal adult heart rate 60 to 100 bpm
         2. Fast adult heart rate greater than 100 bpm
         3. Slow adult heart rate less than 60 bpm
         4. Irregular pulse may be normal or abnormal for the patient
      ii. No radial pulse – assess for carotid pulse
         1. If carotid pulse present, lay patient flat and elevate feet 8 to 12 Inches
         2. No carotid pulse, begin CPR
   b. Is any major bleeding present?
      i. Yes: control bleeding
      ii. No
   c. Is the patient maintaining adequate blood flow?
      i. Skin color
         1. Pink
         2. Assess palms of hands in dark-skinned patients
         3. Pale skin may indicate:
            a. Low body temperature
            b. Blood loss
            c. Shock (poor blood flow)
            d. Poor blood flow to a body part
         4. Blue (cyanotic skin) may indicate
            a. Problem with airway, ventilation, respiration
            b. Poor blood flow
      ii. Skin temperature
         1. Cool skin may indicate:
            a. Low body temperature
            b. Shock
      iii. Skin moisture
         1. Dry or slightly moist
         2. Wet or sweaty skin may indicate:
            a. Physical exertion
            b. Severe pain
            c. Shock
      iv. Capillary refill (children)
         1. Press on the skin and release
         2. Color should return to area Depressed within two seconds
         3. Color return in more than two seconds may indicate shock
   d. Treat for shock in primary survey if:
      i. Unresponsive to verbal
      ii. Heart rate too fast or too slow

	iii. Skin signs of shock are present e. Management of shock i. Administer oxygen by non-rebreather mask at 15 lpm (if available) ii. Lay patient flat 6. Identifying life threats a. Assess patient and determine if the patient has a life-threatening condition i. Unstable: treat life-threatening conditions as soon as they are discovered ii. Stable: assess nature of illness or mechanism of injury 7. Assessment of vital functions
C 4.2.1.2 – Identify the need to begin interventions required to preserve life	
P 4.2.1.3 – Demonstrate the use of appropriate PPE	1. Gloves 2. Eye protection 3. Mask 4. Gown
P 4.2.1.4 – Demonstrate a primary assessment	1. Medical complaint (nature of illness) 2. Trauma complaint (mechanism of injury) 3. Airway 4. Breathing 5. Circulation a. External bleeding b. Skin color/condition c. Capillary refill 6. Mental status 7. Immediate life threats
A 4.2.1.5 – Defend the need to provide critical life-saving interventions	(The responder needs to be able to distinguish what life threating interventions need to be completed and why)

4.3 – History-Taking

Objective	Educational Standard
4.3.1 – Determining the Chief Complaint	
C 4.3.1.1 – Identify the chief complaint	1. The chief complaint is a very brief description of the reason for summoning EMS to the scene a. In the best of circumstances, the patient will be able to answer all questions about his or her own chief complaint and medical history b. In other cases, this information may be obtained from: i. Family ii. Friend(s) iii. Bystander(s) iv. Public safety personnel v. Medical identification jewelry or other medical information sources
4.3.2 – Mechanism of Injury or Nature of Illness	
C 4.3.2.1 – Identify the mechanism of injury or nature of illness	1. Mechanism of injury a. Forces that caused an injury b. May help predict presence of injuries 2. Nature of illness a. Ask patient, family, or bystanders why EMS was called b. Look for clues in the environment i. Hot or cold environment ii. Presence of drugs or poisons
4.3.3 – Associated Signs and Symptoms	
C 4.3.3.1 – Identify signs and symptoms associated with the patient's chief complaint and mechanism of injury or nature of illness	1. Ask the patient to describe the current problem a. Sign: any medical or trauma assessment finding that can be seen, felt or heard by the EMR i. Listening to blood pressure ii. Seeing an open wound iii. Feeling skin temperature b. Symptom: any medical or trauma condition that is described to the EMR by the patient i. "I'm having trouble breathing" ii. "I have a headache" iii. "My chest hurts" 2. Events leading to the illness or injury
P 4.3.3.2 – Demonstrate the process of obtaining a patient history	1. S.A.M.P.L.E. a. Signs and symptoms b. Allergies c. Medicines d. Past medical history e. Last oral intake f. Events leading to incident
4.3.4 – Age-Related Variations for Pediatric and Geriatric Assessment and Management	
C 4.3.4.1 – Differentiate age-related variations for the assessment and management of pediatric and geriatric patients	1. Pediatric a. Assess infant pulse at brachial artery b. Capillary refill is a reliable assessment of

adequate blood flow in infants and children six years old and younger
   c. Use distracting measures to gain trust
   d. See special patient population section (pediatrics)
2. Geriatric
   a. Obtain eye glasses and hearing aids
   b. Expect history to take more time
   c. See special patient population section (geriatrics)

4.4 – Secondary Assessment

Objective	Educational Standard
4.4.1 – Performing a Rapid Full-Body Scan	
C 4.4.1.1 – Summarize the general approach to the secondary assessment process	1. Examine the patient systematically 2. Place special emphasis on areas suggested by the chief complaint 3. Many patients view a physical exam with apprehension and anxiety – they feel vulnerable and exposed a. Maintain professionalism throughout the physical exam b. Display compassion toward your patient and family members
4.4.2 – Focused Assessment of Pain	
C 4.4.2.1 – Outline the focused assessment for complaints of pain	1. The EMR should complete a secondary assessment on all patients following the primary assessment 2. Exam may focus on specific area based on patient complaint (i.e., injury or illness) 3. As the EMR discovers specific signs and symptoms, there may be specific relevant questions the EMR should ask (as described in the medical and trauma sections) 4. Perform a physical examination to gather additional information a. Compare one side of the body to the other b. Inspect (look) and palpate (feel) for the following signs of injury: i. Deformities ii. Open injuries iii. Tenderness iv. Swelling c. Briefly assess the body from head to toe i. Head 1. Facial symmetry 2. Drainage or bleeding a. Nose b. Ears 3. Objects or swelling in the mouth a. Vomit b. Blood c. Teeth ii. Neck 1. Stoma 2. Open wounds 3. Accessory muscles of breathing iii. Chest 1. Rise and fall 2. Effort of breathing 3. Accessory muscles of breathing 4. Open wounds 5. Symmetry iv. Abdomen

	1. Pain 2. Scars 3. Protruding organs 4. Pregnancy v. Pelvis vi. All four extremities 1. Symmetry 2. Circulation a. Pulses b. Color c. Capillary refill 3. Sensation 4. Movement d. Immediately treat life-threatening problems found in secondary survey
4.4.3 – Assessment of Vital Signs	
C 4.4.3.1 – Examine assessment of vital signs	1. Obtain a complete set of vital signs after managing life-threatening problems found in primary survey 2. Vital signs provide a starting point for judging the effectiveness of prehospital therapy a. Respiratory rate b. Pulse i. Rate (calculation method) ii. Rhythm iii. Strength iv. Location 1. Common locations 2. Relationship of pulse to perfusion c. Blood pressure i. Measures force of blood against the walls of the artery ii. Reported as systolic blood pressure over diastolic blood pressure in mmHg (millimeters of mercury) 1. Systolic blood pressure a. Force exerted against the arteries when the heart is contracting b. Normal adult systolic blood pressure 2. Diastolic blood pressure a. Force exerted against the arteries when the heart is between contractions b. Normal adult diastolic blood pressure iii. Technique 1. Equipment a. Blood pressure cuff sizes b. Stethoscope 2. Positioning a. Position of the patient b. Position of the arm 3. Measurement

	a. Auscultation b. Palpation iv. Relationship of blood pressure to perfusion
P 4.4.3.2 – Demonstrate obtaining vital signs from a patient	1. Pulse a. Radial b. Brachial c. Carotid 2. Respirations 3. Blood Pressure a. Palpation b. Auscultate
4.4.4 – Special Considerations for Pediatric and Geriatric Patients	
C 4.4.4.1 – Differentiate special considerations affecting the secondary assessment of pediatric and geriatric patients	1. Normal vital signs by age 2. See special patient populations section

4.5 – Reassessment

Objective	Educational Standard
4.5.1 – How and When to Reassess	
C 4.5.1.1 – Outline the reassessment process	1. Identify and treat changes in the patient's condition in a timely manner a. Monitor the patient's condition b. Monitor the effectiveness of interventions 2. Reassess at regular intervals a. Unstable patient every 5 minutes, but more often if indicated by patient condition b. Stable patient every 15 minutes or as deemed appropriate by the patient's condition 3. Reassessment includes a. Primary assessment b. Vital signs c. Chief complaint d. Interventions 4. Compare to the baseline status of the assessment component a. Level of consciousness b. Airway c. Breathing i. Reassess the adequacy of breathing ii. Monitor breathing rate, depth, and effort d. Circulation adequacy i. Checking both carotid and radial pulses ii. Skin color, temperature, and moisture 5. Vital signs a. Repeat vital signs as necessary i. Blood pressure, pulse, and respiration 6. Chief complaint a. Constantly reassess the patient's chief complaint of major injury(injuries) i. Pain remains the same ii. Pain worsening iii. Pain alleviating b. Ask if there are new or previously undisclosed complaints 7. Interventions a. Reassess the effectiveness of each intervention performed b. Consider the need for new interventions or modifications to care already being provided
P 4.5.1.2 – Demonstrate the reassessment of a patient	
4.5.2 – Age-Related Considerations for Pediatric and Geriatric Reassessment	
C 4.5.2.1 – Differentiate age-related considerations for the reassessment of pediatric and geriatric patients	

5.0 – Medicine

Recognizes and manages life threats based on assessment findings of a patient with a medical emergency while awaiting additional emergency response

5.1 – Medical Overview

Objective	Educational Standard
5.1.1 – Overview of Medical Complaints	
C 5.1.1.1 – Summarize assessment and management process of medical complaints	1. Assessment a. Follow a systematic assessment approach i. Scene size-up ii. Primary assessment iii. History-taking iv. Secondary assessment v. Reassessment 2. Manage life-threatening problems as they are discovered

5.2 - Neurology

Objective	Educational Standard
5.2.1 – Review Anatomy and Functions of the Brain, Spinal Cord, and Cerebral Blood Vessels	
C 5.2.1.1 – Summarize the anatomy and physiology of the brain, spinal cord, and cerebral blood vessels	
5.2.2 – Altered Mental Status	
C 5.2.2.1 – Differentiate causes of altered mental status	1. Inadequate oxygenation or ventilation 2. Poisoning or overdose 3. Infection 4. Head injury 5. Behavioral illness 6. Diabetic conditions
P 5.2.2.2 – Demonstrate the assessment and management of a patient with an altered mental status	
5.2.3 - Seizures	
C 5.2.3.1 – Explain the causes, assessment findings, and management of a patient suffering from a seizure	1. Causes 2. Assessment findings a. Spasms, muscle contractions b. Bite tongue, increased secretions c. Sweating d. Cyanosis e. Unconscious, gradually increasing level of consciousness f. Shaking or tremors and no loss of consciousness g. Incontinent h. Amnesia of event 3. Management a. Safety of patient/position b. ABCs (consider nasopharyngeal airway) c. Oxygen/suction d. Assist ventilation if indicated e. Emotional support
P 5.2.3.2 – Demonstrate the assessment and management of a patient with a seizure	
5.2.4 - Stroke	
C 5.2.4.1 – Explain the causes, assessment findings, and management of a patient suffering from a stroke	1. Causes a. Hemorrhage b. Clot 2. Assessment findings and symptoms a. Confused, dizzy, and/or weak b. Decreasing or increasing level of consciousness c. Combative, uncooperative, or restless d. Facial droop, inability to swallow, and/or tongue deviation e. Double or blurred vision f. Difficulty speaking or absence of speech

	g. Decreased or absent movement of one or more extremities h. Headache i. Decreased or absent sensation in one or more extremities or other areas of body j. Coma 3. Management of patient with stroke assessment findings or symptoms a. Scene safety and PPE b. ABCs/position c. Oxygen/suction d. Emotional support
P 5.2.4.2 – Demonstrate the assessment and management of a patient suffering from a stroke	

5.3 – Abdominal and Gastrointestinal Disorders

Objective	Educational Standard
5.3.1 – Define Acute Abdomen	
C 5.3.1.1 – Generalize acute abdominal complaints	
5.3.2 – Organs of the Abdominopelvic Cavity	
C 5.3.2.1 – Identify the organs within the abdominopelvic cavity	1. Stomach 2. Intestines 3. Esophagus 4. Spleen 5. Urinary bladder 6. Liver 7. Gall bladder 8. Pancreas 9. Kidneys 10. Reproductive organs
5.3.3 – Assessment and Symptoms	
C 5.3.3.1 – Summarize assessment techniques and associated symptoms for a patient with an abdominal or gastrointestinal disorder	1. Techniques a. Inspection b. Palpation 2. Normal findings a. Soft b. Non-tender 3. Abnormal findings a. Nausea, vomiting, and/or diarrhea i. Excessive ii. Blood in emesis or stool b. Pain c. Signs of shock d. Fever
5.3.4 – General Management for Patients with Abdominal Pain	
C 5.3.4.1 – Summarize the management of a patient with abdominal pain	1. Scene safety and PPE 2. Airway, ventilatory, and circulation 3. Position of comfort 4. Emotional support
P 5.3.4.2 – Demonstrate the assessment and management of a patient with abdominal pain	
5.3.5 – Specific Acute Abdominal Conditions	
C 5.3.5.1 – Explain the causes, assessment findings, symptoms, and management of a patient with gastrointestinal bleeding	1. Causes 2. Assessment findings and symptoms a. Bloody vomit (color is red or looks like coffee grounds) b. Blood in stool (color is red or black) c. Signs of shock 3. Management a. Standard precautions b. Airway (suction if needed) c. Oxygenation/ventilation i. Administer oxygen ii. Assist with ventilation if indicated d. Position

5.3.6 – Consider Age-Related Variations for Pediatric and Geriatric Assessment and Management	
C 5.3.6.1 – Differentiate age-related variations for pediatric and geriatric patients with abdominal or gastrointestinal disorders	1. Pediatrics – vomiting/diarrhea can cause shock 2. Geriatrics – abdominal pain may be related to a heart attack

5.4 - Immunology

Objective	Educational Standard
5.4.1 – Immunology Emergencies	
C 5.4.1.1 – Explain the causes, assessment findings, and management of a patient with an immunology emergency	1. Introduction a. Anaphylaxis definition (allergy versus anaphylaxis) b. Common substances that cause anaphylaxis 2. Assessment findings a. Respiratory system i. Severe respiratory distress ii. Wheezing b. Cardiovascular i. Rapid pulse ii. Low blood pressure c. Skin i. Pale, red, or cyanotic ii. Hives, itching, and/or swelling around eyes, mouth, and/or tongue d. Other i. Altered mental status ii. Nausea/vomiting 3. Management a. Maintain airway b. Administer oxygen c. Position d. Vitals e. Remove allergen if possible f. Ask if patient has used his/her epinephrine auto-injector
P 5.4.1.2 – Demonstrate the assessment and management of a patient with an anaphylactic reaction	
5.4.2 – Consider Age-Related Variations for Pediatric and Geriatric Assessment and Management	
C 5.4.2.1 – Differentiate age-related variations for the assessment and management of pediatric and geriatric patients experiencing immunology emergencies	

5.5 – Infectious Diseases

Objective	Educational Standard
5.5.1 – Infectious Disease Awareness	
C 5.5.1.1 – Explore infectious disease emergencies	1. Definitions a. Infectious disease b. Communicable disease 2. Transmission routes a. Direct contact b. Coughing and sneezing c. Blood borne d. Other body fluids 3. Standard precautions (review content in workforce safety)
5.5.2 – Equipment Decontamination (Review Content in Workforce Safety)	
C 5.5.2.1 – Summarize equipment decontamination procedures	

5.6 – Endocrine Disorders

Objective	Educational Standard
5.6.1 – Diabetic Conditions	
C 5.6.1.1 – Distinguish diabetic emergencies	1. Definition of terms a. Diabetes b. Low blood glucose c. High blood glucose 2. Role of glucose – fuel for body cells to produce energy 3. High blood glucose a. History and assessment findings i. Onset – slow changes in mental status ii. Rapid breathing, sweet smell on breath iii. Dehydration; skin pale, warm, and dry iv. Weakness, nausea, and vomiting v. Weak and rapid pulse vi. Increased urination, appetite, thirst vii. Medical alert identification b. Management i. ABCs ii. Position iii. Oxygen iv. Emotional support 4. Low blood glucose a. History and assessment findings i. Onset – rapid changes in mental status ii. Bizarre behavior, tremors, shaking iii. Sweating, hunger iv. Rapid, full pulse v. Rapid, shallow respirations vi. Seizures (coma in late stages) vii. Medical identification jewelry or information b. Management i. ABCs ii. Oxygen c. Emotional support
P 5.6.1.2 – Demonstrate the assessment and management of a diabetic patient	1. Oral Glucose
5.6.2 – Age-Related Variations for Pediatric and Geriatric Assessment and Management	
C 5.6.2.1 – Differentiate age-related variations for pediatric and geriatric patients with a diabetic emergency	1. Pediatrics: Seizures 2. Geriatrics: Strokes

5.7 - Psychiatric

Objective	Educational Standard
5.7.1 - Define	
C 5.7.1.1 – Examine psychiatric disorders	
5.7.2 - Assessment	
C 5.7.2.1 – Outline assessment findings for a patient suffering from a psychiatric disorder	1. General appearance 2. Speech 3. Skin 4. Posture/gait 5. Mental status 6. Mood, thought, perception, judgment, memory, and attention
5.7.3 – Behavioral Change	
C 5.7.3.1 – Identify factors that may alter a patient's behavior	1. Situational stresses 2. Medical illnesses 3. History 4. Psychiatric problems 5. Alcohol or drugs 6. Patient not taking psychiatric medication
C 5.7.3.2 – Explore common causes of behavioral alteration	1. Low blood sugar 2. Lack of oxygen 3. Shock 4. Head trauma 5. Mind-altering substances 6. Psychiatric 7. Excessive cold 8. Excessive heat 9. Brain infection 10. Seizure disorders 11. Poisoning or overdose 12. Withdrawal from drugs or alcohol
C 5.7.3.3 – Explain the potential danger created by behavioral emergencies to the EMR, patient, or others	1. Agitation 2. Bizarre thinking and behavior (i.e., hallucinations, paranoia) 3. Danger to self – self-destructive behavior, suicide attempt 4. Danger to others – threatening behavior, violence, weapons
C 5.7.3.4 – Outline the assessment process for suicide risk	1. Depression 2. Risk factors/signs or symptoms a. Has the patient said or done anything that would indicate the possible risk of suicide or violence to self or others? b. Certain cultural and religious beliefs 3. Important questions: a. How does the patient feel? b. Are you (the patient) thinking about hurting or killing yourself or anyone else? c. Is patient a threat to self or others? d. Is there a medical problem? e. Is there trauma involved? f. Does the patient have any weapons on self or within easy access (i.e., backpack or purse)?

	g. Interventions?
5.7.4 – Methods to Calm Behavioral Emergency Patients	
C 5.7.4.1 – Outline methods to calm behavioral emergency patients	1. Acknowledge that the person seems upset; restate you are there to help 2. Inform the patient about what is being done 3. Ask questions in a calm, reassuring voice 4. Maintain a comfortable distance 5. Encourage the patient to state what is troubling him/her 6. Do not make quick moves 7. Respond honestly to patient's questions 8. Do not threaten, challenge, or argue with disturbed patients 9. Tell the truth; do not lie to the patient 10. Do not "play along" with visual or auditory disturbances of the patient 11. Involve trusted family members or friends 12. Be prepared to stay at scene for a long time; always remain with the patient 13. Avoid unnecessary physical contact; call additional help if needed 14. Use good eye contact 15. Avoid threatening postures 16. Other assessment techniques to keep in mind: a. Always try to talk patient into cooperation b. Do not belittle or threaten patients c. Be calm and patient d. Reassure the patient e. Lower distressing stimuli, if possible f. Avoid restraints unless necessary g. Treat the patient with respect h. Protect the patient and yourself
5.7.5 – Emergency Medical Care	
C 5.7.5.1 – Summarize the techniques for providing emergency medical care to a psychiatric patient	1. Scene size-up, personal safety 2. Establish rapport a. Interviewing techniques i. Acknowledge that EMR is listening by: 1. Nodding 2. Stating phrases such as, "go on" and "I understand" ii. Be supportive and empathetic 1. "I understand that made you angry, sad, upset, etc." iii. Limit interruptions iv. Respect patient's territory, limit physical touching b. Avoid threatening actions, statements, and questions c. Approach slowly and purposefully 3. Patient assessment a. Ability to make decisions b. Delusions, hallucinations c. Unusual worries, fears d. Anxiety, depression, elation, agitation

	4. Calm the patient – do not leave the patient alone unless unsafe situation (consider need for law enforcement assistance) 5. Assist other EMS responders with restraint if necessary
5.7.6 – Consider Age-Related Variations for Pediatric and Geriatric Assessment and Management	
C 5.7.6.1 – Differentiate age-related variations for pediatric and geriatric psychiatric patients	1. Pediatric – teenage suicide concerns 2. Geriatric – suicide issues/depression common

5.8 – Cardiovascular

Objective	Educational Standard
5.8.1 – Chest Pain	
C 5.8.1.1 – Examine the causes, assessment, and management of a patient experiencing chest pain	1. Causes a. Decrease in blood supply to part of the heart muscle i. Heart attack – death of heart muscle ii. Angina – temporary or incomplete interruption of blood supply to heart muscle b. Assessment and management of both conditions is the same for EMR 2. Assessment a. Chest discomfort/pain b. Pain i. Character and location of discomfort 1. Quality – What does the discomfort feel like? 2. Location – Where is the discomfort? 3. Severity – Consider pain scale ii. Does the discomfort go anywhere else (radiate) in the body? 1. Arms 2. Back 3. Neck 4. Jaw 5. Stomach c. Shortness of breath may occur i. During activity/exercise ii. At rest iii. Worse when lying flat d. Skin i. Cold ii. Wet/sweaty e. Other findings i. Nausea or vomiting ii. Lightheadedness f. Vital signs i. Blood pressure ii. Pulse iii. Respirations (rate of breathing) 3. Management a. High-concentration oxygen b. Place in position of comfort c. Encourage the patient to rest d. Ask if patient has taken any medicine for pain i. Aspirin ii. Nitroglycerin
P 5.8.1.2 – Demonstrate the assessment and management of a patient with chest pain	
5.8.2 – Consider Age-Related Variations for Pediatric and Geriatric Patients for Assessment and Management of Cardiac Compromise	

C 5.8.2.1 – Differentiate age-related variations for pediatric and geriatric patients with cardiac complaints	1. Pediatric a. Heart problems often related to congenital heart condition b. Cardiac arrest is often caused by a primary respiratory problem 2. Geriatric – may not have chest discomfort with heart attack
5.8.3 – Cardiac Arrest (Refer to Shock and Resuscitation Section)	
C 5.8.3.1 – Outline the assessment and management of a patient in cardiac arrest	

5.9 – Toxicology

Objective	Educational Standard
5.9.1 – Introduction	
C 5.9.1.1 – Summarize poisoning considerations	1. Define poisoning 2. National poison control center a. Role b. When to call c. National telephone number (800-222-1222)
5.9.2 – Carbon Monoxide Poisoning	
C 5.9.2.1 – Explain carbon monoxide poisoning.	
5.9.3 – Poisoning by Nerve Agents	
C 5.9.3.1 – Explore poisoning by nerve agents	1. Define nerve agents 2. Exposure routes a. Inhaled gas b. Absorbed through the skin c. Ingested from liquid or food 3. Onset of signs and symptoms 4. Assessment findings a. Salivation, lacrimation (tearing), urination, defecation, emesis, pupil constriction b. Blurred or dim vision c. Difficulty breathing d. Slow of fast heart rate e. Muscle twitching, weakness, or paralysis f. Slurred speech g. Sweating h. Seizures i. Loss of consciousness j. Death 5. General management considerations a. Scene safety/special resources b. Remove patient from contaminated environment as soon as safely possible c. PPE d. Decontamination by appropriately trained personnel if indicated e. Remove clothing f. Airway control g. Oxygenate and ventilate h. Position i. Administer nerve agent antidote auto-injector kit to self or other rescuer if indicated and available
5.9.4 – Nerve Agent Antidote Auto-Injector Kit	
C 5.9.4.1 – Examine nerve agent antidote auto-injector kits	1. Types a. MARK I™ – two auto-injector syringes each contain a separate drug i. Atropine ii. Pralidoxime Chloride b. DuoDote™ i. One auto-injector syringe that contains both Atropine and Pralidoxime Chloride

ii. FDA-approved in 2007
2. Administer a nerve agent auto-injector kit if:
   a. EMR or a peer has serious signs or symptoms that indicate the presence of nerve agent poisoning
   b. EMR is authorized to do so by medical direction
3. Do not give the nerve agent auto-injector kit if:
   a. Mild signs and symptoms such as tearing or runny nose are the only signs of nerve agent poisoning present
4. Drugs in the nerve agent auto-injector kit
   a. Atropine
      i. Increases heart rate
      ii. Dries secretions
      iii. Decreases gastric upset
      iv. Dilates pupils
   b. Pralidoxime Chloride (2-pAM chloride)
      i. Muscle twitching
      ii. Difficulty breathing
5. Administration of MARK I™ Kit
   a. Wear appropriate PPE
   b. Confirm that serious signs and symptoms of nerve agent poisoning are present
   c. Confirm correct drug
   d. Check expiration date
   e. Grasp the atropine syringe
   f. Remove the yellow protective cap
   g. Press the green end of the injector very firmly against the outer aspect of the patient's upper leg (thigh) at a 90° angle
   h. Hold for 10 seconds
   i. Check for the presence of a needle at the tip to ensure the drug was injected
   j. Dispose of syringe appropriately
   k. Grasp the Pralidoxime Chloride syringe
   l. Remove the gray protective cap
   m. Press the black end of the injector firmly against the outer aspect of the patient's upper leg (thigh) at a 90° angle
   n. Hold for 10 seconds
   o. Check for the presence of a needle at the tip to ensure the drug was injected
   p. Dispose of syringe appropriately
   q. Reassess the patient's signs and symptoms
6. Administration of DuoDote™ Kit
   a. Wear appropriate PPE
   b. Confirm that serious signs and symptoms of nerve agent poisoning are present
   c. Confirm correct drug
   d. Check expiration date
   e. Grasp the syringe with dominant hand
   f. Remove the gray protective cap
   g. Press the green (needle) end of the injector very firmly against the outer aspect of the

	patient's upper leg (thigh) at a 90° angle h. Hold for 10 seconds i. Check for the presence of a needle at the green tip to ensure the drug was injected j. Dispose of syringe appropriately k. Reassess the patient's signs and symptoms
5.9.5 – Consider Age-Related Variations for Pediatric and Geriatric Assessment and Management	
C 5.9.5.1 – Differentiate age-related variations for pediatric and geriatric patients suffering from a toxicological emergency	1. Pediatric a. Toddler-aged prone to ingestion of toxic substances b. Adolescent prone to experimentation with drugs of abuse 2. Geriatric a. Medication errors are common for many reasons b. May cause life-threatening conditions

5.10 – Respiratory

Objective	Educational Standard
5.10.1 – Anatomy of the Respiratory System	
C 5.10.1.1 – Summarize the anatomical structures within the respiratory system	1. Upper airway 2. Lower airway 3. Lungs and accessory structures
5.10.2 – Normal Respiratory Effort	
C 5.10.2.1 – Explain the assessment findings and management of a patient with respiratory problems	1. Assessment findings and symptoms a. Respiratory distress b. Shortness of breath c. Restlessness d. Increased pulse rate e. Changes in respiratory rate or rhythm f. Skin color changes g. Abnormal sounds of breathing (i.e., wheezing) h. Inability to speak i. Accessory muscle use j. Altered mental status k. Abdominal breathing l. Coughing m. Tripod position 2. Management of respiratory distress a. ABCs, position b. Oxygen/suction c. Emotional support
P 5.10.2.2 – Demonstrate the assessment and management of a patient with respiratory complaints	
5.10.3 – Consider Age-Related Variations for Pediatric and Geriatric Assessment and Management	
C 5.10.3.1 – Differentiate age-related variations for pediatric and geriatric patients with respiratory problems	1. Pediatric a. Upper airway obstruction may be caused by respiratory infections b. Lower airway disease may be caused by birth problems or infections 2. Geriatrics – pneumonia and chronic conditions

5.11 – Genitourinary/Renal

Objective	Educational Standard
5.11.1 - Hemodialysis	
C 5.11.1.1 – Explore the considerations associated with assessing and managing a patient on hemodialysis	1. Hemodialysis a. Used to eliminate water and wastes from the body when the kidneys fail b. Dialysis machine is connected to an access site at fistula, shunt, or access port 2. Special considerations for Hemodialysis patients a. Do not obtain BP in the arm with the dialysis fistula or shunt 3. Life-threatening emergencies associated with dialysis patients a. Low blood pressure b. Nausea/vomiting c. Irregular pulse, cardiac arrest d. Bleeding from access site e. Difficulty breathing 4. Management of a patient with a dialysis emergency a. Maintain airway b. Administer oxygen c. Assist ventilation if indicated d. Stop bleeding from shunt if present e. Position i. Flat if signs of shock ii. Upright if difficulty breathing

5.12 - Gynecology

Objective	Educational Standard
5.12.1 – Vaginal Bleeding	
C 5.12.1.1 – Summarize the assessment and management considerations for a patient with vaginal bleeding	1. Causes 2. Assess for signs of shock 3. Presence of pain 4. Management a. Standard precautions b. Administer oxygen c. Position

5.13 – Diseases of the Eyes, Ears, Nose, and Throat

Objective	Educational Standard
5.13.1 - Nosebleed	
C 5.13.1.1 – Explain the causes, assessment findings, and management of a patient experiencing a nosebleed	1. Causes a. Trauma b. Medical i. Dryness ii. High blood pressure 2. General assessment findings and symptoms a. Pain or tenderness b. Bleeding from nose c. Vomits swallowed blood d. Can block airway if patient is unresponsive 3. Techniques to stop bleeding in conscious patient if no risk of spine injury a. Sit patient up and lean forward b. Pinch the nostrils together firmly c. Tell patient not to sniffle or blow nose

6.0 – Shock and Resuscitation

Uses assessment information to recognize shock, respiratory failure or arrest, and cardiac arrest based on assessment findings and manages the emergency while awaiting additional emergency response

6.1 – Shock and Resuscitation

Objective	Educational Standard
6.1.1 – Ethical Issues in Resuscitation	
A 6.1.1.1 – Defend the ethics involved in withholding resuscitation attempts	1. Irreversible death 2. Do not resuscitate (DNR) orders
6.1.2 – Anatomy and Physiology Review	
C 6.1.2.1 – Summarize the anatomy and physiology associated with the respiratory and cardiovascular systems	1. Respiratory system a. Fresh oxygen to enter the lungs and blood supply b. Respiratory waste products to leave the blood and lungs 2. Cardiovascular system a. Heart – four chambers i. When the heart contracts, a wave of blood is sent through the arteries ii. Pumps blood to the lungs to pick up oxygen iii. Pumps blood around the body 1. To deliver oxygen and nutrients to the tissues 2. To remove waste products from the tissues b. Vascular system i. Arteries carry blood to tissues ii. Veins carry blood to heart iii. Heart contract can be felt as a pulse 1. Carotid 2. Femoral 3. Radial 4. Brachial
6.1.3 – Respiratory Failure	
C 6.1.3.1 – Explain respiratory failure	1. Many causes a. Respiratory infection b. Heart failure c. Chronic respiratory illness d. Trauma 2. If untreated, can lead to respiratory arrest a. No spontaneous respiration b. If not treated, quickly leads to cardiac arrest 3. Signs and symptoms a. Altered mental status b. Cyanosis c. Inadequate depth and rate of breathing
6.1.4 – Cardiac Arrest	
C 6.1.4.1 – Explain cardiac arrest	1. If the heart stops contracting, no blood will flow 2. The body cannot survive when the heart stops

	a. Brain damage begins 4 to 6 minutes after the patient suffers cardiac arrest b. Damage becomes irreversible in 8 to 10 minutes 3. Cardio-pulmonary resuscitation (CPR) a. Artificial ventilation oxygenates the blood b. External chest compressions squeezes the heart and stimulates a contraction c. Oxygenated blood is circulated to the brain and other vital organs
6.1.5 – Resuscitation	
C 6.1.5.1 – Explain the process of resuscitation for a patient with respiratory or cardiac arrest	1. System components to maximize survival a. Early access i. Public education and awareness 1. Rapid recognition of a cardiac emergency 2. Rapid notification before CPR starts – "phone first" ii. 911 pre-arrival instructions and dispatcher-directed CPR b. Early CPR i. Lay public 1. Family 2. Bystanders ii. Emergency medical responders (EMRs) c. Early defibrillation d. Early advanced care 2. Basic cardiac life support (refer to the current AHA guidelines) a. Adult CPR and foreign body airway obstruction (FBAO) b. Child CPR and foreign body airway obstruction (FBAO) c. Infant CPR and foreign body airway obstruction (FBAO) 3. Airway control and ventilation a. Basic airway adjuncts b. Ventilation i. Delivery of excessive rate or depth of ventilation reduces blood return to the right side of the heart ii. Reduces the overall blood flow that can be generated with CPR 4. Chest compressions a. Factors which decrease effectiveness: i. Compressions that are too shallow ii. Slow compression rate iii. Sub-maximum recoil iv. Frequent interruptions
P 6.1.5.2 – Demonstrate CPR	1. Adult 2. Child 3. One-rescuer 4. Two-rescuer
6.1.6 – Automated External Defibrillation (AED) (Refer to Current AHA Guidelines)	

C 6.1.6.1 – Explain the use of an automated external defibrillator (AED)	1. Adult 2. Child 3. Infant 4. Special AED situations a. Pacemaker b. Wet patients c. Transdermal medication patches
P 6.1.6.2 – Demonstrate the use of an AED.	
6.1.7 – Shock (Poor Perfusion)	
C 6.1.7.1 – Explain the assessment and management of a patient with poor perfusion	1. Results from inadequate delivery or oxygenated blood to body tissues 2. Can be a result of: a. Severe bleeding or loss of fluid from the body b. Failure of the heart to pump enough oxygenated blood c. Abnormal dilation of the blood vessels 3. Signs and symptoms a. Extreme thirst b. Restlessness, anxiety c. Rapid, weak pulse d. Rapid, shallow respirations e. Mental status changes f. Pale, cool, moist skin g. Decreased blood pressure (late sign) 4. Patient assessment a. Complete a scene size-up b. Perform a primary assessment c. Obtain relevant history d. Perform secondary assessment e. Perform reassessment 5. Management a. Manual in-line spinal stabilization, as needed b. Comfort, calm, and reassure the patient while awaiting additional EMS resources c. Do not give food or drink d. Airway control (i.e., adjuncts) e. Breathing i. Oxygen administration (high concentration) ii. Assist ventilation, as needed f. Circulation i. Attempt to control obvious uncontrolled external bleeding ii. Position patient appropriately for all ages iii. Keep patient warm; attempt to maintain normal body temperature iv. Treat any additional injuries that may be present
P 6.1.7.2 – Demonstrate proper positioning for a patient in shock	

7.0 – Trauma

Uses simple knowledge to recognize and manage life threats based on assessment findings for an acutely injured patient while awaiting additional emergency response resources. This level of provider does not transport patients, but should be able to identify and categorize trauma patients and activate the appropriate trauma system response

7.1 – Trauma Overview

Objective	Educational Standard
7.1.1 – Identification and Categorization of Trauma Patients	
C 7.1.1.1 – Interpret the National Trauma Triage Protocol (as modified and adopted by the Wisconsin Department of Health Services)	1. Centers for Disease Control and Prevention Guidelines for field triage of injured patients: recommendations of the national expert panel on field triage. MMWR 2008:58 RR-1:1-35. 2. http://cdc.gov/fieldtriage/

7.2 – Bleeding

Objective	Educational Standard
7.2.1 - Bleeding	
C 7.2.1.1 – Explain the assessment and management of a bleeding patient	1. General considerations a. Use standard precautions to reduce risk of exposure to blood or body fluids b. Estimation of severity of blood loss based on: i. Signs and symptoms ii. General impression of the amount of blood loss iii. Usually unreliable c. Uncontrolled bleeding or significant blood loss leads to shock and possibly death 2. Types of external bleeding a. Arterial i. Blood spurts from the wounds ii. Bright, red blood iii. May be difficult to control because of high pressure in arteries iv. As blood pressure drops, spurting may decrease b. Venous i. Blood flow as a steady stream ii. Darker red than arterial blood iii. Bleeding from a vein can be severe iv. In most cases it is easier to control than arterial bleeding due to the lower venous pressure c. Capillary i. Blood oozes from capillaries ii. Bleeding often clots spontaneously d. Internal bleeding i. Injured or damaged internal organs a. May lead to extensive, concealed bleeding b. May cause unexplained shock ii. Injuries to the extremities may lead to serious internal blood loss from long bone fractures iii. Signs and symptoms a. Discolored, painful, tender, swollen, or firm tissue b. Increased respiratory rate c. Increased pulse rate d. Pale, cool skin e. Nausea and vomiting f. Thirst g. Mental status changes iv. Specific injuries (i.e., nosebleed) 1. Causes a. Trauma b. Medical i. Dryness ii. High blood pressure

	2. General assessment findings and symptoms a. Pain or tenderness b. Bleeding from nose c. Vomit d. Swallowed blood e. Can block airway if patient is unresponsive 3. Techniques to stop nose bleed in conscious patient if no risk of spine injury a. Sit patient up and lean forward b. Pinch the nostrils together firmly c. Tell patient not to sniffle or blow nose v. Management of bleeding soft tissue injuries 1. Expose the wound a. Control the bleeding i. Apply fingertip pressure (use flat part of fingers) directly on the point of bleeding ii. Large wounds may require sterile gauze and direct hand pressure if fingertip pressure does not control bleeding iii. If bleeding oozes through dressing, do not lift off; apply another gauze dressing on top of the first and continue to apply pressure iv. Consider other measure for bleeding control based on local guidelines b. Prevent further contamination c. Apply sterile dressing to the wound and bandage securely in place with tape or roller gauze 2. Keep patient warm 3. Position patient flat on back 4. Do not give food or drink if shock is suspected 5. Treat other injuries
P 7.2.1.2 – Demonstrate the assessment and management of a patient with bleeding	1. Internal 2. External a. Direct pressure b. Pressure points c. Tourniquet

7.3 – Chest Trauma

Objective	Educational Standard
7.3.1 – Sucking Chest Wound	
C 7.3.1.1 – Explain the management of a patient with a sucking chest wound	1. Open wounds of the chest a. May hear gurgling sound from wound as patient inhales b. Bubbling in blood around the wound 2. Apply an air tight (occlusive) dressing a. Vaseline gauze b. Plastic wrap c. Foil 3. Secure with tape on three sides 4. Position of comfort if spinal injury suspected
P 7.3.1.2 – Demonstrate the assessment and management of a patient with a sucking chest wound	
7.3.2 – Impaled Objects in Chest	
C 7.3.2.1 – Explain the management of a patient with an impaled object in the chest	1. Do not remove the impaled object unless it interferes with chest compressions 2. Manually secure the object 3. Expose the wound area 4. Control bleeding 5. Use a bulky dressing to stabilize the object
P 7.3.2.2 – Demonstrate the assessment and management of a patient with an impaled object in the chest	

7.4 – Abdominal and Genitourinary Trauma

Objective	Educational Standard
7.4.1 – Abdominal Trauma	
C 7.4.1.1 – Explain the management of a patient with abdominal trauma	1. Eviscerations – open injury with organs sticking out of the wound a. Do not replace organs b. Cover with thick, moist dressing 2. Impaled objects in abdomen a. Do not remove the impaled object b. Manually secure the wound c. Expose the wound d. Control bleeding e. Use bulky dressing to stabilize the object

7.5 – Orthopedic Trauma

Objective	Educational Standard
7.5.1 – Fractures and Dislocations	
C 7.5.1.1 – Explain the assessment and management of a patient with a fracture or dislocation	1. Fractures a. Introduction i. Isolated fractures are not usually life-threatening; however, fractures of the pelvic bones or the femurs may result in serious blood loss b. Types i. Open: Bone that is broken and a break in the continuity of the skin has occurred either as a result of the broken bone ends or by the forces which caused the fracture ii. Closed: Bone that is broken but does not produce a break in the continuity of the skin 2. Dislocations a. Definition: When a separation occurs between two bones at the joint b. Can be extremely painful 3. Signs and symptoms – may be extremely difficult to distinguish a fracture from a dislocation a. Deformity or angulation b. Pain and tenderness c. Grating d. Swelling e. Bruising (discoloration) f. Exposed bone ends g. Joint locked into position h. Impaired function or circulation 4. Emergency medical care of bone injuries a. After life threats have been controlled, allow patient to remain in a position of comfort b. Apply cold pack to area of painful, swollen, deformed extremity to reduce swelling and pain c. Manual extremity stabilization i. Goal is to prevent movement of the extremity ii. Support above and below an injury iii. Cover open wounds with a sterile dressing iv. Pad to prevent pressure and discomfort to the patient v. When in doubt, manually stabilize the injury vi. Do not intentionally replace any protruding bones vii. Amputation 1. Limb or part of a limb is severed 2. Bleeding may be controlled easily or be difficult to control 3. Find the severed body part to send to

	the hospital 4. Place in a sealed plastic bag 5. Place plastic bag in a bowl with ice and water a. Do not allow the amputated part to become saturated with water b. Never place amputated part directly on ice
P 7.5.1.2 – Demonstrate the assessment and management of a patient with a fracture or dislocation	1. Splinting a. Manual b. Rigid c. Soft d. Optional: i. Vacuum ii. Traction

7.6 – Soft Tissue Trauma

Objective	Educational Standard
7.6.1 – Abrasion	
C 7.6.1.1 – Summarize possible assessment findings for a patient with an abrasion	1. Outermost layer of skin is scraped off 2. Painful 3. Superficial 4. No bleeding or small amount of blood oozes from wound
7.6.2 – Laceration	
C 7.6.2.1 – Summarize possible assessment finding for a patient with a laceration	1. Cut or break in skin 2. May occur alone or with other soft tissue injuries 3. Caused by forceful impact with sharp object 4. Bleeding may be severe
7.6.3 – Penetration/Puncture	
C 7.6.3.1 – Summarize possible assessment findings for a patient with a penetration/puncture	1. Caused by sharp pointed object 2. May be little or no external bleeding 3. Internal bleeding may be severe 4. Exit wound may be present 5. Examples a. Gunshot wound b. Stab wound
7.6.4 – Impaled Object	
C 7.6.4.1 – Summarize the management of a patient impaled with a foreign object	1. Object that creates the puncture wound remains embedded 2. Leave object in place unless it is in the cheek with uncontrolled bleeding 3. Apply pressure around the object and secure in place 4. Avoid movement
7.6.5 – Foreign Body In Eye	
C 7.6.5.1 – Summarize the possible assessment findings and management of a patient with a foreign body in the eye	1. Dust, dirt, or chemical 2. Signs and symptoms a. Pain, tearing, redness b. Vision may be blurred 3. Treatment a. Standard precautions b. Lay patient flat c. Tilt head to affected side so debris or chemical does not flow into unaffected eye d. Hold eyelid open with gloved hand i. Apply pressure to bones around the eye while holding lid open ii. Never press on the eye itself e. Flush for at least 15 minutes with water or normal saline
7.6.6 – Burns	
C 7.6.6.1 – Outline the possible assessment findings and management of a patient with burns	1. Severity determined by several factors a. Depth of burn i. Superficial involves only the outer layer of the skin 1. Pain 2. Redness of the skin

3. Swelling
ii. Partial thickness involves the outer and middle layer of the skin
1. Deep, intense pain
2. Reddening
3. Blisters or moist appearance
iii. Full thickness extends through all layers of the skin
1. White, yellow, tan, brown, or charred appearance
2. Leathery feel
3. No pain in those areas
a. Usually there is pain in surrounding areas with other depth of burns
b. Extent of burn
i. How much of the body surface is burned
ii. Has a large influence on whether the patient develops:
1. Shock
2. Other complications related to burns
iii. Rule of nines
c. Respiratory involvement
d. Part of body burned
e. Cause of burn
i. Thermal
ii. Chemical
1. Scene safety
2. Gloves and eye protection
3. Brush off dry powder
4. Flush with copious amounts of water
5. Consider eye burns if splash injury and flush with water
iii. Electrical
1. Scene safety: never touch a patient in contact with an electric source
2. Often internal damage more severe than external injuries appear
3. Patient may be in cardiac arrest when EMR arrives

2. Special management considerations
a. Stop the burning process with brief application of clean, room temperature water or saline
b. Remove smoldering clothing and jewelry
i. Some clothing may have melted to the skin
ii. If there is resistance when removing clothing, leave it in place
c. Continually monitor airway and breathing
d. Burned in an enclosed space or on the face could be high risk of swelling of the airway or other breathing problems
e. Cover the burned area with a dry, clean dressing

	i. Do not apply any ointment, lotion, or antiseptic ii. Do not break blisters iii. Keep the patient warm 3. Infant and child considerations a. Skin covers greater body surface area in relation to the total body size b. Greater fluid and heat loss c. Keep environment warm when possible d. Consider possibility of child abuse
7.6.7 – Dressings and Bandages	
C 7.6.7.1 – Explain the use of dressings and bandages for patients with soft tissue injuries	1. Function a. Control bleeding b. Absorb drainage c. Prevent contamination 2. Dressings a. Usually sterile b. Types i. Sterile gauze pads ii. Non-stick gauze pads iii. Occlusive dressing iv. Trauma dressings 3. Bandages a. Hold dressing in place b. Types i. Adhesive bandages ii. Roller gauze 1. Elastic 2. Non-elastic iii. Tape 4. Application a. Dressings b. Bandages
P 7.6.7.2 – Demonstrate the use of dressings and bandages for a patient with a soft tissue injury	1. Abrasion 2. Laceration 3. Penetration/puncture 4. Impaled object 5. Foreign body in eye 6. Burns

7.7 Head, Facial, Neck, and Spinal Trauma

Objective	Educational Standard
7.7.1 – Injuries to the Brain and Skull	
C 7.7.1.1 – Explain the potential assessment findings and management of a patient with injuries to the brain or skull	1. Head injuries a. Open injuries may present with bleeding b. Closed injury may present with swelling or depression of skull bones c. Brain injury may lead to altered consciousness with airway and breathing problems 2. Scalp injuries a. May bleed more than expected because of the large number of blood vessels in the scalp b. Control bleeding with direct pressure c. Severe bleeding from the scalp can cause shock in infants and young children 3. Injury to the brain a. Injury of brain tissue or bleeding inside the skull may increase pressure on the brain b. Altered mental status 4. Special management considerations a. Maintain airway/ventilation/oxygenation b. Primary assessment with manual in-line stabilization should be done on scene c. Monitor the patient's mental status d. Dress and bandage open wound as indicated in the emergency medical care of soft tissue injuries
P 7.7.1.2 – Demonstrate the assessment and management of a patient with a head injury	1. Manual in-line spinal immobilization/stabilization
7.7.2 – Injuries to the Spine	
C 7.7.2.1 – Explain the potential assessment findings and management of a patient with injuries to the spine	1. Mechanism of injury a. Motor vehicle crashes b. Pedestrian – vehicle collisions c. Falls d. Blunt trauma e. Penetrating trauma to head, neck, or torso f. Motorcycle crashes g. Hangings h. Springboard or platform diving accidents i. Unresponsive trauma patients 2. Signs and symptoms a. Tenderness in the area of injury b. Pain associated with moving i. Do not ask the patient to move to try to find a pain response ii. Do not move the patient to test for a pain response c. Pain independent of movement or palpation d. Numbness, weakness, or tingling in the arms or legs e. Unable to feel or move below the suspected

	level of injury f. Loss of feeling or movement in the upper or lower extremities g. Difficulty breathing or shallow breathing h. Loss of bladder and/or bowel control i. If the patient can walk, move, and feel arms and legs, it does not rule out the possibility of injury to the bones of the spine or to the spinal cord 3. Assessing the patient with a possible spine injury a. Responsive patient i. Manually stabilize head and neck in the position found ii. Mechanism of injury iii. Questions to ask: 1. Does your neck or back hurt? 2. What happened? 3. Where does it hurt? 4. Can you move your hands and feet? 5. Can you feel me touching your fingers? 6. Can you feel me touching your toes? b. Unresponsive patient i. Maintain airway ii. Assist ventilation if inadequate iii. Administer oxygen iv. Stabilize head and neck manually in the position found v. Obtain information from others at the scene to determine mechanism of injury and patient's mental status before the EMR's arrival c. Complications i. Inadequate breathing effort ii. Paralysis 4. Special management consideration a. Establish and maintain manual stabilization i. Maintain constant manual stabilization ii. May be released when additional EMS resources have applied a cervical collar and properly secured the patient's torso and head to a backboard b. Primary assessment i. Whenever possible, airway control should be done without moving the patient's head ii. Whenever possible, artificial ventilation should be done without moving the patient's head iii. Assess pulse, movement, and feeling in all extremities
P 7.7.2.2 – Demonstrate the assessment and management of a patient with a spinal injury	1. Manual spinal immobilization/stabilization

7.8 – Special Considerations in Trauma

Objective	Educational Standard
7.8.1 – Pregnant Patient	
C 7.8.1.1 – Explain the recognition and management of a pregnant trauma patient	1. Recognition a. Pregnant women who have suffered an injury should be evaluated by a physician in the emergency room 2. Management a. If the woman is having any symptoms related to shock, high-concentration oxygen should be administered b. Place pregnant patient in third trimester on her left side unless spinal injury is suspected, then tilt spine board to the left after patient is fully secured to the board
7.8.2 – Pediatric Patient	
C 7.8.2.1 – Explain the recognition and management of a pediatric trauma patient	1. Recognition a. Heavy head with weak neck muscles in children increase risk of cervical spine injury b. Accessory muscle use more prominent during respiratory distress c. Slow pulse rate indicates hypoxia d. Normal blood pressure may be present in compensated shock e. Shaken baby syndrome may cause brain trauma 2. Management a. Manage hypovolemia and shock as for adults b. Prevent hypothermia in shock c. Transport to appropriate facility d. Pad beneath child from shoulders to hips during cervical immobilization to prevent flexion of the neck e. Ventilate bradycardic pediatric patient
7.8.3 – Elderly Patient	
C 7.8.3.1 – Explain the recognition and management of a geriatric trauma patient	1. Recognition a. Changes in pulmonary, cardiovascular, neurologic, and musculoskeletal systems make older patients susceptible to trauma b. Circulation changes lead to inability to maintain normal vital signs during hemorrhage; blood pressure drops sooner c. Multiple medications are more common and may affect: i. Assessment, especially vital signs ii. Blood clotting d. Skeletal changes cause curvature of the upper spine that may require padding during spinal immobilization e. Dentures may cause airway obstruction f. Falls are often the result of medical conditions 2. Management

	a. Suctioning is important in elderly patients due to decreased cough reflex b. Skeletal changes cause curvature of the upper spine that may require padding during spinal immobilization c. Prevent hypothermia d. Broken bones are common

7.9 – Environmental Emergencies

Objective	Educational Standard
7.9.1 – Exposure to Cold	
C 7.9.1.1 – Explain the potential assessment findings and management of a patient suffering from exposure to the cold	1. Generalized cold emergency a. Contributing factors i. Cold environment ii. Wet environment iii. Wind iv. Age (very old/very young) v. Medical conditions vi. Alcohol/drugs/poisons b. Signs and symptoms of generalized hypothermia i. Obvious exposure ii. Subtle exposure 1. Underlying illness 2. Overdose/poisoning 3. Ambient temperature decreased (e.g., cool home of elderly patient) iii. Cool/cold skin temperature 1. Place the back of hand between the clothing and the patient's abdomen to assess the general temperature of the patient 2. The patient experiencing a generalized cold emergency will present with cool or cold abdominal skin temperature iv. Shivering v. Decreasing mental status or motor function 1. Depends on the degree of hypothermia 2. Poor coordination 3. Memory disturbances/confusion 4. Reduced or loss of touch sensation 5. Mood changes 6. Less communicative 7. Dizziness 8. Speech difficulty 9. Stiff or rigid posture 10. Muscular rigidity 11. Poor judgment – patient may actually remove clothing 12. Complaints of joint/muscle stiffness vi. Slow pulse c. Management i. Move to a warm environment as soon as possible ii. Remove wet clothing iii. Wrap patient in warm blankets iv. Handle gently v. Assess pulses for 30 to 45 seconds to determine absence of pulse before

starting CPR
vi. If AED states that shock is indicated, defibrillate

2. Local cold emergencies
   a. Freezing or near freezing of a body part
   b. Usually occurs in fingers, toes, face, ears, and nose
   c. Signs and symptoms of local cold injuries
   d. Local injury with clear demarcation
      i. Early or superficial injury
         1. Blanching of the skin: palpation of the skin in which normal color does not return
         2. Loss of feeling and sensation in the injured area
         3. Skin is soft
         4. If rewarmed, tingling sensation
      ii. Late or deep injury
         1. White, waxy skin
         2. Firm or frozen feeling when palpated
         3. Swelling may be present
         4. Blisters may be present
         5. If thawed or partially thawed, the skin may appear flushed with areas of purple and blanching or may be mottled and cyanotic
   e. Special management considerations
      i. Remove the patient from the cold environment
         1. Handle the patient extremely gently
         2. Protect the patient form further heat loss
         3. Do not allow the patient to walk or exert himself
         4. Do not re-expose to the cold
         5. Remove any wet clothing and cover the patient with a blanket
      ii. Do not:
         1. Break blisters
         2. Rub or massage affected area
         3. Apply heat
         4. Rewarm if any chance of refreezing
      iii. The patient should not be given anything by mouth
         1. Coffee, tea, or smoking may worsen the condition
         2. Cover the patient with a blanket; keep the patient warm
      iv. If early or superficial injury:
         1. Manually stabilize the extremity
         2. Cover the extremity
      v. If late or deep cold injury:
         1. Remove jewelry
         2. Cover with dry clothing or dressings

P 7.9.1.2 – Demonstrate the assessment and management of a patient suffering from hypothermia	
7.9.2 – Exposure to Heat	
C 7.9.2.1 – Explain the potential assessment findings and management of a patient suffering from exposure to heat	1. Predisposing factors a. Climate i. High ambient temperature reduces the body's ability to lose heat by radiation ii. High relative humidity reduces the body's ability to lose heat through evaporation b. Exercise and activity: can lose more than one liter of sweat per hour c. Age (very old/very young) d. Preexisting illness and/or conditions e. Drugs/medications 2. Signs and Symptoms a. Muscular cramps b. Weakness or exhaustion c. Sweating or dry skin d. Dizziness or faintness e. Rapid heart rate f. Altered mental status to unresponsive 3. Special management considerations a. Administer oxygen by non-rebreather mask b. Remove the patient from the hot environment c. Remove excess clothing d. Place in a cool environment (air conditioned) e. Cool patient by fanning (may be ineffective in high humidity) f. Cool with cool cloths or ice packs (wrapped so they are not placed in contact with the skin) i. On neck ii. Under armpits iii. On groin g. If unconscious, place in recovery position i. Maintain airway ii. Assist ventilation if breathing Inadequate
P 7.9.2.2 – Demonstrate the assessment and management of a patient suffering from a heat exposure emergency	
7.9.3 – Submersion	
C 7.9.3.1 – Explain the potential assessment findings and management of a patient suffering from a submersion event	1. Definitions a. Drowning: occurs when the patient's airway is surrounded by a liquid that prevents him/her from breathing air; it may or may not cause death 2. Contributing factors 3. Severity 4. Signs and symptoms a. Coughing b. Vomiting

c. Difficulty breathing
d. Respiratory arrest
e. Cardiac arrest

5. Special management considerations
   a. If patient is in water, be aware of personal safety
   b. Consider possibility of spine injury
      i. If risk of spinal injury exists, manually stabilize the neck and spine
      ii. If no risk of spinal injury exists and patient is breathing:
         1. Place in recovery position
         2. Administer oxygen
      iii. If no risk of spinal injury exists and patient is not breathing, follow AHA guidelines for CPR
   c. Risk of vomiting is high and, if patient vomits:
      i. Roll on side
      ii. Suction mouth

7.10 – Multi-System Trauma

Objective	Educational Standard
7.10.1 – Multi-System Trauma	
C 7.10.1.1 – Generalize multi-system trauma considerations	1. Patients subjected to significant forces have an increased risk for injuries to multiple organs within the body at the same time 2. Multi-trauma patients are at a greater risk for developing shock 3. Suspect multi-systems trauma in any patient subjected to significant external forces

8.0 – Special Patient Populations

Recognizes and manages life threats based on simple assessment findings for a patient with special needs while awaiting additional emergency response

8.1 – Obstetrics

Objective	Educational Standard
8.1.1 – Anatomy and Physiology of Organs Related to Delivery	
C 8.1.1.1 – Identify the anatomy and physiology of organs related to delivery	1. Uterus/womb 2. Baby/fetus 3. Placenta/afterbirth 4. Amniotic sac/bag of water 5. Vagina/birth canal
8.1.2 – Vaginal Bleeding in the Pregnant Patient	
C 8.1.2.1 – Explain the potential assessment findings and management of a pregnant patient with vaginal bleeding	1. Light irregular discharges of small amount of blood "spotting" may be normal 2. More bleeding may indicate a problem that needs a physician's attention 3. Mucus with small amount of blood late in pregnancy may mean delivery is near 4. Any other bleeding late in pregnancy is a serious emergency 5. General assessment a. ABCs b. Vital signs initially and repeated periodically c. SAMPLE and obstetric histories 6. General management a. Standard precautions b. Place patient on left side c. Ensure the patient places a sanitary pad over the vaginal opening d. Provide shock care e. Monitor airway and administer oxygen f. Save blood-soaked pads in a plastic bag for examination at the hospital g. Offer support for the patient while awaiting EMT response
8.1.3 – General Assessment and Management of the Obstetrical Patient	
C 8.1.3.1 – Outline considerations associated with labor and delivery for an obstetrical patient	1. Signs of labor a. Braxton hicks/false labor contractions b. Blood show c. Ruptured membranes d. Contractions regular and at closer intervals 2. Stages of labor and delivery a. First stage: onset of contractions until fetus enters the birth canal b. Second Stage: fetus enters the birth canal until birth c. Third stage: placenta delivery 3. Assessment during labor and delivery a. Airway, breathing, and circulation

	b. SAMPLE and obstetric histories i. When is the baby due? ii. First or subsequent/later pregnancy iii. Known complications (multiple births, etc.) iv. Has experienced bloody show, water broken v. Contraction regularity, interval, and duration vi. Other medical history
C 8.1.3.2 – Summarize the physical examination process of an obstetrical patient given potential labor and delivery	1. Vital signs 2. Evaluating contractions 3. Inspect for crowning 4. Preparation for delivery a. Standard precautions i. Gloves ii. Gown iii. Eye protection and face shield b. Collect supplies/OB kit i. Towels ii. Sheets iii. Bulb syringe iv. Cord clamps v. Sterile scissors or razor vi. Sanitary pads vii. Bag or basin for placenta/afterbirth viii. Medical hazard bag c. Provide privacy for mother d. Position mother on back, hips elevated, knees bent, legs apart e. No internal vaginal examination f. Wait for EMTs
C 8.1.3.3 – Outline the steps to be taken if the EMR needs to assist with a delivery	1. If baby's head is seen at the vaginal opening (crowning), delivery will occur soon 2. Someone by mother's head for support 3. Wash hands and put on PPE 4. Support the baby's head as it delivers 5. If umbilical cord is around the baby's neck, slip it gently over the head 6. Support the baby as he/she rotates 7. The upper shoulder should deliver next as the head is guided downward 8. The feet should deliver after that 9. Keep the head lowered so fluids can drain; suction mouth and nose 10. Make note of the birth time 11. Keep the baby at the level of the birth canal 12. Clamp the cord; cut only if sterile equipment is available 13. Monitor the ABCs 14. Wait for the placental/afterbirth delivery 15. Provide care for the baby (see neonatal care) 16. Provide care for the mother a. Some bleeding is normal

	b. Sanitary pad over vaginal opening c. Massage the uterus in a circular motion continuously d. Allow the mother to nurse e. Provide comfort, warmth
P 8.1.3.4 – Demonstrate the assessment and management of a normal delivery	1. Assessment for impending birth 2. Assisting birth 3. Post-delivery care for the newborn 4. Post-delivery care for mother

8.2 – Neonatal Care

Objective	Educational Standard
8.2.1 – Initial Care of the Neonate	
C 8.2.1.1 – Summarize the assessment and routine care of a newborn	1. Assessment a. Respirations b. Pulse c. Color d. Cry e. Movement 2. Routine care a. Support b. Dry c. Warm d. Position e. Airway f. Stimulation
P 8.2.1.2 – Demonstrate the assessment and management of a newborn	

8.3 – Pediatrics

Objective	Educational Standard
8.3.1 – General Considerations	
C 8.3.1.1 – Outline general considerations to keep in mind when assessing and managing pediatric patients	1. Many components of the initial evaluation can be done by careful observation without touching the patient 2. When appropriate, utilize the parent/guardian to help the infant or child be more comfortable with your exam and treatment 3. Communicating with scared, concerned parents and family is important when caring for an ill infant or child 4. Continue assessment until care is transferred
8.3.2 – Assessment Process	
C 8.3.2.1 – Summarize the assessment process of a pediatric patient	1. Scene survey a. Evaluate the scene for safety b. Evaluate the scene for clues related to the chief complaint i. Ingestions or toxic exposures: pills, medicine bottles, chemicals, alcohol, drug paraphernalia, etc. ii. Child abuse: injury must be consistent with history given and physical/developmental capabilities of the patient iii. Note position and location in which patient is found c. Observe caregivers' interactions with the child i. Are they appropriately concerned, angry, or indifferent? ii. Does the child seem comforted or scared by them? 2. Patient Assessment a. Pediatric assessment triangle – 15 to 30 second assessment of the severity of the patient's illness or injury i. Use prior to addressing the ABCs ii. Does not require touching the patient; just looking and listening 1. Appearance a. Muscle tone b. Interactiveness c. Consolability d. Eye contact e. Speech or cry 2. Work of breathing a. Abnormal airway noise b. Wheezing c. Stridor d. Grunting 3. Abnormal positioning (i.e., tripoding) 4. Accessory muscle use

a. Chest wall
b. Nasal flaring

iii. Assess skin to see if it is:
1. Pale
2. Mottled
3. Cyanotic

iv. Possible causes of abnormal findings
1. Respiratory distress or failure
2. Shock
3. Cardiopulmonary failure or arrest
4. Other abnormality
5. Stable patient

b. Airway
i. Obstructed
1. Open with airway maneuvers and airway adjuncts
2. If indicated, suction or remove fluids, blood, or foreign objects
ii. Maintainable on its own

c. Ventilation/oxygenation
i. Administer oxygen if inadequate
ii. Assist with ventilation if necessary

d. Circulation
i. Signs of shock
1. Pulse quality: Strong or weak
2. Extremity skin temperature and active bleeding
ii. Position flat
iii. Maintain warmth

e. Determine level of consciousness
i. AVPU scale
ii. Assess pupils: Dilated, constricted, reactive, or fixed
iii. Moving all extremities equally

f. Exposure
i. Examine for additional injuries
ii. Promptly cover to prevent hypothermia; cover head as well

g. Additional assessment
i. History
1. Symptoms and duration
a. Fever
b. Activity level
c. Recent eating, drinking, and urine output history
d. History of vomiting, diarrhea, or abdominal pain
2. Medications taking and allergies
3. Past medical problems or chronic illnesses
4. Key events leading to the injury or illness
ii. Secondary examination – "head to toe"
1. Head: bruising, swelling
2. Ears: drainage suggestive of trauma

	or infection 3. Mouth: loose teeth, identifiable odors, bleeding 4. Neck: abnormal bruising 5. Chest and back: bruises, injuries, or rashes 6. Extremities: deformities, swellings, or pain on movement
P 8.3.2.2 – Demonstrate the assessment of a pediatric patient	
8.3.3 – Respiratory Distress/Failure/Arrest	
C 8.3.3.1 – Outline the assessment and management of a pediatric patient with respiratory distress, failure, or arrest	1. Introduction a. Tongue is larger b. Airways are smaller 2. Pathophysiology a. Respiratory distress b. Respiratory failure c. Respiratory arrest 3. Assessment a. History b. Physical findings 4. Upper airway obstruction a. Swelling of tissue b. Foreign body c. Secretions d. Other 5. Management a. Airway positioning (chin lift, jaw thrust) b. If upper airway is obstructed, use age- and situation-appropriate airway measures (i.e., finger sweep, back blows, suctioning, abdominal thrusts) c. Airway adjunct (oropharyngeal airways) d. Oxygen e. Assisted ventilation (bag-valve mask)
P 8.3.3.2 – Demonstrate the assessment and management of a pediatric patient with respiratory compromise	1. Respiratory distress 2. Respiratory failure 3. Respiratory arrest
8.3.4 – Shock	
C 8.3.4.1 – Outline the assessment and management of a pediatric patient in shock	1. Causes a. Trauma b. Infections c. Vomiting or diarrhea 2. Assessment a. History b. Physical findings i. Rapid heart and respiratory rates ii. Weak or absent pulse iii. Altered mental status iv. Pale, cool, clammy skin 3. Management a. Scene safety and standard precautions b. Open airway (protect spine if necessary)

	c. Oxygen d. Assist ventilations if necessary e. Chest compressions if necessary f. Control bleeding
8.3.5 – Seizures	
C 8.3.5.1 – Outline the assessment and management of a pediatric patient suffering from seizures	1. Description 2. Causes a. Fever b. Head trauma c. Epilepsy d. Low blood glucose e. Poisoning 3. Assessment 4. Management a. Scene safety and standard precautions b. Place patient on the floor c. Loosen restrictive clothing d. Protect the patient from injury e. Nothing in the mouth f. Do not hold the patient down g. After seizure, place patient in recovery position
8.3.6 – Sudden Infant Death Syndrome (SIDS)	
C 8.3.6.1 – Outline the assessment and management of a sudden infant death syndrome (SIDS) case	1. Introduction a. Definition of SIDS b. Definition of apparent life-threatening event (ALTE) c. Epidemiology and risk factors 2. Assessment a. Airway, breathing, pulse b. Signs of death c. Begin resuscitation if no indication of futility 3. Management a. Local EMS criteria for death in the field b. Notification of appropriate authorities c. Caregiver support

8.4 – Geriatrics

Objective	Educational Standard
8.4.1 – Age-Associated Changes	
C 8.4.1.1 – Explore age-associated changes in geriatric patients	1. Age dependent and variable 2. Sensory changes in older patients a. Vision i. Decreased vision ii. Inability to differentiate colors iii. Decreased night vision iv. Decreased ability to see close up v. Decreased depth perception b. Hearing i. Inability to hear high-frequency sounds ii. Use of hearing aids c. Sense of touch and pain i. Decreased sense of balance ii. Diminished pain perception iii. Decreased ability to differentiate hot from cold iv. Decreased tolerance of hot and cold 3. Heart/blood vessels a. High blood pressure b. Increased risk of heart attack and stroke c. Heart is less able to beat faster when needed 4. Lungs and breathing a. Diminished breathing capacity b. Increased risk of infection in the lungs c. Decreased cough 5. Stomach and intestines a. Difficulty with digestion b. Difficulty chewing c. Increased risk of foreign body obstruction (FBAO) 6. Brain and nervous system a. Slower reflexes b. Decreased recent memory 7. Muscles and bones a. Decreased bone density – easier to break b. Loss of strength and size of bone and muscles 8. Other a. Increased risk of infections b. Decreased signs and symptoms of infection when present
8.4.2 – Assessment and Care Implications	
C 8.4.2.1 – Summarize assessment and care implications for geriatric patients	1. Assessment a. ABCs i. Airway may be difficult to assess and manage due to neck arthritis ii. Dentures should not be removed unless they obstruct the airway or interfere with ventilation if rescue breathing is needed iii. Increased risk of airway obstructions

	iv. Pulse may be irregular due to common heart rhythm problems b. Speak slowly and distinctly at patient's eye level with good lighting c. Give the patient time to respond unless the condition appears urgent d. Elderly may not show severe symptoms even if very ill e. Use family members if available, especially for base line mental status f. Reassess often as condition may deteriorate quickly 2. Care a. Handle gently as skin is fragile and can tear easily b. Reassurance is important
P 8.4.2.2 – Demonstrate the assessment and management of a geriatric patient	

8.5 – Patients with Special Challenges

Objective	Educational Standard
8.5.1 – Recognizing and Reporting Abuse and Neglect	
C 8.5.1.1 – Summarize the assessment and management of an abused or neglected pediatric or geriatric patient	1. Child abuse a. Types of abuse i. Neglect ii. Physical abuse iii. Sexual abuse iv. Emotional abuse b. Assessment i. History or scene findings ii. Caregiver's behavior iii. Physical findings c. Management i. Reporting ii. Safely transporting iii. Role of child/adult protective services 2. Elder abuse a. Types of abuse i. Neglect ii. Physical abuse iii. Sexual abuse iv. Emotional abuse v. Financial abuse b. Epidemiology c. Assessment d. Management e. Legal aspects f. Documentation

9.0 – EMS Operations

Knowledge of operational roles and responsibilities to ensure patient, public, and personnel safety

9.1 – Principles of Safely Operating a Ground Ambulance

The intent of this section is to give an overview of emergency response to ensure the safety of EMS personnel, patients, and others during EMS operations. This does not prepare the entry-level student to be an experienced or competent driver

Information related to the clinical management of the patient during emergency response is found in the clinical sections of the National EMS Education Standards and Instructional Guidelines for each personnel level

Objective	Educational Standard
9.1.1 – Risks and Responsibilities of Emergency Response	
C 9.1.1.1 – Explain apparatus and equipment readiness	1. Inspect and service vehicles regularly a. Tire inflation b. Engine fluid levels c. Warning devices in working order 2. Appropriate safety equipment available and in working order a. Personal protective equipment b. Safety vests
C 9.1.1.2 – Outline pre-arrival considerations	1. All personnel are properly seated and use seat belts 2. All equipment is appropriately secured a. Cab area b. Rear of ambulances c. Compartment areas 3. Consideration of use of lights and siren a. Risk/benefit analysis b. Audible warning devices i. Asking for right-of-way of others ii. Not to be used to clear traffic c. Visual warning devices: consider turning off upon arrival if appropriate 4. Respond with due regard 5. High-risk situations a. Intersections b. Highway access c. Speeding d. Driver distractions i. Mobile computer ii. Global positioning systems iii. Mobile radio iv. Vehicle stereo v. Wireless devices vi. Eating/drinking e. Inclement weather f. Aggressive drivers

	g. Unpaved roadways (see federal highway administration definition) h. Responding alone i. Fatigue
C 9.1.1.3 – Explain scene safety	1. Personal a. First priority for all EMS personnel b. Appropriate personal protective equipment for conditions c. Scene size-up 2. Patient a. Keep them informed of your actions b. Protect from further harm 3. Control traffic flow a. Proper positioning of emergency vehicles i. Upwind/uphill ii. Protect scene b. Use of lights and other warning devices c. Setting up protective barrier d. Designate a traffic control person 4. 360° Assessment (traffic crashes and outdoor incidents) a. Downed electrical lines b. Leaking fuels or fluids c. Smoke or fire d. Broken glass e. Trapped or ejected patients f. Mechanism of injury
C 9.1.1.4 – Identify scene-clearing (leaving the scene) considerations	1. Ensure all hazards have been mitigated 2. Pick up and dispose of all equipment properly 3. Turn scene over to appropriate authority prior to leaving a. Law enforcement b. Fire suppression c. Highway department d. Other
A 9.1.1.5 – Relate the need for safe, responsible ambulance operations (defensive driving)	

9.2 – Incident Management

Information related to the clinical management of the patient within components of the Incident Management System (IMS) is found in the clinical sections of the National EMS Education Standards and Instructional Guidelines for each personnel level

Objective	Educational Standard
9.2.1 – Establish and Work Within the Incident Management System	
C 9.2.1.1 – Summarize incident management	1. Entry-level students need to be certified in: a. ICS-100: Introduction to ICS, or equivalent b. FEMA IS-700: NIMS, an introduction 2. This can be done as a co- or pre-requisite or as part of the entry-level course 3. Training in NIMS and ICS (as denoted herein) should be provided to the student by his/her affiliated service/employer

9.3 – Multiple Casualty Incidents (MCI)

The intent of this section is to give an overview of operating during a multiple casualty incident when a multiple casualty incident plan is activated
Information related to the clinical management of the patients during a multiple casualty incident is found in the clinical sections of the National EMS Education Standards and Instructional Guidelines for each personnel level

Objective	Educational Standard
9.3.1 – Triage Principles	
C 9.3.1.1 – Examine principles of triaging multiple casualty incidents	1. MCI – An event that places a great demand on resources, be It equipment or personnel 2. Triage principles a. Primary triage used on-scene to rapidly categorize patient's condition i. Document location of patient and transport needs ii. Triage tape or labels used iii. Focus on speed to sort patients quickly b. Patient priority i. Immediate 1. Airway and breathing difficulties 2. Uncontrolled or severe bleeding 3. Decreased mental status 4. Patients with severe medical problems 5. Shock (hypoperfusion) 6. Severe burns ii. Delayed 1. Burns without airway problems 2. Major or multiple bone or joint injuries 3. Back injuries with or without spinal cord damage iii. Hold 1. Minor painful, swollen, deformed extremities 2. Minor soft tissue injuries iv. Deceased 3. Triage tagging/labeling a. International agreement on color-coding and priorities i. Immediate: Red Priority = 1 (P-1) ii. Delayed: Yellow Priority = 2 (P-2) iii. Hold: Green Priority = 3 (P-3) iv. Deceased: Black Priority = 0 (P-0) 4. Triage Procedures a. Identify a triage officer (remains on-scene for duration of event) b. Request additional resources i. Personnel ii. Equipment c. Perform triage of all patients

	d. Assign personnel and equipment to highest priority patients 5. Post-traumatic and cumulative stress a. Should be part of post-incident standard operating procedure (SOP) b. Access to defusing during the multiple casualty incident c. Roles of debriefing for a multiple casualty incident d. Access to debriefing
C 9.3.1.2 – Explain resource management considerations	1. Triage procedures a. Identify a triage officer (remains on-scene for duration of event) b. Request additional resources i. Personnel ii. Equipment c. Perform triage of all patients d. Assign personnel and equipment to highest priority patients

9.4 – Air Medical and Advanced Life Support

The intent of this section is to give an overview of operating safely in and around a landing zone during air medical operations and transport

Information related to the clinical management of the patient being cared for during air medical operations is found in the clinical sections of the National EMS Standards and Instructional Guidelines for each personnel level

Objective	Educational Standard
9.4.1 – Safe Air Medical Operations	
C 9.4.1.1 – Explore safe air medical operations	1. Types a. Rotorcraft b. Fixed wing 2. Advantages a. Specialized care: skills, supplies, equipment b. Rapid transport c. Access to remote areas d. Helicopter hospital helipads 3. Disadvantages a. Weather/environmental b. Altitude limitations c. Airspeed limitations d. Aircraft cabin size e. Terrain f. Cost 4. Patient transfer a. Interacting with flight personnel b. Patient preparation c. Scene safety i. Securing loose objects ii. Approaching the aircraft iii. Landing zone 5. Landing zone selection and preparation 6. Approaching the aircraft 7. Communication issues
9.4.2 – Criteria for Utilizing Air Medical Response	
C 9.4.2.1 – Outline criteria for utilizing air medical response	1. Indications for patient transport a. Medical b. Trauma c. Search and rescue 2. Activation a. Local and state guidelines exist for air medical activation i. State statutes ii. Administrative rules iii. City/county/district ordinance standards
9.4.3 – Criteria for Requesting Advanced Life Support (ALS)	
C 9.4.3.1 – Outline criteria to be considered when determining the need for advanced life support (care beyond the EMT level)	1. Follow local protocols 2. May be similar to criteria for activation of air medical
A 9.4.3.2 – Explain the value of advanced care	

for critical patients

9.5 – Vehicle Extrication

The intent of this section is to give an overview of vehicle extrication to ensure EMS personnel and patient safety during extrication operations. This does not prepare the entry-level student to become a vehicle extrication expert or technician

Information related to the clinical management of the patient receiving care during vehicle extrication activities is found in the clinical sections of the National EMS Education Standards and Instructional Guidelines for each personnel level

Objective	Educational Standard
9.5.1 – Safe Vehicle Extrication	
C 9.5.1.1 – Summarize safe vehicle extrication	1. Role of EMS in vehicle extrication a. Provide patient care b. Perform simple extrication 2. Personal safety a. First priority for all EMS personnel b. Appropriate personal protective equipment for conditions c. Scene size-up 3. Patient safety a. Keep patient(s) informed of EMR actions b. Protect from further harm 4. Situational safety a. Control traffic flow i. Proper positioning of emergency vehicles 1. Upwind/uphill 2. Protect scene ii. Use of lights and other warning devices iii. Setting up protective barrier iv. Designate a traffic control person b. 360° Assessment i. Downed electrical lines ii. Leaking fuels or fluids iii. Smoke or fire iv. Broken glass v. Trapped or ejected patients vi. Mechanism of injury c. Vehicle stabilization i. Put vehicle in “park” or in gear ii. Set parking brake iii. Turn off vehicle ignition iv. Cribbing/chocking v. Move seats back and roll down windows vi. Disconnect battery or power source vii. Identify and avoid hazardous vehicle safety components 1. Seat belt pretensioners 2. Undeployed air bags 3. Other d. Unique hazards i. Alternative-fuel vehicles ii. Undeployed vehicle safety devices

	iii. Hazardous materials e. Evaluate the need for additional resources i. Extrication equipment ii. Fire suppression iii. Law enforcement iv. Hazardous materials v. Utility companies vi. Air medical vii. Others f. Extrication considerations i. Disentanglement of vehicle from patient ii. Multi-step process iii. Rescuer-intensive iv. Equipment-intensive v. Time-intensive vi. Access to patient 1. Simple a. Try to open doors b. Ask patient to unlock doors c. Ask patient to lower windows 2. Complex 3. Tools a. Hand b. Pneumatic c. Hydraulic d. Other 5. Determine number of patients (implement local multiple casualty incident protocols if necessary)
9.5.2 – Use of Simple Hand Tools	
C 9.5.2.1 – Summarize the use of simple hand tools for extrication	1. Hammer 2. Center punch 3. Pry bar 4. Hack saw 5. Come-along
9.5.3 – Special Considerations for Patient Care	
C 9.5.3.1 – Outline special considerations for patient care given extrication activities	1. Removing patient a. Maintain manual cervical spine stabilization b. Complete primary assessment c. Provide critical interventions 2. Assist with rapid extrication 3. Move patient, not device 4. Use sufficient personnel 5. Use path of least resistance

9.6 – Hazardous Materials Awareness and Weapons of Mass Destruction (WMD)

Information related to the clinical management of the patient exposed to hazardous materials is found in the clinical sections of the National EMS Education Standards and Instructional Guidelines for each personnel level

Objective	Educational Standard
9.6.1 – Risks and Responsibilities of Operating in a Cold Zone at a Hazardous Material or Other Special Incident	
C 9.6.1.1 – Summarize the risks and responsibilities of operating in a cold zone at a hazardous materials or other special incident	1. Entry-level students need to be certified in: a. Hazardous waste operations and emergency response (HAZWOPER) standard, 29 CFR 1910.120 (q)(6)(i) – First Responder awareness level b. This can be done as a co- or pre-requisite or as part of the entry-level course c. HAZWOPER training (as denoted herein) should be provided to the student by his/her affiliated service/employer
9.6.2 – Weapons of Mass Destruction (WMD)	
C 9.6.2.1 – Summarize the weapons of mass destruction information as provided by the Wisconsin Department of Health Services	1. Weapons of Mass Destruction (WMD) training is required of all EMS providers within Wisconsin, including EMRs. 2. A separate WMD training module is available through the WI DHS EMS Unit (or other state agency). The EMS training center should have information pertaining to this requirement or can contact the EMS Unit for additional resources.

9.7 – Mass Casualty Incidents Due to Terrorism and Disaster

The intent of this section is to give an overview of operating during a terrorist event or during a natural or man-made disaster

Information related to the clinical management of patients exposed to a terrorist event or involved in a disaster is found in the clinical sections of the National EMS Education Standards and Instructional Guidelines for each personnel level

Objective	Educational Standard
9.7.1 – Risks and Responsibilities of Operating at the Scene of a Natural or Man-Made Disaster	
C 9.7.1.1 – Summarize the risks and responsibilities associated with operating at the scene of a natural or man-made disaster	1. Role of EMS a. Personal safety b. Provide patient care c. Initiate/operate in an incident command system (ICS) d. Assist with operations 2. Safety a. Personal i. First priority for all EMS personnel ii. Appropriate personnel protective equipment for conditions iii. Scene size-up iv. Time, distance, and shielding for self-protection v. Emergency responders are targets vi. Dangers of the secondary attack b. Patient i. Keep patient(s) informed of EMR actions ii. Protect from further harm iii. Signs and symptoms of biological, nuclear, incendiary, chemical, and explosive (B-NICE) substances c. 360° Assessment and scene size-up i. Outward signs and characteristics of terrorist incidents ii. Outward signs of a weapons of mass destruction (WMD) incident iii. Outward signs and protective actions of biological, nuclear, incendiary, chemical, and explosive (B-NICE) weapons d. Determine number of patients (implement local multiple casualty incident [MCI] protocols as necessary) e. Evaluate need for additional resources f. EMS operations during terrorist, weapons of mass destruction (WMD), disaster events i. All hazards safety approach ii. Initially distance from scene and approach when safe iii. Ongoing scene assessment for potential secondary events iv. Communicate with law enforcement at

	the scene of an armed attack v. Initiate or expand incident command system as needed vi. Perimeter use to protect rescuers and public from injury vii. Escape plan and a mobilization point at a terrorist incident g. Care of emergency responders on scene i. Safe use of an auto-injector for self and peers ii. Safe disposal of auto-injector devices after activation

Summary of Curriculum Objectives

0.0 – INTRODUCTION
- 0.1 – Wisconsin Emergency Medical Responder (EMR) Program Outcomes
- 0.2 – Curriculum Background and EMS Training Center Adaptation
- 0.3 – Contribution Acknowledgement
- 0.4 – Course Pre-/Co-Requisites and Additional Modules
- 0.5 – Course Structure and Topical Hour Guidelines

1.0 – PREPARATORY
- 1.1 EMS Systems
  - *1.1.1 – The Emergency Medical Services (EMS) System*
    - C 1.1.1.1 – Explore current EMS systems
    - C 1.1.1.2 – Recognize the National highway Traffic Safety Administration (NHTSA) as the lead coordinating agency
    - C 1.1.1.3 – Identify methods to access emergency medical services
    - C 1.1.1.4 – Examine the educational components within the EMS system
    - C 1.1.1.5 – Examine mechanisms by which authorization is provided to practice emergency medicine
  - *1.1.2 – Roles, Responsibilities, and Professionalism of EMS Personnel*
    - C 1.1.2.1 – Differentiate the roles and responsibilities of EMRs
    - C 1.1.2.2 – Summarize professionalism as it applies to the EMR
    - A 1.1.2.3 – Model professional behavior
    - A 1.1.2.4 – Relate the importance of maintaining a professional appearance when on duty in view of the public
    - A 1.1.2.5 – Incorporate diversity and non-discriminatory conduct into routine activities
  - *1.1.3 – Quality Improvement*
    - C 1.1.3.1 – Illustrate how quality improvement is a dynamic system for continually evaluating and improving care
- 1.2 – Research
  - *1.2.1 – Impact of Research on EMR Care*
    - C 1.2.1.1 – Defend how research findings are important to identify what should be changed in EMS assessment and management and to improve patient care and outcomes (i.e., CPR guidelines change based on current research)
    - C 1.2.1.2 – Summarize how quality assurance research for an EMS system can improve service delivery
    - C 1.2.1.3 – Investigate data collection methods as they apply to EMS research
- 1.3 – Workforce Safety and Wellness
  - *1.3.1 – Standard Safety Precautions*
    - C 1.3.1.1 – Defend the importance of a baseline health assessment for EMRs
    - C 1.3.1.2 – Support the importance of hand washing
    - C 1.3.1.3 – Justify adherence to standard precautions and OSHA regulations
    - C 1.3.1.4 – Explain the importance of safe operation of EMS/patient care equipment
    - C 1.3.1.5 – Explore the need for environmental control
    - C 1.3.1.6 – Summarize the need for occupational health activities and blood borne pathogens precautions
  - *1.3.2 – Personal Protective Equipment*
    - C 1.3.2.1 – Explain how exposure to diseases spread through blood, body fluids, or respiratory droplets are best prevented by the use of standard precautions
    - C 1.3.2.2 – Differentiate between recognized standard precautions
    - C 1.3.2.3 – Outline the steps to follow if an exposure occurs
    - C 1.3.2.4 – Determine the appropriate process for addressing soiled equipment or vehicles
    - A 1.3.2.5 – Incorporate the routine and proper use of personal protective equipment (PPE) within personal practice
  - *1.3.3 – Stress Management*
    - C 1.3.3.1 – Distinguish EMS situations that can be stressful for EMS personnel
    - C 1.3.3.2 – Appraise the need for EMR to be supportive
    - C 1.3.3.3 – Specify appropriate EMR actions during and immediately after a stressful incident
    - C 1.3.3.4 – Contrast the warning signs of personal stress
    - C 1.3.3.5 – Outline strategies to manage personal stress

C 1.3.3.6 – Investigate realities of dealing with death and dying
A 1.3.3.7 – Evaluate the importance of recognizing human responses to death and dying
A 1.3.3.8 – Justify EMR use of stress-reduction techniques

1.3.4 – Prevention of Response-Related Injuries

C 1.3.4.1 – Examine exposures to infectious diseases
C 1.3.4.2 – Relate common injury prevention methods
C 1.3.4.3 – Analyze the proper lifting and moving of patients
C 1.3.4.4 – Explain the use of emergency moves
C 1.3.4.5 – Differentiate between ways of positioning patients
C 1.3.4.6 – Explore the use of patient restraints
P 1.3.4.7 – Demonstrate an emergency move of a patient
P 1.3.4.8 – Demonstrate a non-emergency move of a patient
P 1.3.4.9 – Demonstrate the use of appropriate equipment to move a patient

1.4 – DOCUMENTATION

1.4.1 – Recording Patient Findings

C 1.4.1.1 – Explain the importance of prehospital care reports
C 1.4.1.2 – Summarize items to be documented on a prehospital care report
A 1.4.1.3 – Defend the importance of completing documentation completely and within a timely fashion

1.5 – EMS SYSTEM COMMUNICATION

1.5.1 – Communications

C 1.5.1.1 – Defend the need to be an effective communicator as an EMR

1.6 – THERAPEUTIC COMMUNICATION

1.6.1 – Principles of Communicating with Patients in a Manner that Achieves a Positive Relationship

C 1.6.1.1 – Investigate factors for effective communication
C 1.6.1.2 – Summarize interviewing techniques
A 1.6.1.3 – Portray empathetic communication techniques with patients
A 1.6.1.4 – Ensure compassion when providing care

1.7 – MEDICAL/LEGAL AND ETHICS

1.7.1 – Consent

C 1.7.1.1 – Determine conditions for consent
C 1.7.1.2 – Explain expressed consent
C 1.7.1.3 – Explain implied consent
C 1.7.1.4 – Identify criteria to be considered an emancipated minor
C 1.7.1.5 – Examine consent as it applies to pediatric patients
C 1.7.1.6 – Explain refusal of care

1.7.2 – Confidentiality

C 1.7.2.1 – Examine the obligation to protect patient information
C 1.7.2.2 – Summarize patient confidentiality provisions within the Health Information Portability and Accountability Act (HIPAA)

1.7.3 – Advanced Directives

C 1.7.3.1 – Differentiate between types of advanced directives
A 1.7.3.2 – Evaluate the need for advanced directives and end-of-life planning

1.7.4 – Types of Court Cases

C 1.7.4.1 – Differentiate various civil (tort) actions that may involve an EMR
C 1.7.4.2 – Differentiate various criminal actions that may involve an EMR

1.7.5 – Evidence Preservation

C 1.7.5.1 – Outline evidence preservation considerations for the EMR

1.7.6 – Statutory Responsibilities

C 1.7.6.1 – Explain scope of practice as it applies to the EMR

1.7.7 – Mandatory Reporting

C 1.7.7.1 – Defend mandatory reporting requirements

1.7.8 – Ethical Principles

C 1.7.8.1 – Explore ethical principles
C 1.7.8.2 – Contrast ethical decision-making models
A 1.7.8.3 – Model ethical behavior

1.8 – ANATOMY AND PHYSIOLOGY

1.8.1 – Anatomy and Body Functions
C 1.8.1.1 – Explain standard anatomic terms
C 1.8.1.2 – Identify skeletal system components
C 1.8.1.3 – Explain the function of the muscular system
C 1.8.1.4 – Identify respiratory system components and function
C 1.8.1.5 – Identify circulatory system components and function
C 1.8.1.6 – Identify the structures and function of the skin
1.8.2 – Life Support Chain
C 1.8.2.1 – Differentiate the fundamental elements of the life support chain
C 1.8.2.2 – Identify potential issues that may impact the fundamental elements of the life support chain
1.8.3 – Age-Related Variations for Pediatrics and Geriatrics
C 1.8.3.1 – Differentiate age-related variations in anatomy and physiology for pediatric and geriatric patients
1.9 MEDICAL TERMINOLOGY
1.9.1 – Medical Terminology
C 1.9.1.1 – Construct medical terms through the use of simple medical prefixes, suffixes, and roots
1.10 – PATHOPHYSIOLOGY
1.10.1 – Respiratory Compromise
C 1.10.1.1 – Compare the impact of impaired airway, respiration, or ventilation
1.10.2 - Shock
C 1.10.2.1 – Contrast pathophysiological reasons for impaired blood flow to the organs and cells
1.11 – LIFE SPAN DEVELOPMENT
1.11.1 – Infancy (Birth to One Year)
C 1.11.1.1 – Summarize normal infant physiological findings
1.11.2 – Toddler (12 to 36 Months) and Preschool-Age (Three to Five Years)
C 1.11.2.1 – Summarize normal toddler and preschool-age physiological findings
1.11.3 – School-Age Children (Six to 12 Years)
C 1.11.3.1 – Summarize normal school-age physiological findings
1.11.4 – Adolescence (13 to 18 Years)
C 1.11.4.1 – Summarize normal adolescent physiological findings
1.11.5 – Early Adulthood (19 to 40 Years)
C 1.11.5.1 – Summarize normal early adulthood physiological findings
1.11.6 – Middle Adulthood (41 to 60 Years)
C 1.11.6.1 – Summarize normal middle adulthood physiological findings
C 1.11.6.2 – Summarize normal middle adulthood psychological findings
1.11.7 – Late Adulthood (61 Years and Older)
C 1.11.7.1 – Summarize normal late adulthood physiological findings
1.12 – PUBLIC HEALTH
1.12.1 – Basic Principles of Public Health
C 1.8.3.1 – Determine how EMS interfaces with public health

2. 0 – PHARMACOLOGY
2.1 – MEDICATION ADMINISTRATION
2.1.1 – Self Administration (IM Injection by Auto-Injector)
C 2.1.1.1 – Analyze the advantages, disadvantages, and techniques associated with the self-administration of auto-injected medications
2.1.2 – Peer Administration (IM Injection by Auto-Injector)
C 2.1.2.1 – Analyze the advantages, disadvantages, and techniques associated with the peer administration of auto-injected medications
2.2 – EMERGENCY MEDICATIONS
2.2.1 – Specific Medications (i.e., Chemical Antidote Auto-Injector Devices)
C 2.1.1.1 – Outline the names, effects, indications, routes of administration, and dosages for emergency medications included within the WI EMR scope of practice

3.0 – AIRWAY MANAGEMENT, RESPIRATION, AND ARTIFICIAL VENTILATION
3.1 – AIRWAY MANAGEMENT
3.1.1 – Airway Anatomy

C 3.1.1.1 – Explore the anatomy of the upper airway tract
C 3.1.1.2 – Explore the anatomy of the lower airway tract

3.1.2 – Airway Assessment
C 3.1.2.1 – Outline signs of an adequate airway
C 3.1.2.2 – Outline signs of an inadequate airway
C 3.1.2.3 – Identify swelling due to trauma or infection

3.1.3 – Techniques of Assuring a Patent Airway (Refer to Current AHA Guidelines)
C 3.1.3.1 – Contrast manual airway maneuvers
C 3.1.3.2 – Contrast mechanical airway devices
C 3.1.3.3 – Explain the techniques associated with the relief of a foreign body airway obstruction (FBAO)
C 3.1.3.4 – Explore the technique of upper airway suctioning
P 3.1.3.5 – Demonstrate the opening and maintenance of an airway

3.1.4 – Consider Age-Related Variations in Pediatric and Geriatric Patients
C 3.1.4.1 – Differentiate age-related variations in airway anatomy in pediatric and geriatric patients

3.2 – RESPIRATION

3.2.1 – Anatomy of the Respiratory System
C 3.2.1.1 – Review all airway anatomy covered in the Airway Management section
C 3.2.1.2 – Examine additional respiratory system anatomy
C 3.2.1.3 – Examine vascular structures that support respiration

3.2.2 – Physiology of Respiration
C 3.2.2.1 – Examine the physiology of pulmonary ventilation
C 3.2.2.2 – Examine the physiology of oxygenation
C 3.2.2.3 – Examine the physiology of respiration

3.2.3 – Pathophysiology of Respiration
C 3.2.3.1 – Examine the pathophysiology of pulmonary ventilation
C 3.2.3.2 – Examine the pathophysiology of oxygenation
C 3.2.3.3 – Examine the pathophysiology of respiration

3.2.4 – Assessment of Adequate and Inadequate Respiration (Refer to Current AHA Guidelines)
C 3.2.4.1 – Explain the assessment of an unresponsive patient
C 3.2.4.2 – Explain the assessment of a responsive patient

3.2.5 – Management of Adequate and Inadequate Respiration
C 3.2.5.1 – Summarize techniques for assuring patent airway (as described in Airway Management section)
C 3.2.5.2 – Explain techniques for assuring adequate respirations

3.2.6 – Supplemental Oxygen Therapy
C 3.2.6.1 – Outline portable oxygen cylinder considerations
C 3.2.6.2 – Differentiate oxygen delivery devices
P 3.2.6.3 – Demonstrate the delivery of supplemental oxygen

3.2.7 – Consider Age-Related Variations in Pediatric and Geriatric Patients
C 3.2.7.1 – Differentiate age-related variations in airway assessment and management for pediatric and geriatric patients

3.3 – ARTIFICIAL VENTILATION

3.3.1 – Assessment of Adequate and Inadequate Ventilation
C 3.3.1.1 – Summarize signs adequate ventilation
C 3.3.1.2 – Outline signs and symptoms of inadequate ventilation

3.3.2 – Oxygenation
C 3.3.2.1 – Characterize adequate oxygenation
C 3.3.2.2 – Characterize inadequate oxygenation

3.3.3 – Management of Adequate and Inadequate Ventilation
C 3.3.3.1 – Summarize management of patients with adequate ventilation
C 3.3.3.2 – Explain management of patients with inadequate ventilation

3.3.4 – Ventilation of an Apneic Patient
C 3.3.4.1 – Explain the ventilation of an apneic patient
P 3.3.4.2 – Demonstrate manual techniques for relieving a foreign body airway obstruction
P 3.3.4.3 – Demonstrate the ventilation of a patient

3.3.5 – Differentiate Normal Ventilation from Positive Pressure Ventilation
C 3.3.5.1 – Differentiate normal and positive pressure ventilation

3.3.6 – Consider Age-Related Variations in Pediatric and Geriatric Patients

C 3.3.6.1 – Differentiate age-related variations in the artificial ventilation of pediatric and geriatric patients
P 3.3.6.2 – Ventilate a pediatric patient

4.0 – PATIENT ASSESSMENT

4.1 – SCENE SIZE-UP

4.1.1 – Scene Safety

C 4.1.1.1 – Summarize common scene hazards
C 4.1.1.2 – Explain evaluation of the scene

4.1.2 – Scene Management

C 4.1.2.1 – Explore the impact of the environment on patient care
C 4.1.2.2 – Generalize the addressing of on-scene hazards
C 4.1.2.3 – Explain the need for violence awareness
C 4.1.2.4 – Identify the need for additional or specialized resources
C 4.1.2.5 – Explain the need for standard precautions

4.2 – PRIMARY ASSESSMENT

4.2.1 – Primary Assessment/Survey

C 4.2.1.1 – Outline the components of a primary assessment/survey
C 4.2.1.2 – Identify the need to begin interventions required to preserve life
P 4.2.1.3 – Demonstrate the use of appropriate PPE
P 4.2.1.4 – Demonstrate a primary assessment
A 4.2.1.5 – Defend the need to provide critical life-saving interventions

4.3 – HISTORY-TAKING

4.3.1 – Determining the Chief Complaint

C 4.3.1.1 – Identify the chief complaint

4.3.2 – Mechanism of Injury or Nature of Illness

C 4.3.2.1 – Identify the mechanism of injury or nature of illness

4.3.3 – Associated Signs and Symptoms

C 4.3.3.1 – Identify signs and symptoms associated with the patient's chief complaint and mechanism of injury or nature of illness
P 4.3.3.2 – Demonstrate the process of obtaining a patient history

4.3.4 – Age-Related Variations for Pediatric and Geriatric Assessment and Management

C 4.3.4.1 – Differentiate age-related variations for the assessment and management of pediatric and geriatric patients

4.4 – SECONDARY ASSESSMENT

4.4.1 – Performing a Rapid Full-Body Scan

C 4.4.1.1 – Summarize the general approach to the secondary assessment process

4.4.2 – Focused Assessment of Pain

C 4.4.2.1 – Outline the focused assessment for complaints of pain

4.4.3 – Assessment of Vital Signs

C 4.4.3.1 – Examine assessment of vital signs
P 4.4.3.2 – Demonstrate obtaining vital signs from a patient

4.4.4 – Special Considerations for Pediatric and Geriatric Patients

C 4.4.4.1 – Differentiate special considerations affecting the secondary assessment of pediatric and geriatric patients

4.5 – REASSESSMENT

4.5.1 – How and When to Reassess

C 4.5.1.1 – Outline the reassessment process
P 4.5.1.2 – Demonstrate the reassessment of a patient

4.5.2 – Age-Related Considerations for Pediatric and Geriatric Reassessment

C 4.5.2.1 – Differentiate age-related considerations for the reassessment of pediatric and geriatric patients

5.0 – MEDICINE

5.1 – MEDICAL OVERVIEW

5.1.1 – Overview of Medical Complaints

C 5.1.1.1 – Summarize assessment and management process of medical complaints

5.2 - NEUROLOGY

5.2.1 – Review Anatomy and Functions of the Brain, Spinal Cord, and Cerebral Blood Vessels
C 5.2.1.1 – Summarize the anatomy and physiology of the brain, spinal cord, and cerebral blood vessels
5.2.2 – Altered Mental Status
C 5.2.2.1 – Differentiate causes of altered mental status
P 5.2.2.2 – Demonstrate the assessment and management of a patient with an altered mental status
5.2.3 - Seizures
C 5.2.3.1 – Explain the causes, assessment findings, and management of a patient suffering from a seizure
P 5.2.3.2 – Demonstrate the assessment and management of a patient with a seizure
5.2.4 - Stroke
C 5.2.4.1 – Explain the causes, assessment findings, and management of a patient suffering from a stroke
P 5.2.4.2 – Demonstrate the assessment and management of a patient suffering from a stroke

5.3 – ABDOMINAL AND GASTROINTESTINAL DISORDERS
5.3.1 – Define Acute Abdomen
C 5.3.1.1 – Generalize acute abdominal complaints
5.3.2 – Organs of the Abdominopelvic Cavity
C 5.3.2.1 – Identify the organs within the abdominopelvic cavity
5.3.3 – Assessment and Symptoms
C 5.3.3.1 – Summarize assessment techniques and associated symptoms for a patient with an abdominal or gastrointestinal disorder
5.3.4 – General Management for Patients with Abdominal Pain
C 5.3.4.1 – Summarize the management of a patient with abdominal pain
P 5.3.4.2 – Demonstrate the assessment and management of a patient with abdominal pain
5.3.5 – Specific Acute Abdominal Conditions
C 5.3.5.1 – Explain the causes, assessment findings, symptoms, and management of a patient with gastrointestinal bleeding
5.3.6 – Consider Age-Related Variations for Pediatric and Geriatric Assessment and Management
C 5.3.6.1 – Differentiate age-related variations for pediatric and geriatric patients with abdominal or gastrointestinal disorders

5.4 - IMMUNOLOGY
5.4.1 – Immunology Emergencies
C 5.4.1.1 – Explain the causes, assessment findings, and management of a patient with an immunology emergency
P 5.4.1.2 – Demonstrate the assessment and management of a patient with an anaphylactic reaction
5.4.2 – Consider Age-Related Variations for Pediatric and Geriatric Assessment and Management
C 5.4.2.1 – Differentiate age-related variations for the assessment and management of pediatric and geriatric patients experiencing immunology emergencies

5.5 – INFECTIOUS DISEASES
5.5.1 – Infectious Disease Awareness
C 5.5.1.1 – Explore infectious disease emergencies
5.5.2 – Equipment Decontamination (Review Content in Workforce Safety)
C 5.5.2.1 – Summarize equipment decontamination procedures

5.6 – ENDOCRINE DISORDERS
5.6.1 – Diabetic Conditions
C 5.6.1.1 – Distinguish diabetic emergencies
P 5.6.1.2 – Demonstrate the assessment and management of a diabetic patient
5.6.2 – Age-Related Variations for Pediatric and Geriatric Assessment and Management
C 5.6.2.1 – Differentiate age-related variations for pediatric and geriatric patients with a diabetic emergency

5.7 - PSYCHIATRIC
5.7.1 - Define
C 5.7.1.1 – Examine psychiatric disorders
5.7.2 - Assessment
C 5.7.2.1 – Outline assessment findings for a patient suffering from a psychiatric disorder
5.7.3 – Behavioral Change
C 5.7.3.1 – Identify factors that may alter a patient's behavior
C 5.7.3.2 – Explore common causes of behavioral alteration
C 5.7.3.3 – Explain the potential danger created by behavioral emergencies to the EMR, patient, or others

C 5.7.3.4 – Outline the assessment process for suicide risk

5.7.4 – Methods to Calm Behavioral Emergency Patients

C 5.7.4.1 – Outline methods to calm behavioral emergency patients

5.7.5 – Emergency Medical Care

C 5.7.5.1 – Summarize the techniques for providing emergency medical care to a psychiatric patient

5.7.6 – Consider Age-Related Variations for Pediatric and Geriatric Assessment and Management

C 5.7.6.1 – Differentiate age-related variations for pediatric and geriatric psychiatric patients

5.8 – CARDIOVASCULAR

5.8.1 – Chest Pain

C 5.8.1.1 – Examine the causes, assessment, and management of a patient experiencing chest pain

P 5.8.1.2 – Demonstrate the assessment and management of a patient with chest pain

5.8.2 – Consider Age-Related Variations for Pediatric and Geriatric Patients for Assessment and Management of Cardiac Compromise

C 5.8.2.1 – Differentiate age-related variations for pediatric and geriatric patients with cardiac complaints

5.8.3 – Cardiac Arrest (Refer to Shock and Resuscitation Section)

C 5.8.3.1 – Outline the assessment and management of a patient in cardiac arrest

5.9 – TOXICOLOGY

5.9.1 – Introduction

C 5.9.1.1 – Summarize poisoning considerations

5.9.2 – Carbon Monoxide Poisoning

C 5.9.2.1 – Explain carbon monoxide poisoning.

5.9.3 – Poisoning by Nerve Agents

C 5.9.3.1 – Explore poisoning by nerve agents

5.9.4 – Nerve Agent Antidote Auto-Injector Kit

C 5.9.4.1 – Examine nerve agent antidote auto-injector kits

5.9.5 – Consider Age-Related Variations for Pediatric and Geriatric Assessment and Management

C 5.9.5.1 – Differentiate age-related variations for pediatric and geriatric patients suffering from a toxicological emergency

5.10 – RESPIRATORY

5.10.1 – Anatomy of the Respiratory System

C 5.10.1.1 – Summarize the anatomical structures within the respiratory system

5.10.2 – Normal Respiratory Effort

C 5.10.2.1 – Explain the assessment findings and management of a patient with respiratory problems

P 5.10.2.2 – Demonstrate the assessment and management of a patient with respiratory complaints

5.10.3 – Consider Age-Related Variations for Pediatric and Geriatric Assessment and Management

C 5.10.3.1 – Differentiate age-related variations for pediatric and geriatric patients with respiratory problems

5.11 – GENITOURINARY/RENAL

5.11.1 - Hemodialysis

C 5.11.1.1 – Explore the considerations associated with assessing and managing a patient on hemodialysis

5.12 - GYNECOLOGY

5.12.1 – Vaginal Bleeding

C 5.12.1.1 – Summarize the assessment and management considerations for a patient with vaginal bleeding

5.13 – DISEASES OF THE EYES, EARS, NOSE, AND THROAT

5.13.1 - Nosebleed

C 5.13.1.1 – Explain the causes, assessment findings, and management of a patient experiencing a nosebleed

6.0 – SHOCK AND RESUSCITATION

6.1 – SHOCK AND RESUSCITATION

6.1.1 – Ethical Issues in Resuscitation

A 6.1.1.1 – Defend the ethics involved in withholding resuscitation attempts

6.1.2 – Anatomy and Physiology Review

C 6.1.2.1 – Summarize the anatomy and physiology associated with the respiratory and cardiovascular systems

6.1.3 – Respiratory Failure

C 6.1.3.1 – Explain respiratory failure

6.1.4 – Cardiac Arrest
C 6.1.4.1 – Explain cardiac arrest
6.1.5 – Resuscitation
C 6.1.5.1 – Explain the process of resuscitation for a patient with respiratory or cardiac arrest
P 6.1.5.2 – Demonstrate CPR
6.1.6 – Automated External Defibrillation (AED) (Refer to Current AHA Guidelines)
C 6.1.6.1 – Explain the use of an automated external defibrillator (AED)
P 6.1.6.2 – Demonstrate the use of an AED.
6.1.7 – Shock (Poor Perfusion)
C 6.1.7.1 – Explain the assessment and management of a patient with poor perfusion
P 6.1.7.2 – Demonstrate proper positioning for a patient in shock

7.0 – TRAUMA
7.1 – TRAUMA OVERVIEW
7.1.1 – Identification and Categorization of Trauma Patients
C 7.1.1.1 – Interpret the National Trauma Triage Protocol (as modified and adopted by the Wisconsin Department of Health Services)
7.2 – BLEEDING
7.2.1 - Bleeding
C 7.2.1.1 – Explain the assessment and management of a bleeding patient
P 7.2.1.2 – Demonstrate the assessment and management of a patient with bleeding
7.3 – CHEST TRAUMA
7.3.1 – Sucking Chest Wound
C 7.3.1.1 – Explain the management of a patient with a sucking chest wound
P 7.3.1.2 – Demonstrate the assessment and management of a patient with a sucking chest wound
7.3.2 – Impaled Objects in Chest
C 7.3.2.1 – Explain the management of a patient with an impaled object in the chest
P 7.3.2.2 – Demonstrate the assessment and management of a patient with an impaled object in the chest
7.4 – ABDOMINAL AND GENITOURINARY TRAUMA
7.4.1 – Abdominal Trauma
C 7.4.1.1 – Explain the management of a patient with abdominal trauma
7.5 – ORTHOPEDIC TRAUMA
7.5.1 – Fractures and Dislocations
C 7.5.1.1 – Explain the assessment and management of a patient with a fracture or dislocation
P 7.5.1.2 – Demonstrate the assessment and management of a patient with a fracture or dislocation
7.6 – SOFT TISSUE TRAUMA
7.6.1 – Abrasion
C 7.6.1.1 – Summarize possible assessment findings for a patient with an abrasion
7.6.2 – Laceration
C 7.6.2.1 – Summarize possible assessment finding for a patient with a laceration
7.6.3 – Penetration/Puncture
C 7.6.3.1 – Summarize possible assessment findings for a patient with a penetration/puncture
7.6.4 – Impaled Object
C 7.6.4.1 – Summarize the management of a patient impaled with a foreign object
7.6.5 – Foreign Body In Eye
C 7.6.5.1 – Summarize the possible assessment findings and management of a patient with a foreign body in the eye
7.6.6 – Burns
C 7.6.6.1 – Outline the possible assessment findings and management of a patient with burns
7.6.7 – Dressings and Bandages
C 7.6.7.1 – Explain the use of dressings and bandages for patients with soft tissue injuries
P 7.6.7.2 – Demonstrate the use of dressings and bandages for a patient with a soft tissue injury
7.7 HEAD, FACIAL, NECK, AND SPINAL TRAUMA
7.7.1 – Injuries to the Brain and Skull
C 7.7.1.1 – Explain the potential assessment findings and management of a patient with injuries to the brain or skull

8.3.5 – Seizures
C 8.3.5.1 – Outline the assessment and management of a pediatric patient suffering from seizures
8.3.6 – Sudden Infant Death Syndrome (SIDS)
C 8.3.6.1 – Outline the assessment and management of a sudden infant death syndrome (SIDS) case
8.4 – GERIATRICS
8.4.1 – Age-Associated Changes
C 8.4.1.1 – Explore age-associated changes in geriatric patients
8.4.2 – Assessment and Care Implications
C 8.4.2.1 – Summarize assessment and care implications for geriatric patients
P 8.4.2.2 – Demonstrate the assessment and management of a geriatric patient
8.5 – PATIENTS WITH SPECIAL CHALLENGES
8.5.1 – Recognizing and Reporting Abuse and Neglect
C 8.5.1.1 – Summarize the assessment and management of an abused or neglected pediatric or geriatric patient

9.0 – EMS OPERATIONS
9.1 – PRINCIPLES OF SAFELY OPERATING A GROUND AMBULANCE
9.1.1 – Risks and Responsibilities of Emergency Response
C 9.1.1.1 – Explain apparatus and equipment readiness
C 9.1.1.2 – Outline pre-arrival considerations
C 9.1.1.3 – Explain scene safety
C 9.1.1.4 – Identify scene-clearing (leaving the scene) considerations
A 9.1.1.5 – Relate the need for safe, responsible ambulance operations (defensive driving)
9.2 – INCIDENT MANAGEMENT
9.2.1 – Establish and Work Within the Incident Management System
C 9.2.1.1 – Summarize incident management
9.3 – MULTIPLE CASUALTY INCIDENTS (MCI)
9.3.1 – Triage Principles
C 9.3.1.1 – Examine principles of triaging multiple casualty incidents
C 9.3.1.2 – Explain resource management considerations
9.4 – AIR MEDICAL AND ADVANCED LIFE SUPPORT
9.4.1 – Safe Air Medical Operations
C 9.4.1.1 – Explore safe air medical operations
9.4.2 – Criteria for Utilizing Air Medical Response
C 9.4.2.1 – Outline criteria for utilizing air medical response
9.4.3 – Criteria for Requesting Advanced Life Support (ALS)
C 9.4.3.1 – Outline criteria to be considered when determining the need for advanced life support (care beyond the EMT level)
A 9.4.3.2 – Explain the value of advanced care for critical patients
9.5 – VEHICLE EXTRICATION
9.5.1 – Safe Vehicle Extrication
C 9.5.1.1 – Summarize safe vehicle extrication
9.5.2 – Use of Simple Hand Tools
C 9.5.2.1 – Summarize the use of simple hand tools for extrication
9.5.3 – Special Considerations for Patient Care
C 9.5.3.1 – Outline special considerations for patient care given extrication activities
9.6 – HAZARDOUS MATERIALS AWARENESS AND WEAPONS OF MASS DESTRUCTION (WMD)
9.6.1 – Risks and Responsibilities of Operating in a Cold Zone at a Hazardous Material or Other Special Incident
C 9.6.1.1 – Summarize the risks and responsibilities of operating in a cold zone at a hazardous materials or other special incident
9.6.2 – Weapons of Mass Destruction (WMD)
C 9.6.2.1 – Summarize the weapons of mass destruction information as provided by the Wisconsin Department of Health Services
9.7 – MASS CASUALTY INCIDENTS DUE TO TERRORISM AND DISASTER
9.7.1 – Risks and Responsibilities of Operating at the Scene of a Natural or Man-Made Disaster

C 9.7.1.1 – Summarize the risks and responsibilities associated with operating at the scene of a natural or man-made disaster

SUMMARY OF CURRICULUM OBJECTIVES

2013 Wisconsin EMR Curriculum

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