

CONFIDENTIAL: Retrospective Pre-hospital Chart Review Form

Purpose: We are interested in capturing a broad range of potential challenges or errors in the pre-hospital care of children. This tool is intended to understand and describe the circumstances that could have caused such events, which we are referring to as "UNSEMs."

UNSEM is defined as:

- **U**nintended injury or consequence
- **N**ear miss (not a planned event)
- **S**uboptimal action that can be improved
- **E**rror
- **M**anagement complication

The act of responding to a call and providing care may have resulted in an UNSEM. We appreciate that professionals talk about these events in different ways and use different terms to describe them; more than one UNSEM can occur in any particular situation. In addition, we consider overtreatment or unnecessary treatment to be an UNSEM (e.g. inappropriate Code 3, unnecessary trauma registration, unnecessary IV, and unnecessary medication).

There may be times when you do not see documentation of clinical information in the pre-hospital record. We are interested in your synthesis of the entire chart; if an item or event is not documented, **assume it did not happen**. [Please note: as long as it is documented in one of the charts (e.g. in the fire chart but not in the AMR chart), it is OK.]

Please note: Sections have overlap; it is okay to mention items, ideas, issues, etc. in multiple sections.

SECTION 1: REVIEWER INFORMATION

***1. Reviewer Initials:**

***2. Study ID:**

3. Is there a Fire chart? (If you only received one chart, assume there is no Fire chart.)

- Yes
- No

4. Reason For Call (chief complaint):

5. Please use your judgment to assess the nature of the patient's condition overall:

- Mild (expected to recover within days)
- Moderate
- Critical/Severe or potentially permanent
- Death
- Cannot reasonably judge

6. Among pediatric dispatches, how common is this type of chief complaint?

- Very Rare (<1%)
- Rare (1-9%)
- Occasional (10-24%)
- Frequent (> 25%)

SECTION 2: RESUSCITATION

Remember, if you do not see it documented, assume it did not happen.

"Resuscitation" refers to the treatment of: respiratory distress or failure, compensated or decompensated shock, altered mental status, and/or ongoing seizure activity (e.g. treatment of an asthmatic who is wheezing and receiving albuterol).

UNSEM (Unintended Injury or Consequence, Near Miss, Suboptimal Action, Error, Management Complication)

1. Did resuscitation occur at any point during this call? (Refer to your manual before answering this question.)

- Yes
- No

SECTION 2: RESUSCITATION

1. Should resuscitation have occurred? (Refer to your manual before answering this question.)

- Yes
- No

SECTION 2: RESUSCITATION

1. Was there a(n) UNSEM related to resuscitation?

- Yes
- No
- Not Sure

If you checked Yes or Not Sure in the above question, please describe.

SECTION 2: RESUSCITATION

1. Please elaborate:

SECTION 2: RESUSCITATION

1. Please feel free to provide additional comments:

2. What was the condition(s) that led to the need for resuscitation?

- Cardiac arrest (specify below)
- Respiratory failure/arrest (specify below)
- Altered mental status (specify below)
- Seizures (specify below)
- Poisoning (e.g. drug overdose) (specify below)
- Drowning (specify below)
- Trauma (specify below)
- Metabolic disorder (e.g. hypoglycemia) (specify below)
- Infection/Sepsis (specify below)
- Other (specify below)

Please specify your response from above.

SECTION 2: RESUSCITATION

1. Was there a delay, omission, or confusion in dealing with the resuscitation-related issue?

- Yes, delay
- Yes, omission
- Yes, confusion
- No
- Not Sure

SECTION 2: RESUSCITATION

1. Please check all that apply:

- Equipment not available
- Required drug(s) not available
- Scene management issue
- Failure to recognize age-based norms
- Failure to obtain needed tests (glucose, O2 Sat)
- Failure to obtain needed monitoring
- Other

If Other, please specify here:

2. Was the resuscitation-related UNSEM avoidable?

- Yes
- Possibly
- No

Please explain your response.

3. Specific to this clinical scenario, how often is this resuscitation issue or cascade of issues likely to occur? If more than one issue or cascade of issues occurred, select the corresponding frequencies and explain in the provided text box below.

- Very Rarely (<1%)
- Rarely (1-9%)
- Occasionally (10-24%)
- Frequently (> 25%)

Please provide additional details:

4. Using your best clinical judgment, to what degree could the resuscitation management issue have harmed the patient?

- No harm likely or a near miss
- Mild or temporary harm, including additional treatment
- Permanent or severe permanent harm, including death

5. Pertains only to cases with 2 charts:

Is there concordance regarding resuscitation between the 2 charts?

- Yes
- No (Please explain below)

If you checked No, please explain and include potential impacts to the patient.

SECTION 2: ASSESSMENT, IMPRESSION/DIAGNOSIS, AND CLINICAL DECISION M...

“Assessment, Impression/Diagnosis, and Clinical Decision Making” refers to the assessment or diagnosis of the patient (recognizing abnormal vital signs or if the patient is sick or not sick, etc.), and/or the decisions made regarding the patient’s care. For example, a child with stridor from croup could be assessed as having wheezing from asthma, which would result in inappropriate subsequent management of the patient. (The patient actually has upper airway obstruction, but was thought to have lower airway obstruction.)

UNSEM (Unintended Injury or Consequence, Near Miss, Suboptimal Action, Error, Management Complication)

1. Was there an issue related to: (Please refer to the manual & then check all that apply)

- Clinical history (specify below)
- Physical exam (specify below)
- Taking account of comorbidity (specify below)
- Recognizing age-based norms (specify below)
- Reassessing patient response to care/intervention (specify below)
- Applying appropriate monitors (specify below)
- Monitoring vital signs (specify below)
- Communicating impressions to the rest of the team (specify below)
- Other (specify below)
- No issue

Please specify your response(s) from above.

2. Was there a(n) UNSEM related to assessment, impression/diagnosis, and/or clinical decision making?

- Yes
- No
- Not Sure

If you checked Yes or Not Sure to the above question, please describe.

SECTION 2: ASSESSMENT, IMPRESSION/DIAGNOSIS, AND CLINICAL DECISION M...

1. Was there a delay, omission, or confusion in assessment, impression/diagnosis, and/or clinical decision making?

- Yes, delay
- Yes, omission
- Yes, confusion
- No
- Not Sure

If Yes or Not Sure, please describe:

2. Given the information the EMS professional had at the time, was the assessment, impression/diagnosis, and/or clinical decision making issue avoidable?

- Yes
- Possibly
- No

Please explain your response.

3. Specific to this clinical scenario, how often is this assessment, impression/diagnosis, and/or clinical decision making issue or cascade of issues likely to occur? If more than one issue or cascade of issues occurred, select the corresponding frequencies and explain in the provided text box below.

- Very Rarely (<1%)
- Rarely (1-9%)
- Occasionally (10-24%)
- Frequently (> 25%)

Please provide additional details:

4. Using your best clinical judgment, to what degree could the assessment, impression/diagnosis, and/or clinical decision making issue have harmed the patient?

- No harm likely or a near miss
- Mild or temporary harm, including additional treatment
- Permanent or severe permanent harm, including death

5. Pertains only to cases with 2 charts:

Is there concordance regarding assessment, impression/diagnosis, and/or clinical decision making between the 2 charts?

- Yes
- No (Please explain below)

If you checked No, please explain and include potential impacts to the patient.

SECTION 2: AIRWAY/BREATHING

“Airway/Breathing” refers to management of the patient’s airway and/or breathing, including use/misuse of basic and advanced airway adjuncts (including administration of Oxygen). Please note that administration of medication for breathing problems **is** considered airway management (and also considered medication administration).

UNSEM (Unintended Injury or Consequence, Near Miss, Suboptimal Action, Error, Management Complication)

1. Did airway management occur at any point during this call?

- Yes
- No

SECTION 2: AIRWAY/BREATHING

1. Please feel free to provide additional comments:

SECTION 2: AIRWAY/BREATHING

***1. Please elaborate:**

SECTION 2: AIRWAY/BREATHING

1. Should airway management have occurred?

- Yes
- No

SECTION 2: AIRWAY/BREATHING

1. Was the airway management performed indicated?

- Yes
- No
- Not Sure

If you checked No or Not Sure, please explain.

2. Please check all types of airway management that occurred.

- O2 (Nasal/Mask/Blow-by)
- BVM
- Surgical Airway (specify below)
- Delay in airway management (specify below)
- Airway Adjuncts: (Please select either Oral or Nasal Airway)
- Oral Airway
- Nasal Airway
- Intubation (Please select which device was used)
- ETT
- King Airway
- LMA
- Other

If needed, please specify here:

SECTION 2: AIRWAY/BREATHING

1. Did the patient need medication-facilitated intubation?

- Yes
- No

If No, should RSI medications have been used? Please explain.

2. If the patient needed medication-facilitated intubation, what were the medications, dosages, and routes? (Please separate responses with a comma)

Medication	<input type="text"/>
Dosage	<input type="text"/>
Route	<input type="text"/>
Time Administered	<input type="text"/>

3. Was difficulty of intubation noted?

- Yes
- No

4. Was confirmation obtained?

- Yes
- No
- Unable to Determine

SECTION 2: AIRWAY/BREATHING

1. Please check the method(s) of confirmation that were used: (Check all that apply)

- ETCO2 (waveform)
- ETCO2 (colorimetric)
- Direct visualization of the cords
- Absent gastric sounds
- Mist in endotracheal tube
- Bilateral chest rise
- O2 sat prior/after
- Missing
- Unclear
- Other

If Other, please specify here:

SECTION 2: AIRWAY/BREATHING

1. Was there a(n) UNSEM related to airway management?

- Yes
- No
- Not Sure

If you checked Yes or Not Sure, please describe.

SECTION 2: AIRWAY/BREATHING

1. Was there a delay, omission, or confusion in dealing with the airway-related issue?

- Yes, delay
- Yes, omission
- Yes, confusion
- No
- Not Sure

If Yes or Not Sure, please explain.

2. Given the information the EMS professional had at the time, was the airway management issue avoidable?

- Yes
- Possibly
- No

Please explain your response.

3. Specific to this clinical scenario, how often is this airway management issue or cascade of issues likely to occur? If more than one issue or cascade of issues occurred, select the corresponding frequencies and explain in the provided text box below.

- Very Rarely (<1%)
- Rarely (1-9%)
- Occasionally (10-24%)
- Frequently (> 25%)

Please provide additional details:

4. Using your best clinical judgment, to what degree could the airway management issue have harmed the patient?

- No harm likely or a near miss
- Mild or temporary harm, including additional treatment
- Permanent or severe permanent harm, including death

5. Pertains only to cases with 2 charts:

Is there concordance regarding airway management between the 2 charts?

- Yes
- No

If you checked No, please explain and include potential impacts to the patient.

SECTION 2: FLUIDS & MEDICATION

"Fluids" refers to the administration of IV/IO fluids (e.g. saline, LR, dextrose/glucose rather than specific IV medications) or the failure to administer IV fluids when indicated. It does NOT refer to specific IV medications. Also, 10cc of normal saline is a flush, and does not refer to fluid administration (this is generally given to keep the line open).

"Medication" refers to drug choice, dosage, and route of administration, as well as adverse drug reactions and failure to administer an indicated medication. (Not including supplemental O2.)

UNSEM (Unintended Injury or Consequence, Near Miss, Suboptimal Action, Error, Management Complication)

1. Was patient weight documented?

- Yes
- No

SECTION 2: FLUIDS & MEDICATION

1. How was weight obtained?

- Parental Report
- Length-based Estimate
- Method Not Specified

1. Is the documented weight within age-based norms?

- Yes
- No, low for patient age
- No, high for patient age

2. The next several questions pertain to administration of IV/IO fluids ONLY, NOT medications.

Were fluids administered?

- Yes
- No

SECTION 2: FLUIDS & MEDICATION

1. Please indicate the route and volume:

SECTION 2: FLUIDS & MEDICATION

1. Should fluids have been administered?

- Yes
- No

SECTION 2: FLUIDS & MEDICATION

1. Please elaborate:

SECTION 2: FLUIDS & MEDICATION

1. Was there an UNSEM related to fluid administration?

- Yes
- No
- Not Sure

SECTION 2: FLUIDS & MEDICATION

1. Please describe:

2. Was there a delay, omission, or confusion in dealing with the fluids-related issue?

- Yes, delay
- Yes, omission
- Yes, confusion
- No
- Not Sure

SECTION 2: FLUIDS & MEDICATION

1. Please explain:

2. What was the nature of the fluids-related UNSEM?

- Unpredictable reaction
- Predictable reaction
- Incorrect concentration
- Fluids contraindicated in this case
- Incorrect volume
- Incorrect route
- Inadequate monitoring
- Failure to administer fluids
- Other

Please specify choices above:

3. Even with the knowledge beforehand that this adverse effect could occur, was it reasonable to administer the fluids?

- Yes
- No
- No fluids were administered

4. What additional treatment was provided as a result of the fluids-related UNSEM?

5. Given the information the EMS professional had at the time, was the fluids-related issue avoidable?

- Yes
- Possibly
- No

Please explain

6. Specific to this clinical scenario, how often is this fluids-related issue or cascade of issues likely to occur? If more than one issue or cascade of issues occurred, select the corresponding frequencies and explain in the provided text box below.

- Very Rarely (<1%)
- Rarely (1-9%)
- Occasionally (10-24%)
- Frequently (>25%)

Please provide additional details:

7. Using your best clinical judgment, to what degree could the fluids-related issue have harmed the patient?

- No harm likely or a near miss
- Mild or temporary harm, including additional treatment
- Permanent or severe permanent harm, including death

8. Pertains only to cases with 2 charts: Is there concordance regarding fluids management between the 2 charts?

- Yes
- No; please explain and include potential impacts to the patient below

Please explain:

9. The remaining questions in this section pertain to medications ONLY, NOT fluids

In this section, please include albuterol or other airway medications that were given. If pain medications should have been given but were not, this is considered an UNSEM.

Was medication administered?

- Yes
- No

SECTION 2: FLUIDS & MEDICATION

1. Please feel free to provide comments:

SECTION 2: FLUIDS & MEDICATION

1. Should medication have been administered?

- Yes
- No

SECTION 2: FLUIDS & MEDICATION

***1. Please elaborate:**

SECTION 2: FLUIDS & MEDICATION

1. Please feel free to provide comments:

2. Was the medication indicated?

- Yes
- No
- Not Sure

If No or Not Sure, please explain.

3. What type of medication(s) was administered?

- Sedative or hypnotic
- Nausea
- Allergy/Anaphylaxis treatment
- Antidote (e.g. Narcan)
- Anti-seizure
- Narcotic
- Anti-diabetic (glucagon)
- Diuretics
- Cardiovascular
- Antipsychotic
- Respiratory (including inhaled)
- RSI (including pre-meds)
- Other

If Other, please specify

4. Other than what you have already described in airway management, please list the medication(s) administered:

5. How was the medication(s) administered (route of administration)?

- Intravenous
- Orally
- IO
- ET Tubes
- Intra-muscular
- Sublingual
- Rectal
- Subcutaneous
- Intranasal
- Not documented
- Other

If Other or multiple options were selected, please specify:

SECTION 2: FLUIDS & MEDICATION

1. Was there a(n) UNSEM related to medication?

- Yes
- No
- Not Sure

If Yes or Not Sure, please describe.

SECTION 2: FLUIDS & MEDICATION

1. Was there a delay, omission, or confusion in dealing with the medication-related issue?

- Yes, delay
- Yes, omission
- Yes, confusion
- No
- Not Sure

If Yes or Not Sure, please explain.

2. What was the nature of the medication-related UNSEM?

- Drug less effective than expected (specify below)
- Unpredictable reaction (specify below)
- Predictable reaction (specify below)
- Incorrect drug (specify below)
- Incorrect concentration (specify below)
- Drug contraindication (specify below)
- Drug-drug interaction (specify below)
- Incorrect dose (specify below)
- Incorrect route (specify below)
- Inadequate monitoring (specify below)
- Failure to administer medication (specify below)
- Other (specify below)

Please specify your response(s) from above.

3. Even with knowledge beforehand that an adverse effect could occur, was it reasonable to administer the medication?

- Yes
- No
- No medication was administered

1. What additional medication(s) were administered as a result of the UNSEM?

2. Given the information the EMS professional had at the time, was the medication-related issue avoidable?

- Yes
- Possibly
- No

Please explain your response.

3. Specific to this clinical scenario, how often is this medication-related issue or cascade of issues likely to occur? If more than one issue or cascade of issues occurred, select the corresponding frequencies and explain in the provided text box.

- Very Rarely (<1%)
- Rarely (1-9%)
- Occasionally (10-24%)
- Frequently (> 25%)

Please provide additional details:

4. Using your best clinical judgment, to what degree could the medication-related issue have harmed the patient?

- No harm likely or a near miss
- Mild or temporary harm, including additional treatment
- Permanent or severe permanent harm, including death

5. Pertains only to cases with 2 charts:

Is there concordance regarding medication management between the 2 charts?

- Yes
- No

If you checked No, please explain and include potential impacts to the patient.

SECTION 2: PROCEDURE

“Procedure” refers to any technical procedure that was performed, other than airway (e.g. vascular access, cardioversion, spinal immobilization, splinting, tourniquet application), or the failure to perform an indicated procedure. Any attempt - whether successful or not - at performing an IV/IO is considered a procedure. Given the clinical context, consider whether the number of attempts and route of access are justified.

UNSEM (Unintended Injury or Consequence, Near Miss, Suboptimal Action, Error, Management Complication)

1. Other than resuscitation, airway management, and medication administration, was a procedure(s) performed at any point during this call?

- Yes
- No

SECTION 2: PROCEDURE

1. Please feel free to provide comments:

SECTION 2: PROCEDURE

1. Should a procedure have been performed that was not?

- Yes
- No
- Not Sure

If Yes, please explain.

SECTION 2: PROCEDURE

1. Was the procedure(s) indicated?

- Yes
- No
- Not Sure

If No or Not Sure, please explain:

2. Please check all that apply:

- Vascular access
- Cardioversion
- Spinal immobilization
- Splinting
- Tourniquet application
- Other

If Other, please specify here:

3. Was there a(n) UNSEM related to procedure?

- Yes
- No
- Not Sure

SECTION 2: PROCEDURE

1. Please check all that apply.

- Failure to perform an indicated procedure (specify below)
- Inappropriate procedural technique (specify below)
- Delay in performing a procedure (specify below)
- Difficult task or procedure, including new or untested task (specify below)
- Other (specify below)

Please specify your response from above.

2. Was there a delay, omission, or confusion in dealing with the procedure-related issue?

- Yes, delay
- Yes, omission
- Yes, confusion
- No
- Not Sure

If you checked Yes or Not Sure, please explain.

3. What additional procedures (including any additional tests) were performed as a result of the UNSEM?

4. Given the information the EMS professional had at the time, was the procedure-related UNSEM avoidable?

- Yes
- Possibly
- No

Please explain your response.

5. Specific to this clinical scenario, how often is this procedure-related issue or cascade of issues likely to occur? If more than on issue or cascade of issues occurred, select the corresponding frequencies and explain in the provided text box below.

- Very Rarely (<1%)
- Rarely (1-9%)
- Occasionally (10-24%)
- Frequently (> 25%)

Please provide additional details:

6. Using your best clinical judgment, to what degree could the procedure-related issue have harmed the patient?

- No harm likely or a near miss
- Mild or temporary harm, including additional treatment
- Permanent or severe permanent harm, including death

7. Pertains only to cases with 2 charts:

Is there concordance regarding procedures between the 2 charts?

- Yes
- No

If you checked No, please explain and include potential impacts to the patient.

SECTION 2: EQUIPMENT

“Equipment” refers to implements used when treating a patient. This could include splints, immobilization equipment, Kendrick extrication device, monitoring and testing equipment, etc. (Please note: Radio/communication is dealt with in System.)

UNSEM (Unintended Injury or Consequence, Near Miss, Suboptimal Action, Error, Management Complication)

1. What safety restraints were used for patient transport?

The answer to this question is often contained in the beginning of the chart Narrative or in the Treatment and Response section.

- Gurney
- Car Seat
- Parent's Arms
- Bench Seat
- Not Documented
- Other

If Other, please specify:

SECTION 2: EQUIPMENT

1. Was the manner in which the patient was restrained for transport appropriate?

- Yes
- No

SECTION 2: EQUIPMENT

***1. Please elaborate:**

2. Other than safety restraints, were any of the following pieces of equipment used at any point during this call: behavioral restraints, cardiovascular (monitors, defibrillators), backboards/C-Spine, splints/traction splints, or other pieces of equipment not listed here?

- Yes
- No

SECTION 2: EQUIPMENT

1. Please feel free to provide comments:

SECTION 2: EQUIPMENT

1. Should equipment have been used that was not?

- Yes
- No

SECTION 2: EQUIPMENT

***1. Please elaborate:**

SECTION 2: EQUIPMENT

1. Was there a(n) UNSEM related to equipment?

- Yes
- No
- Not Sure

SECTION 2: EQUIPMENT

1. If equipment was used, was it indicated?

- Yes
- No
- Not Sure

If No or Not Sure, please explain.

2. If equipment other than safety restraints was used, please check all that apply:

- Behavioral restraints
- Cardiovascular (monitors, defibrillators)
- Backboards/C-Spine
- Splints/traction splints
- Other

If Other, please specify here:

SECTION 2: EQUIPMENT

1. Please choose all that apply:

- Delay in using equipment (specify below)
- Correct-sized equipment not available (specify below)
- Incorrect-sized equipment used (specify below)
- Lack of/incorrect equipment for special needs child (specify below)
- Equipment malfunction (specify below)
- Failure to use the correct equipment (specify below)
- Other (specify below)

Please specify your response from above.

2. Was there a delay, omission, or confusion in dealing with the equipment-related issue?

- Yes, delay
- Yes, omission
- Yes, confusion
- No
- Not Sure

If Yes or Not Sure, please explain.

3. Given the information the EMS professional had at the time, was the equipment-related UNSEM avoidable?

- Yes
- Possibly
- No

Please explain your response.

4. Specific to this clinical scenario, how often is this equipment-related issue or cascade of issues likely to occur? If more than one issue or cascade of issues occurred, select the corresponding frequencies and explain in the provided text box below.

- Very Rarely (<1%)
- Rarely (1-9%)
- Occasionally (10-24%)
- Frequently (> 25%)

Please provide additional details:

5. Using your best clinical judgment, to what degree could the equipment-related issue have harmed the patient?

- No harm likely or a near miss
- Mild or temporary harm, including additional treatment
- Permanent or severe permanent harm, including death

6. Pertains only to cases with 2 charts:

Is there concordance regarding equipment between the 2 charts?

- Yes
- No

If you checked No, please explain and include potential impacts to the patient.

SECTION 2: ENVIRONMENT

Based on what is included in the History of Present Illness or Narrative sections of the chart, do you think the environment affected the patient's care/played a role in the level of care the patient received?

“Environment” is a broad category that includes:

- Transport: difficult terrain, vehicle accident during EMS transport, etc.
- Scene Characteristics: unsafe environment, weather conditions, location or lack of radio/cell reception, mass casualties incident/multiple simultaneous patients, hostile people on scene, etc.

UNSEM (Unintended Injury or Consequence, Near Miss, Suboptimal Action, Error, Management Complication)

1. Was there a(n) UNSEM related to environment?

- Yes
- No
- Not Sure

If Yes or Not Sure, please describe:

SECTION 2: ENVIRONMENT

1. Given the information the EMS professional had at the time, was the environment-related UNSEM avoidable?

- Yes
- Possibly
- No

Please explain your response:

2. Specific to this clinical scenario, how often is this environment-related issue or cascade of issues likely to occur? If more than one issue or cascade of issues occurred, select the corresponding frequencies and explain in the provided text box below.

- Very Rarely (<1%)
- Rarely (1-9%)
- Occasionally (10-24%)
- Frequently (> 25%)

Please provide additional details:

3. Using your best clinical judgment, to what degree could the environment-related issue have harmed the patient?

- No harm likely or a near miss
- Mild or temporary harm, including additional treatment
- Permanent or severe permanent harm, including death

4. Pertains only to cases with 2 charts:

Is there concordance regarding the environment between the 2 charts?

- Yes
- No, please explain and include potential impacts to the patient:

SECTION 2: SYSTEM

“System” refers to an organized or established set of protocols, guidelines, and/or norms intended to facilitate the response of EMS professionals. “System” also includes aspects of care such as certification level of responding providers and staffing.

UNSEM (Unintended Injury or Consequence, Near Miss, Suboptimal Action, Error, Management Complication)

1. Was the code determination appropriate (e.g. Code 3, lights and sirens)?

- Yes
- No

SECTION 2: SYSTEM

***1. Please elaborate:**

2. Was the hospital destination appropriate?

- Yes
- No

SECTION 2: SYSTEM

***1. Please elaborate:**

SECTION 2: SYSTEM

1. Was there a(n) UNSEM related to the system?

- Yes
- No
- Not Sure

SECTION 2: SYSTEM

1. Please choose all of the following that apply:

- Code determination was inappropriate
- Police, Fire, or other professionals hinder or delay management or transport
- Inadequate online medical control (includes not accessing, conflicting advice, or inappropriate advice)
- Patient did not meet the correct trauma system criteria
- Patient transported to inappropriate facility (nearest vs. tertiary)
- Dispatch information (pre-arrivals) incorrect
- Other

If Other, please specify here:

2. Was there a delay, omission, or confusion in dealing with the system-related issue?

- Yes, delay
- Yes, omission
- Yes, confusion
- No
- Not Sure

If Yes or Not Sure, please explain:

3. Given the information the EMS professional had at the time, was the system-related UNSEM avoidable?

- Yes
- Possibly
- No

Please explain your response:

4. Specific to this clinical scenario, how often is this system-related issue or cascade of likely to occur? If more than one issue or cascade of issues occurred, select the corresponding frequencies and explain in the provided text box below.

- Very Rarely (<1%)
- Rarely (1-9%)
- Occasionally (10-24%)
- Frequently (> 25%)

Please provide additional details:

5. Using your best clinical judgment, to what degree could the system-related issue have harmed the patient?

- No harm likely or a near miss
- Mild or temporary harm, including additional treatment
- Permanent or severe permanent harm, including death

6. Pertains only to cases with 2 charts:

Is there concordance regarding the system between the 2 charts?

- Yes
- No, please explain and include potential impacts to the patient:

SECTION 3: SUMMARY OF PATIENT CONDITION

Remember, if you do not see it documented, assume it did not happen.

UNSEM (Unintended Injury or Consequence, Near Miss, Suboptimal Action, Error, Management Complication)

1. We understand that in many cases the severity of the chief complaint is the major driver of the patient's outcome. Even in these cases, EMS care has the potential to negatively or positively contribute to the patient's condition. Using your best clinical judgment, please rate on a scale of -3 to +3 the degree to which EMS care contributed to the patient's condition. -3 = large negative contribution to patient's condition and +3 = large positive contribution to patient's condition

	-3	-2	-1	0	+1	+2	+3
EMS Care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Please explain the numbers you provided above:

3. How adequate were the records in providing information to enable judgments of whether or not there was an UNSEM(s)?

- Medical records were adequate to make a reasonable judgment
- Some deficiencies in the records
- Major deficiencies in the records
- Severe deficiencies in the records, impossible to make judgments about UNSEM(s)

If there were deficiencies in the records, please specify:

4. For cases with 2 charts, what is the overall level of concordance between the 2 charts?

- Almost entirely concordant
- Minor discordance, still able to make judgments
- Concerning discordance, potential for medical/legal ramifications

SECTION 3: SUMMARY OF UNSEM(s)

1. Using your best clinical judgment (your gut feeling) and after considering the details of this patient's management, irrespective of preventability or harm to the patient, do you think there was: (Please check all that apply)

- U= Unintended injury or consequence (not solely by disease process)
- N= Near miss (not a planned event)
- S= Suboptimal action that can be improved
- E= Error
- M= Management complication
- Other
- Not Sure
- No, patient management was appropriate

2. Based only on what is documented in the chart(s) and after considering the details of this patient's management, irrespective of preventability or harm to the patient, do you think there was: (Please check all that apply)

- U= Unintended injury or consequence (not solely by disease process)
- N= Near miss (not a planned event)
- S= Suboptimal action that can be improved
- E= Error
- M= Management complication
- Other
- Not Sure
- No, patient management was appropriate

SECTION 3: SUMMARY OF UNSEM(s)

1. Is there documentation in the record that indicates the EMT recognized an UNSEM(s) occurred in any of the below areas?

	Likely Recognized	Likely Unrecognized
Resuscitation	<input type="radio"/>	<input type="radio"/>
Assessment & Diagnosis	<input type="radio"/>	<input type="radio"/>
Clinical Decision Making	<input type="radio"/>	<input type="radio"/>
Airway/Breathing	<input type="radio"/>	<input type="radio"/>
Medication	<input type="radio"/>	<input type="radio"/>
Procedure	<input type="radio"/>	<input type="radio"/>
Equipment	<input type="radio"/>	<input type="radio"/>
Environment	<input type="radio"/>	<input type="radio"/>
System	<input type="radio"/>	<input type="radio"/>

2. Give details of any key action/inaction and their sequence, when possible, that played a significant part in the causation of the UNSEM(s):

3. In your best clinical judgment, if you had to pick the primary factor (not limited to the items in #1 above) that led to the UNSEM(s), what would it be?

4. Of the UNSEMs that were recognized by the EMTs, was there an error in handling it (them)?

- Yes
- No
- Not Sure
- UNSEM(s) not recognized

SECTION 3: SUMMARY OF UNSEM(s)

1. Please describe for each potential error:

***2. Please describe the impact of the UNSEM(s) on the patient:**

SECTION 4: CHART SUMMARY

The following is a list of factors not previously addressed in prior domains. Please tell us the degree to which any of these factors may have contributed to the UNSEM. The category "Not likely to be relevant" includes items that you are not sure if they contributed to the UNSEM.

1. Patient, Family, Friend, and/or Bystander Factors

	Not likely to be Relevant	Possible Contributor	Likely Contributor	Leading Contributor
a) Uncooperative patient, family member, friend, and/or bystander	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Hostile patient, family member, friend, and/or bystander	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Patient comorbidity(ies)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Child with special health care needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Difficulty understanding/communicating with patient, family member, or other guardian (e.g. language difficulties in absence of interpreter or cultural differences)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Other patient, family, friend, and/or bystander characteristics (specify below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please specify your "other" response (f)

2. Provider Factors

	Not likely to be Relevant	Possible Contributor	Likely Contributor	Leading Contributor
a) Lack of knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Lack of skill(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Other provider factors (specify below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please specify your "other" response (c)

7. Did any of the following contribute to the UNSEM? Check all that apply.

- Patient's degree of vulnerability was not recognized
- Risk: Benefit ratio of treatment was not assessed/appreciated
- Age-based norms not appreciated
- Training for this clinical scenario not a required standard
- No
- Other

If Other, please specify here:

8. When UNSEMs occur, they frequently involve a chain of events. While individual elements may vary, we are interested to know how often you think a similar chain of events is likely to occur, given this clinical scenario in the pre-hospital setting?

- Very Rarely (<1%)
- Rarely (1-9%)
- Occasionally (10-24%)
- Frequently (> 25%)

9. Please rate the degree to which the UNSEM as a whole was preventable: 0 (impossible to prevent) to 10 (entirely preventable)

0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. All charts have 2 reviewers (an EMT-P and MD). If you think this chart requires a third reviewer, please describe the type of provider best suited for the review and why.

Thank you!

You have finished reviewing this case.
Thank you very much.