

Appendix A

Field Triage of Injured Patients Guideline (FTG)– Stakeholder Feedback Tool

Start of Block: Introductory Questions- Page 1

Q1 Demographics

Which of the following best describes your primary role at your main EMS job?

- Patient Care Provider** - A person whose primary role is the provision of emergency medical services to patients.
 - Educator** - A person whose primary role is instructing individuals enrolled in an approved or accredited EMS training course or providing continuing education required for maintenance of licensure.
 - Preceptor** - A person whose primary role is training individuals enrolled in an approved or accredited EMS training course in a clinical setting.
 - Dispatcher/Operator** - A person whose primary role is EMS communications.
 - Administrator/Manager** - A person whose primary role is the management and direction of an organization providing emergency medical services.
 - First-line Supervisor** - A person whose primary role is the direct supervision of individuals providing emergency medical services.
 - Other** - A person whose primary EMS role at their main job is not listed above:

-

Q2 At what level are you currently practicing as an EMS provider?

- Emergency Medical Responder; First Responder
 - Emergency Medical Technician - Basic
 - Emergency Medical Technician - Intermediate
 - Paramedic
 - Advanced Emergency Medical Technician
 - Flight Nurse
 - Flight Respiratory Therapist
 - Physician
 - Nurse Practitioner/Physician Assistant
 - Other. Please specify: _____
-

Q3 Which of the following best describes your main EMS agency?

- Hospital** - Refers to EMS agencies that are under the direct control of a hospital.
 - Fire Department (Paid and Volunteer)** - An organization from which fire and emergency medical services are provided.
 - Tribal** - An EMS agency operated by a federally recognized Indian or Alaska Native Tribe.
 - Military** - An agency operated by one of the U.S. Armed Forces.
 - Government, Non-Fire Department** - An agency operated directly by a federal, state, county, or local government entity other than the U.S. Armed Forces.
 - Private** - An agency operated under the direct control of a for-profit or not-for-profit organization other than a hospital to include volunteer rescue squads operated independently of a fire department.
 - Air Medical** - An organization which provides air ambulance services.
 - Other.** Please specify: _____
-

Q4 Which of the following best describes the primary type of service provided by your main EMS agency? If more than one type of service is provided, pick the service with the greatest number of calls in the past 12 months.

- Air Medical Care** - Transport of patients from scene or hospital by rotor or fixed wing.
- Primarily 911 response** - Immediate response to an incident location, regardless of method of notification (for example, 911, direct dial, walk-in, flagging down).
- Primarily medical transport** - Transport of a patient from one health facility to another.
- Equal mix** of 911 and medical transport.
- Clinical services** - Provision of clinical services in a non-ambulance clinical setting such as emergency department, medical office, or dialysis clinic.
- Mobile Integrated Healthcare & Community Paramedicine**- Provision of clinical services in an out-of-hospital community setting.
- Other.** Please specify: _____

End of Block: Introductory Questions- Page 1

Start of Block: Introductory Questions- Page 2

Q5 A major trauma patient in your area is taken by ground to:

- Closest Level I or II trauma center
- Closest Level III or IV trauma center
- Closest hospital (non-trauma center)



Q6 What is the average time by ground, in minutes, with good weather and low traffic volumes, to reach your closest **trauma center** of any level?



Q7 What is the average time by ground, in minutes, with good weather and low traffic volumes, to reach your closest **Level I or II trauma center**?

Q8 A major trauma patient in your area taken by air:

- 0% of the time
 - 1-25% of the time
 - 26-50% of the time
 - 51-75% of the time
 - 76-99% of the time
 - 100% of the time
-

Q9 In your region, how often is air transport **unavailable** (e.g. due to weather, aircraft availability)?

- 0% of the time
- 1-25% of the time
- 26-50% of the time
- 51-75% of the time
- 76-99% of the time
- 100% of the time

End of Block: Introductory Questions- Page 2

Start of Block: Introductory Questions - Page 3

Q10 When there is new information regarding trauma patient care, how do you typically find out about it before it is integrated into your local protocol? Select all that apply.

- Attending a conference
 - Internet/newspaper/television
 - Academic journals
 - State or regional authorities
 - Local agency
 - Colleagues
 - Social media
 - Other. Please specify: _____
-

Q11 What percentage of the time does your judgement override the FTG?

- 0-20%
 - 21-40%
 - 41-60%
 - 61-80%
 - 81-100%
-

Q12 When your judgement overrides the FTG, do you most often find yourself:

- a. Transporting a patient to a trauma center when they don't necessarily meet criteria based on the current FTG?
- b. Transporting a patient to a non-trauma center when they meet criteria for a trauma center based on FTG?
- c. Equal mix of both a and b.



Q13 What transport time, by ground, in minutes, do you think is reasonable to travel to a Level I or II trauma center as opposed to a closer hospital with a patient meeting Step 1 or 2 triage criteria?

End of Block: Introductory Questions - Page 3

Start of Block: Introductory Questions - Page 4

Q14 Which Step drives the majority of the decisions to take patients to a trauma center in your area?

- Step 1- Measure vital signs and level of consciousness
 - Step 2- Assess anatomy of injury
 - Step 3- Assess mechanism of injury and evidence of high-energy impact
 - Step 4- Assess special patient or system considerations
-

Q15 Please order the steps in terms of importance to you as a provider in the field determining patient transport destination. (Drag and drop your responses. "1" being most important; "4" being least important)

- _____ Assess mechanism of injury and evidence of high-energy impact
 - _____ Assess anatomy of injury
 - _____ Assess special patient or system considerations
 - _____ Measure vital signs and level of consciousness
-

Q16 Please place the steps in the order you use them as a provider in the field in determining patient transportation destination. (Drag and drop your responses.)

- _____ Assess mechanism of injury and evidence of high-energy impact
 - _____ Assess anatomy of injury
 - _____ Assess special patient or system considerations
 - _____ Measure vital signs and level of consciousness
-

Q17 Do you think this step-wise approach to triage is useful for implementation of trauma triage criteria?

- Yes. Why? _____
 - No. Why not? _____
-

Q18 Are there any other specific tools you find helpful to assist in consistent implementation of trauma triage criteria?

End of Block: Introductory Questions - Page 4

Start of Block: Step 1: Measure Vital Signs and Level of Consciousness

Step 1 Q1

Step 1: Measure Vital Signs and Level of Consciousness

Is **Step 1** of the FTG (physiologic criteria) used in your local protocol?

Yes

No

Step 1 Q2 How easy is it to understand **Step 1** of the FTG when used in your local protocol?

Very easy

Easy

Neither easy nor difficult

Difficult. Why? _____

Very difficult. Why? _____

Not applicable

Step 1 Q3 How important is **Step 1** of the FTG to triage?

Extremely important

Very important

Moderately important

Slightly important

Not at all important

Step 1 Q4 Please indicate whether you would keep, eliminate, or change each of the **physiologic measures** within Step 1 of the FTG.

| | Keep | Eliminate | Change |
|--|-----------------------|-----------------------|-----------------------|
| <input checked="" type="checkbox"/> Glasgow Coma Scale ≤ 13 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <input checked="" type="checkbox"/> Systolic Blood Pressure | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <input checked="" type="checkbox"/> Respiratory rate 29 breaths per minute (| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Display This Question:
 If Please indicate whether you would keep, eliminate, or change each of the physiologic measures wit... = Change

Step 1 Q4.1 As indicated in the question above, please describe what you would change about the **physiologic measures** within Step 1 of the FTG.

Step 1 Q5 Are there any additional **physiologic measures** that are used by your EMS agency to support trauma center triage?

- Yes. Please specify: _____
- No

Step 1 Q6 Are there any additional **physiologic measures** you believe should be added in the next iteration of the Guidelines?

- Yes. Please specify: _____
- No

End of Block: Step 1: Measure Vital Signs and Level of Consciousness

Start of Block: Step 2: Assess Anatomy of Injury

Step 2 Q1 **Step 2: Assess Anatomy of Injury**

Is **Step 2** of the FTG used in your local protocol?

- Yes
- No

Step 2 Q2 How easy is it to understand **Step 2** of the FTG when used in your local protocol?

- Very easy
- Easy
- Neither easy nor difficult
- Difficult. Why? _____
- Very difficult. Why? _____
- Not applicable
-

Step 2 Q3 How important is **Step 2** of the FTG to triage?

- Extremely important
 - Very important
 - Moderately important
 - Slightly important
 - Not at all important
-

Step 2 Q4 Please indicate whether you would keep, eliminate, or change each ***injury type*** used to identify the major trauma patient?

| | Keep | Eliminate | Change |
|---|-----------------------|-----------------------|-----------------------|
| <input checked="" type="checkbox"/> All penetrating injuries to head, neck, torso and extremities proximal to elbow or knee | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <input checked="" type="checkbox"/> Chest wall instability or deformity (e.g. flail chest) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <input checked="" type="checkbox"/> Two or more proximal long-bone fractures | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <input checked="" type="checkbox"/> Crushed, degloved, mangled, or pulseless extremity | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <input checked="" type="checkbox"/> Amputation proximal to wrist or ankle | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <input checked="" type="checkbox"/> Pelvic Fractures | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <input checked="" type="checkbox"/> Open or depressed skull fracture | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <input checked="" type="checkbox"/> Paralysis | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Display This Question:

If Please indicate whether you would keep, eliminate, or change each injury type used to identify th...
= Change

Step 2 Q4.1 As indicated in the question above, please describe what you would change about the ***injury types*** used to identify the major trauma patient.

Step 2 Q5 Are there any additional ***injury types*** that are used by your EMS agency to support trauma center triage?

- Yes. Please specify: _____
- No

Step 2 Q6 Are there any additional ***injury types*** you believe should be added to improve the next iteration of the Guideline?

- Yes. Please specify: _____
- No

End of Block: Step 2: Assess Anatomy of Injury

Start of Block: Step 3: Assess Mechanism of Injury and Evidence of High-energy Impact

Step 3 Q1

Step 3: Assess Mechanism of Injury and Evidence of High-energy Impact

Is **Step 3** of the FTG used in your local protocol?

- Yes
- No

Step 3 Q2 How easy is it to understand **Step 3** of the FTG when used in your local protocol?

- Very easy
- Easy
- Neither easy nor difficult
- Difficult. Why? _____
- Very difficult. Why? _____
- Not applicable

Step 3 Q3 How important is **Step 3** of the FTG to triage?

- Extremely important
 - Very important
 - Moderately important
 - Slightly important
 - Not at all important
-

Step 3 Q4 Please indicate whether you would keep, eliminate, or change each **mechanism of injury** used to identify the major trauma patient?

| | Keep | Eliminate | Change |
|--|-----------------------|-----------------------|-----------------------|
| <p><input checked="" type="checkbox"/> Falls- Adults: >20 feet (one story is equal to 10 feet) Children: >10 feet or two or three times the height of the child</p> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <p><input checked="" type="checkbox"/> High-risk auto crash- Intrusion, including roof: >12 inches occupant site; >18 inches any site Ejection (partial or complete) from automobile Death in same passenger compartment Vehicle telemetry data consistent with a high risk of injury</p> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <p><input checked="" type="checkbox"/> Auto vs. pedestrian/ bicyclist thrown, run over, or with significant (> 20 mph) impact</p> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <p><input checked="" type="checkbox"/> Motorcycle crash > 20 mph</p> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Display This Question:

If Please indicate whether you would keep, eliminate, or change each mechanism of injury used to ide... = Change

Step 3 Q4.1 As indicated in the question above, please describe what you would change about the **mechanisms of injury** used to identify the major trauma patient.

Step 3 Q5 Are there any additional ***mechanisms of injury*** that are used by your EMS agency to support trauma center triage?

- Yes. Please specify: _____
- No

Step 3 Q6 Are there any additional ***mechanisms of injury*** you believe should be added to improve the next iteration of the Guideline?

- Yes. Please specify: _____
- No

End of Block: Step 3: Assess Mechanism of Injury and Evidence of High-energy Impact

Start of Block: Step 4: Assess Special Patient or System Considerations

Step 4 Q1 **Step 4: Assess Special Patient or System Considerations**

Is **Step 4** of the FTG used in your local protocol?

- Yes
- No

Step 4 Q2 How easy is it to understand **Step 4** of the FTG when used in your local protocol?

- Very easy
 - Easy
 - Neither easy nor difficult
 - Difficult. Why? _____
 - Very difficult. Why? _____
 - Not applicable
-

Step 4 Q3 How important is **Step 4** of the FTG to triage?

- Extremely important
 - Very important
 - Moderately important
 - Slightly important
 - Not at all important
-

Step 4 Q4 Please indicate whether you would keep, eliminate, or change each **special patient or system consideration** influencing your identification of a major trauma victim?

| | Keep | Eliminate | Change |
|---|-----------------------|-----------------------|-----------------------|
| <input checked="" type="checkbox"/> Older Adults: Risk of injury/death increases after age 55 years SBP <110 may represent shock after age 65 Low impact mechanisms (e.g. ground level falls) may result in severe injury | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <input checked="" type="checkbox"/> Children: Should be triaged preferentially to pediatric capable trauma centers | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <input checked="" type="checkbox"/> Anticoagulants and bleeding disorders: Patients with head injury are at high risk for rapid deterioration | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <input checked="" type="checkbox"/> Burns: Without other trauma mechanism: triage to burn facility With trauma mechanism: triage to trauma center | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <input checked="" type="checkbox"/> Pregnancy >20 weeks | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <input checked="" type="checkbox"/> EMS provider judgment | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Display This Question:

If Please indicate whether you would keep, eliminate, or change each special patient or system consi... = Change

Step 4 Q4.1 As indicated in the question above, please describe what you would change about the **special patient or system considerations** influencing your identification of a major trauma victim.

Step 4 Q5 Are there any additional **special patient or system considerations** that are used by your EMS agency to support trauma center triage?

- Yes. Please specify: _____
- No

Step 4 Q6 Are there any additional **special patient or system considerations** you believe should be added to improve the next iteration of the Guideline?

- Yes. Please specify: _____
- No

End of Block: Step 4: Assess Special Patient or System Considerations
