PUBLIC HEALTH DIVISION
Office of Health Care Regulation and Quality Improvement
Kate Brown, Governor

Oregon Health Authority

800 NE Oregon Street, Suite 465
Portland, OR 97232
Voice: (971) 673-0540
FAX: (971) 673-0556
TTY: 711

Guidelines for Field Triage of Injured Patients (Exhibit 2) and Trauma Team Activation (Exhibit 3)
Rule Advisory Committee
December 5, 2023
2:00 – 3:30 p.m. via Zoom

RAC MEMBER ATTENDEES
Ann Rust, Trauma Medical Director, Good Shepherd Medical Center, ATAB 9
Danny Freitag, EMS Manager, Santiam Hospital, ATAB 2
Frank Ehrmantraut, EMS Chief, Polk County Fire District No. 1, ATAB 2
Helene Anderson, Vice President of Capacity and Outreach, Hospital Association of Oregon - attending on behalf of Danielle Meyer
Jeremy Buller, Trauma Program Coordinator, St. Charles Medical Center, ATAB 7
Jerimiah Kenfield, Battalion Chief, Crook County Fire and Rescue, ATAB 7
Johnathan Jones, Clinical Trauma Coordinator, Providence Medford Medical Center, ATAB 5
Jordan Tyer, Firefighter/Paramedic, Pendleton Fire and Ambulance, ATAB 9
Kathy Tompkins, Trauma Program Manager, Salem Health, ATAB 2
Katie Hennick, Good Samaritan Regional Medical Center, ATAB 2 – attending on behalf of Jennifer Serfin
Mackenzie Cook, Trauma Surgeon, Oregon Health & Science University, ATAB 1
Mindy Stinnett, Trauma Program Manager, Blue Mountain Hospital, ATAB 7
Robin Hanson, Asante Rogue Regional Medical Center, ATAB 5 – attending on behalf of Matt Edinger
Sarah Doherty, Trauma Nurse Coordinator, St. Anthony Hospital, ATAB 9
Stacey Holmes, Trauma Program Manager, Sky Lakes Medical Center, ATAB 7
Zachary Hittner, Trauma Nurse Coordinator, Willamette Valley Medical Center, ATAB 2
INTERESTED PARTY ATTENDEES
Alexis Moren, Salem Hospital
Amy Slater, Director of Trauma and House Operations, Salem Hospital; State Trauma Advisory Board member
Elizabeth Wendell, Trauma Medical Director, Salem Hospital
Linda Sheffield, Trauma Nurse Coordinator, Santiam Hospital

Oregon Health Authority Staff	
Amani Atallah	Public Health Division, EMS & TS
Dana Selover	Public Health Division, Health Care Regulation & Quality Improvement
David Lehrfeld	Public Health Division, EMS & TS
Madeleine Parmley	Public Health Division, EMS & TS
Mellony Bernal	Public Health Division, Health Care Regulation and Quality Improvement
Rachel Ford	Public Health Division, EMS & TS

Welcome, Housekeeping and Agenda Review

Mellony Bernal introduced self and welcomed attendees to the Guidelines for Field Triage of Injured Patients (Exhibit 2) and Trauma Team Activation (Exhibit 3) Rule Advisory Committee (RAC). The purpose of this meeting was to discuss proposed changes to Exhibit 2 and Exhibit 3.

- Persons participating in the virtual meeting were instructed to identify themselves by typing their name, title, and organization into the Chat and identify themselves as a RAC member or member of the public.
- Staff shared that public members may listen to the discussion but may not participate. It was noted that members of the public were welcome to submit comments or questions for consideration at the conclusion of the RAC meeting by emailing Mellony Bernal and her email address was shared via Chat.
- RAC members were instructed to use the Chat feature to indicate if they wanted to speak by typing the word "Comment." RAC members who did not want to speak but wanted staff to consider information were asked to type into the Chat “For the Record” and include the information they wished to share. RAC members were told they would be called upon in the order they appeared in the Chat.
- It was noted that the previous RAC meeting notes could be found on the EMS Rulemaking Activity website under Rulemaking Advisory Committees in progress. Meeting notes from this meeting will be shared with RAC members via email and will also be posted on the webpage.
- It was noted that after the RAC process has concluded, there will be an opportunity for persons to provide oral public comments at a public hearing or to send written comments during the public comment period. Information about the notice of proposed rulemaking and public hearing will be shared by email and posted on the EMS Rulemaking Activity webpage under Proposed Rules Out for Comment.

Roll call of RAC members was taken and RAC members introduced themselves.

The agenda was reviewed by M. Bernal.

Exhibit 2 and Exhibit 3 History and Revisions

Rachel Ford provided a brief overview of the RAC meetings held previously – one meeting was held in October 2022 and another in November 2022 (meeting minutes can be found on the Rulemaking Activity webpage under "Rulemaking Advisory Committees in Progress.") The majority of the information shared from these meetings, and additional written correspondence received from RAC members, was relating to the trauma triage criteria (Exhibit 3). Based on this feedback, the EMS & Trauma System (EMS & TS) Program proposed new changes to Exhibit 3 and met with trauma RAC representatives to share changes. This RAC meeting is being reconvened after those discussions.

Madeleine Parmley reviewed the proposed changes to Exhibits 2 and 3.

Exhibit 2 – Field Triage of Injured Patients

- Angle brackets have been removed and replaced with words such as less than or greater than.

- The terms humerus and femur were added next to term 'long bones' to provide more specificity based on the 2014 ACS Resources for the Optimal Care of the Injured Patient (aka the Orange Book.) It was noted that some literature counts a 'tib-fib' or 'radius-ulna' as one long bone, but based on discussions with other program managers, it was decided to add only humerus or femur.

Discussion:

- RAC member asked if based on Exhibit 2 that EMS is being asked to enter patients into the trauma system, for example, a patient over the age of 65 and has a systolic blood pressure (SBP) under 110? M. Parmley noted that based on the field triage criteria, if a patient is 65 years of age or older and has an SBP of 110 or lower, or heartrate (HR) greater than the SBP, then the guideline is suggesting activation. It was further noted that under Exhibit 3, these specific criteria do not represent a full trauma team activation, rather the trauma center should consider all relevant risk factors and possibly activate a modified trauma response. Dr. Lehrfeld further clarified that EMS is considering the nature of the injury, such as being pulled from a car crash, and it is suspected that trauma is the cause. This would not be relevant to a 65-year-old sepsis or overdose patient.
- In response to information shared last year, RAC member responded that based on independent data analysis conducted by hospitals, it is suspected that the SBP criteria for persons 65 years or older would result in a 40% increase in trauma activation. When running data for pulse oximetry, it is suspected there would be a 120% increase in trauma activation. RAC member asked what data exists to support the additional resources. Concerns were also expressed that a person walking through the door meeting the criterium would not be activated whereas if assessed by EMS could be activated.
- Staff stressed that the nature of the injury is accounted for by EMS before considering a risk factor as a trauma. The proposed field triage criteria are based on national research and identifying what EMS should be considering based on hospital outcomes. Hospital activation criteria should not be conflated with field triage criteria.
- RAC member stated appreciation for changes to Exhibit 3 and suggested that staff reconsider changes to Exhibit 2 based on previous correspondence. Additional discussion ensued and following issues were raised:
  - EMS role and trauma band – Should EMS continue to band? Should hospital determine trauma entry at time of patient arrival?
  - Clarification on EMS response, Paramedic assessment and trauma entry. Is it a trauma – yes/no; do we need to go to a trauma center – yes/no.
  - Trauma hospital response after patient arrives at the hospital – Exhibit 2 is not about how many resources the hospital provides to the patient; that is up to the hospital;
  - Transporting rural patients long distances;
  - Oregon specific data should be considered over national data to consider possible overtriage;
  - Careful consideration of methodology used in conducting data analysis.
- RAC member agreed with statements made by Dr. Lehrfeld and noted that Oregon needs to decide whether to keep up with the rest of the country. It was questioned whether the new requirements for hospital nurse staffing may be playing a role in concerns around these Exhibits. Dana Selover noted that HB 2697 (2023 Oregon Laws, Chapter 507), section 6 specifies in statute nurse staffing ratios. It is uncertain how hospitals may interpret who is considered a 'trauma patient' and whether a definition is needed. This will be something that

the hospital nurse staffing committee will need to consider. It does not necessarily mean that every patient with a trauma band is considered a trauma patient. It was further noted that based on how the law was passed, the Oregon Health Authority does not have authority to adopt rules relating to nurse staffing ratios and possible definitions.

- RAC member stated via Chat, "We don't know the data on what happens to injured patients who have field hypotension who are transported to non-trauma hospitals. The statistical likelihood that Oregon is a significant outlier from the rest of the country is low, i.e., probably our data is the same as everyone else's." This RAC member further commented that when hospitals run their own data to determine possible anticipated clinical expansion based on volume, the group of patients of interest are not those that are 66 years old with an SBP of 109. The patients that should be studied are those that show up at a non-trauma center, and then subsequently have to get transferred to a trauma center. He stated that he is empathetic to volume but cautioned the state as a trauma system to not idiosyncratically pull single institution data and use it to argue against high quality published data.
- Additional comments via Chat:
  - Salem supports the group proposal presented in 2022 regarding Exhibit 2;
  - As of 2022, Oregon has 45 out of 58 hospitals that are trauma centers;
  - Look at state data for activated trauma patients over 65 years with BP 90-110 and ISS.
- **Follow-up – The SBP <110 for older adults is a requirement under the <u>current Exhibit 2</u> – 'Assess special patient or system considerations' whereas an SBP less than 110 might represent shock after age 65 years.**

Exhibit 3 – Trauma Activation Criteria

- M. Parmley reviewed changes to Exhibit 3 and noted that these changes align with written comments shared with the EMS & TS Program last year. These proposed changes were discussed with all trauma centers prior to convening this RAC meeting. The following exceptions were noted:
  - Age specific vital signs criteria remain in the first bullet for clarity.
  - Language alignment has been made between the two exhibits.
  - ACS criteria states gunshot injuries to head, neck, torso – the EMS & TS program has retained 'All penetrating injuries.'
  - The GCS scale of less than 9 has been retained.
  - Other criteria previously proposed has been moved to modified activation.
  - The terms 'humerus' and 'femur' have been added to the suspected fracture of two or more proximal long bones.
  - The co-morbid factors that used to sit outside of the activation box are now listed within the modified trauma team and are listed as consideration only.
  - Emergency physician discretion has been added to the modified trauma team.

Discussion:

- RAC member thanked M. Parmley for the work on this and listening to RAC members and revising the material. It was noted that the "Grey Book" states a blood pressure of less than 90 <u>at any time</u> and currently it is evaluated as a sustained blood pressure or is it a contributing factor from, for example, pain medication. It was suggested to remove "at any time." Dr. Lehrfeld noted that the 90 mmHg is specifically for consideration of patients with a

traumatic brain injury. A single episode of hypotension or hypoxia in severe traumatic brain injury tend to double mortality. The purpose of these criteria is to evaluate information from EMS and using clinical judgement determine what resources may be needed when the patient comes through the door.

- Based on comments shared in the Chat about looking at Oregon data, RAC member stated that in considering the recommendations that the field triage criteria are based upon, the likelihood that we can recreate the rigor and depth of that analysis is not feasible as a state. The point of guidelines is that patients end up in the right place with the right resources to begin with, so it is unlikely that significant adverse outcomes will be found. Oregon data can be pulled for years and it unlikely to meaningfully inform the state's decision to implement the field triage guideline. We should move away from trying to find Oregon specific data, since it is highly likely that Oregon is just like every other state. Oregon patients are just like other trauma patients in the US.
- RAC member stated disagreement with the national literature and felt that the study was planned with suburban medicine and did not look at peripheral which is apparent considering there is no level IV criteria. For a level I, ACS verified trauma center, there are huge consequences if not following the national guidance. As a smaller center that sees 300 trauma patients per year, the proposed guidelines appear to increase that number to 450. Dr. Lehrfeld noted that when looking at trauma data across the U.S., most trauma patients live in cities and most studies will overrepresent urban centers. The alternative is one field triage standard for urban and one for rural.
- RAC member asked whether the proposed exhibits are a minimum standard? Dr. Lehrfeld confirmed that these standards are a "floor" – a minimum standard. Trauma centers, ATABs, etc. may implement a higher standard.
- RAC member noted that based on previous correspondence, many trauma centers had identified criteria that was believed to be the most detrimental and moved those criteria to a 'consideration' box. The criteria are still there as a reminder. This RAC member acknowledged the great work that EMS is doing out in the field, using their discretion to activate patients that aren't meeting 'black and white' criteria for activation and do a really good job. Consensus could be reached by not putting some of these criteria in a black and white box and place in a consideration box. Examples shared of some situations that would not rise to a trauma activation. It was further noted that identifying what the gaps are would be appropriate and finding a right plan for Oregon.
- Additional comments reiterated via Chat:
  - Concern that Exhibit 2 requires SBP <110 be transported to highest level of care (Salem Hospital level II in our area) however if the patient walks into a hospital (Santiam Hospital Level IV) it is only a consideration.
  - Can we change to sustained SBP < 90? A single episode of hypotension requiring a full trauma response would overwhelm the trauma system.
  - Does the term "within the geographic constraints of the regional trauma system" mean that the ATAB decide, or should this be reworded for clarity?

Statement of Need and Fiscal Impact

M. Bernal noted that the Statement of Need and Fiscal Impact (SNFI) that had been shared at the November 2022 meeting remains largely the same with exception of the racial equity impact statement. It was noted that per statute, the EMS & TS Program is responsible for the development of a comprehensive statewide trauma system in collaboration with community partners, which includes state trauma objectives and standards, hospital designation, and the criteria and procedures utilized in designating hospitals. The need for the rule change is based on the revised *2021 Guideline for the Field Triage of Injured Patients*.

The racial equity impact was revised noting that future data analysis would be necessary to determine whether adoption of the proposed rules national field triage guideline as well as the trauma activation criteria would lead to better outcomes for persons of color. Exhibit 2 and Exhibit 3 provide a minimum triage standard for all patients being treated by EMS and the trauma system. It was further shared that per the *National Guideline for Field Triage* and the *Resources for Optimal Care of Injured Patients*, both triage and hospital trauma team activation criteria improve trauma patient outcomes by ensuring that patients are assessed and transported to the right care at the right time.

The SNFI outlines the number of licensed ambulance service agencies and trauma centers by category. It is expected that all ambulance service agencies will need to revise triage standards and train EMS providers on the new standards. It was further noted that the revised field triage criteria may result in additional transports to higher level of care from some ambulance agencies. It was further noted that specified criteria would result in a transport to a trauma center that may require a possible activation of the trauma team.

The cost of compliance was reviewed including impact on state agencies, units of local governments and the public. There is not anticipated impact to the state that is already responsible for surveying and designating trauma centers and reviewing Area Trauma System plans. Members of the public may be positively impacted if injured and requiring transport based on the revised field triage guideline; however, they also may be affected by increased billing costs for trauma activations.

Impacts to small businesses would be those ambulance agencies that have 50 or fewer employees. These impacts include staff time and resources to train EMS providers on the revised field triage guideline, as well as to revise applicable triage protocols.

One RAC member indicated via Chat – What is the impact of the additional trauma activation on trauma hospitals for suspicion of child abuse; special, high-resource healthcare needs, and systolic blood pressure (SBP less than 110 mmHg)? What are the additional estimates and how does that translate into dollars?

Next Steps

It was noted that staff will consider the information shared and consider whether additional changes may be made. Final proposed rules will be submitted to the Public Health Division's Administrative Rules Coordinator by December 15, 2023 for filing with the Secretary of State's Office and posting in the January 1, 2024 Oregon Bulletin. A public hearing will be scheduled on or after January 15, 2024 and the written comment deadline will be on or after January 22, 2024. The EMS & TS Program will consider both the oral testimony and written comments

shared and finalize proposed rules. The EMS & TS Program is considering an immediate effective date but allow EMS agencies and hospitals six months to come into compliance.

Meeting adjourned at 3:11 p.m.