



To: Members of the State Board of Health

From: Jeanne-Marie Bakehouse, Branch Chief, Emergency Medical and Trauma Services

Through: Randy Kuykendall, Division Director, Health Facilities and Emergency Medical Services, DRK

Date: Feb. 20, 2019

Subject: **Request for Rulemaking Hearing**
Concerning Proposed Amendments to 6 CCR 1015-4 Statewide Emergency Medical and Trauma Care System, Chapter Three - Designation of Trauma Facilities with a request for a rulemaking hearing to be set for April 2019

Trauma designation determines which injuries a hospital can treat. The goal is to ensure that patients receive the appropriate level of care for their injuries. However, changes in medical practice and population growth in Colorado have resulted in some hospitals providing a higher level of care without obtaining a higher level designation. The Department, the Statewide Trauma Advisory Committee and interested stakeholders developed a task force to review the current rules regarding the scope of services offered by designated trauma centers. The proposed rule changes seek to ensure that patient safety and adequate care are provided by standardizing expectations about what will be available in facilities choosing to expand their scope of care beyond the minimum requirements for the designation level. The amendments do not change the current standards for trauma designation but lay out additional requirements for lower level trauma centers providing care to trauma patients with brain and spinal cord/column injuries as well as clarifying types of patients that may be kept after consultation.

In March 2017, the Board of Health adopted rules for an expanded scope of care platform for orthopedic surgery at Level III and Level IV designated trauma centers. In October 2018, the Board of Health adopted rules regarding an expanded scope of care for general surgery at these lower-level centers. The current rule revision builds on that work and represents the platform needed for neurosurgery at Level III trauma centers and adds specifics regarding what types of trauma patients with brain and spinal cord/column injuries can be kept at Level III and IV designated trauma centers. The proposed regulations will add criteria to assure that Level III and Level IV facilities meet best practice standards for all patients admitted and quickly identify and transfer patients that exceed the trauma center's scope.

Currently, the regulations do not include criteria for facilities offering more services than the minimum required. These changes are necessary to ensure similar levels of care for certain types of patients who may be safely kept at Level III or IV trauma centers.

STATEMENT OF BASIS AND PURPOSE
AND SPECIFIC STATUTORY AUTHORITY
for Amendments to
6 CCR 1015-4 Statewide Emergency Medical and Trauma Care System, Chapter Three -
Designation of Trauma Facilities

Basis and Purpose.

Additional language integrates into requirements currently in rule by identifying neurosurgical capability as a potential expanded scope service offered by Level III trauma centers. The proposed rule requires all Level IV and Level III trauma centers without neurosurgical capability to transfer certain patients and consult on other patients for consideration of transfer. Level III facilities with part-time neurosurgical/orthopedic spine coverage have several additional requirements. Finally, the proposed change requires all Level III trauma centers, even those with full-time neurosurgical/orthopedic spine capability, to transfer the most severe brain and spinal cord/column injuries. The proposed rule amendments will add a statement to clarify that a trauma center may attempt life-saving surgery if it has the clinical capacity to do so.

Specific Statutory Authority.

Statutes that require or authorize rulemaking:

§ 25-3.5-702(3) C.R.S

§ 25-3.5-704(2)(d) C.R.S

Is this rulemaking due to a change in state statute?

Yes, the bill number is _____. Rules are ___ authorized ___ required.
 No

Does this rulemaking incorporate materials by reference?

Yes URL in rule
 No

Does this rulemaking create or modify fines or fees?

Yes
 No

Does the proposed rule create (or increase) a state mandate on local government?

No.

- The proposed rule does not require a local government to perform or increase a specific activity for which the local government will not be reimbursed;
- The proposed rule requires a local government to perform or increase a specific activity because the local government has opted to perform an activity, or;
- The proposed rule reduces or eliminates a state mandate on local government.

REGULATORY ANALYSIS
for Amendments to
6 CCR 1015-4 Statewide Emergency Medical and Trauma Care System, Chapter Three -
Designation of Trauma Facilities

1. A description of the classes of persons affected by the proposed rule, including the classes that will bear the costs and the classes that will benefit from the proposed rule.

Group of Persons/Entities Affected by the Proposed Rule	Size of the Group	Relationship to the Proposed Rule Select category: C/CLG/S/B
Level III Trauma Centers	25 (total)	C*
Level III Trauma Centers with part-time neurosurgical or ortho-spine coverage	9 of 25	C*
Level III Trauma Centers with full-time neurosurgical coverage	3 of 25	C*
Level IV Trauma Centers	35	C*
Trauma community constituents	1000+	S
People who sustain a brain or spinal cord/column injury in Colorado and are transported to a Level III or IV trauma center.	Several thousand per year	B

* Note: No direct impact on CLG. Any Level III or IV trauma center that is part of a special tax district will be affected. However, the rule change for Level IV trauma centers is minimal and should have little impact beyond current rule. The impact on Level IIIs is limited to those choosing to provide neurosurgical/orthopedic spine services, which are not required service lines for Level III trauma centers. In addition, under certain circumstances, Level III and IV trauma centers may be able to admit some patients who were previously transferred to a higher level of care.

While all are stakeholders, groups of persons/entities connect to the rule and the problem being solved by the rule in different ways. To better understand those different relationships, please use this relationship categorization key:

- C = individuals/entities that implement or apply the rule.
- CLG = local governments that must implement the rule in order to remain in compliance with the law.
- S = individuals/entities that do not implement or apply the rule but are interested in others applying the rule.
- B = the individuals that are ultimately served, including the customers of our customers. These individuals may benefit, be harmed or be at-risk because of the rule, the "C" or "CLG" category individuals/entities that implement or apply the rule, or "S" category individuals/entities that are interested in the rule or its implementation.

2. To the extent practicable, a description of the probable quantitative and qualitative impact of the proposed rule, economic or otherwise, upon affected classes of persons.

Non-economic outcomes

The rule revision will potentially impact all residents and visitors to Colorado who may need the resources of a Level III or IV trauma center. The benefit to this group will be more standardization in the trauma care offered for brain and spinal cord/column injuries, some of which are suitable for treatment at Level III or IV trauma centers. The rule will ultimately impact the general public because it will allow certain individuals to be safely cared for locally versus a mandatory transfer to a higher level of care. It is considered to be in the patient's best interest to keep them as close to home and their support network as possible while still receiving optimal care.

This will mostly benefit individuals who live in medically underserved areas. It protects patients by requiring transfer of patients for whom all concomitant services are not available. Meanwhile it assures that patients are kept at the closest hospital where all necessary services are available and are treated according to best practice standards. It also ensures that potential pitfalls in care are not overlooked by lower level facilities when it comes to the diagnosis and treatment of complex trauma patients.

Summarize the anticipated favorable and non-favorable non-economic outcomes (short-term and long-term), and if known, the likelihood of the outcomes for each affected class of persons by the relationship category:

C: Level III and IV trauma centers will have clearly stated expectations for the transfer and care of certain patients with brain and spinal cord/column injuries. Previously adopted rules allow trauma centers freedom to undertake life-saving surgical interventions if the resources necessary are available. The amendments build on those rules to clarify which patients with brain or spinal cord/column injuries must be transferred or receive a consult. Most of these patients already require transfer or consult under current rule. These changes provide additional clarity on which patients may be kept under certain circumstances.

Currently, even Level III trauma centers with full-time neurosurgical capability, transfer some brain and spinal cord/column injuries, particularly those with multisystem trauma. The number of additional required transfers is estimated to be small. (Note: these are patients who do not meet the definition of requiring emergent surgery.) For Level III and IV trauma centers without neurosurgical coverage or with part-time coverage, this may mean that additional patients can be admitted locally after consultation with a higher level of care.

CLG: Generally, not applicable. Local governments are only affected if they are providing funding for Level III trauma centers electing to offer neurosurgical/orthopedic spine service lines.

S: Stakeholders were involved in every phase of this rule development process including the initiation of the task force recommending the rule change. Membership of the task force encompassed care-givers (both physicians and nurses) from Level I through IV trauma centers, and task force meetings were public. During the year of task force meetings, there were many points of disagreement, but what the Board of Health is currently considering was unanimously approved by task force membership. There was disagreement from two Level III trauma centers that felt that the requirement to transfer the most seriously injured patients to a higher level of care was restrictive. After a discussion between the task force and the Level IIIs, the task

force voted to support the proposed regulation which would require the transfer of patients with severe traumatic brain or spinal cord injuries to a higher level trauma center.

Economic outcomes

Summarize the financial costs and benefits, include a description of costs that must be incurred, costs that may be incurred, any Department measures taken to reduce or eliminate these costs, any financial benefits.

C: Being able to keep patients locally provides financial benefits to local economies; proposed regulation allows certain patients that were previously covered by mandatory transfer rules to be retained in Level III and IV facilities after a consultation with a higher level of care. This allows them to be retained in their local economies and limit patient costs associated with transport.

However, there still are a number of patients who will meet mandatory transfer criteria. The task force believes that requiring certain transfers ensures that potential pitfalls in care are not overlooked by lower level facilities when it comes to the diagnosis and treatment of patients with significant brain and spinal cord/column injuries. Furthermore, the task force believes this is consistent with the history of Colorado's trauma system which directs the most seriously injured patients to the highest levels of care.

The task force acknowledged that requiring transfer for those patients with the most serious injuries does mean that a few facilities may transport a small portion of patients they are currently keeping. This revenue stream cannot be analyzed by department personnel since costs are not collected in trauma registry data; however, it would appear that the number of patients affected by the proposed changes is small, and the revenue will still be captured elsewhere in the trauma system.

Please describe any anticipated financial costs or benefits to or monitored by these individuals/entities.

S: Stakeholders who are not from Level III or IV facilities should not see much, if any, impact from the proposed changes.

B: Patients with brain and spinal cord/column injuries should have access to uniformly high quality care at any trauma center in Colorado and a speedy transfer for additional services, if necessary. In addition, patients will not be burdened by the expense of an unnecessary transfer if care can be safely rendered locally.

3. The probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenues.
 - A. Anticipated CDPHE personal services, operating costs or other expenditures: No impact beyond current trauma designation costs.

Anticipated CDPHE Revenues: No change from current designation revenues.
 - B. Anticipated personal services, operating costs or other expenditures by another state agency: N/A

Anticipated Revenues for another state agency: NA

4. A comparison of the probable costs and benefits of the proposed rule to the probable costs and benefits of inaction.

Check mark all that apply:

- Inaction is not an option because the statute requires rules be promulgated.
- The proposed revisions are necessary to comply with federal or state statutory mandates, federal or state regulations, and department funding obligations.
- The proposed revisions appropriately maintain alignment with other states or national standards.
- The proposed revisions implement a Regulatory Efficiency Review (rule review) result, or improve public and environmental health practice.
- The proposed revisions implement stakeholder feedback.
- The proposed revisions advance the following CDPHE Strategic Plan priorities:

Goal 1, Implement public health and environmental priorities Goal 2, Increase Efficiency, Effectiveness and Elegance Goal 3, Improve Employee Engagement Goal 4, Promote health equity and environmental justice Goal 5, Prepare and respond to emerging issues, and Comply with statutory mandates and funding obligations
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Strategies to support these goals:

- Substance Abuse (Goal 1)
- Mental Health (Goal 1, 2, 3 and 4)
- Obesity (Goal 1)
- Immunization (Goal 1)
- Air Quality (Goal 1)
- Water Quality (Goal 1)
- Data collection and dissemination (Goal 1, 2, 3, 4 and 5)
- Implements quality improvement or a quality improvement project (Goal 1, 2, 3 and 5)
- Employee Engagement (career growth, recognition, worksite wellness) (Goal 1, 2 and 3)
- Incorporate health equity and environmental justice into decision-making (Goal 1, 3 and 4)
- Establish infrastructure to detect, prepare and respond to emerging issues (Goal 1, 2, 3, 4, and 5)
- Other favorable and unfavorable consequences of inaction:
- Action will promote standardization of care across facilities for a relatively high-risk patient group.

5. A determination of whether there are less costly methods or less intrusive methods for achieving the purpose of the proposed rule.

Many proposals were discussed at task force meetings. The task force rejected some as overly restrictive while others were rejected as not providing enough standardization of care for this patient population.

Several proposals would have caused more transfers of patients from rural areas to higher levels of care. The task force rejected these as both overly restrictive and potentially causing harm to patients undergoing unnecessary and costly transport.

6. Alternative Rules or Alternatives to Rulemaking Considered and Why Rejected.

The task force also considered not regulating neuro/spine as an expanded scope service for Level III and IV trauma centers, but since the task force was convened specifically to address a perceived gap in the rules, the group proceeded with rule drafting. The task force agreed with the Statewide Trauma Advisory Committee's opinion, that modest changes to regulation could help assure uniform quality care for trauma patients, regardless of where they are injured and hospitalized.

7. To the extent practicable, a quantification of the data used in the analysis; the analysis must take into account both short-term and long-term consequences.

Staff, task force members and members of the public discussed the role of national voluntary criteria as set by the American College of Surgeons (ACS) in *Resources for Optimal Care of the Injured Patient 2014* and in updates provided on the ACS website at: <https://www.facs.org/quality-programs/trauma/tqp/center-programs/vrc/resources>. Also discussed were national best-practice guidelines as issued by the American Association of Neurological Surgeons (<https://www.aans.org/>) for the management of brain injured patients.

These documents were useful in the discussion regarding standard scope of care for Level III trauma centers. Across the country that scope does not generally include the care of patients with severe brain or spinal cord injuries. These documents, in addition to information from some current journal articles, also helped formulate some of the draft regulations regarding what could likely be safely kept at Level III or IV trauma centers without neurosurgical coverage.

STAKEHOLDER ENGAGEMENT
for Amendments to
6 CCR 1015-4 Statewide Emergency Medical and Trauma Care System, Chapter Three -
Designation of Trauma Facilities

State law requires agencies to establish a representative group of participants when considering to adopt or modify new and existing rules. This is commonly referred to as a stakeholder group.

Early Stakeholder Engagement:

The following individuals and/or entities were invited to provide input and included in the development of these proposed rules:

Expanded Scope Task Force	Member	Appointment/Serving as:
Centura - Corporate and St. Anthony	Charles Mains	SEMTAC, STAC chair
HealthOne - Swedish Medical Center	Ben Rubin	Level I neurosurgeon
UCH - Memorial	John McVicker	Level II neurosurgeon
Centura - Parker	Brad Duhon	Level II neurosurgeon
SCHLS - Lutheran	Itay Melamed	Level III neurosurgeon
Denver Health	Ryan Lawless	Level I surgeon
Centura - St. Anthony's	Abigail Blackmore	Level I TPM
SCHLS- St. Mary's Grand Junction	Joel Schaeffer	Level II surgeon
HealthOne - Medical Center of Aurora	Tracy Lauzon	Level II TPM
Centura - St. Anthony Summit Medical Ctr	Jodie Taylor	Level III surgeon
Valley View Hospital	Nancy Frizell	Level III TPM
Centura - St. Thomas More	Nancy Bartkowiak	Level IV TPM

The Neurosurgery Expanded Scope Task Force met a total of eight times from February - October 2018. Each meeting was open to the public, and all public meetings were advertised to the trauma and EMS community (approximately 1,000 recipients) via a weekly communication described above. In addition, the task force reported back to the Statewide Trauma Advisory Committee at public meetings in July and October.

Staff and task force members also communicated with the following organizations regarding the ongoing work and advertised both the public meetings and opportunities to comment to: the State Emergency Medical and Trauma Services Advisory Council (SEMTAC), the Statewide Trauma Advisory Committee, the Regional Emergency Medical and Trauma Advisory Councils (RETAC), the Colorado Trauma Network, the Colorado Hospital Association and the trauma and EMS community.

In addition, when there was disagreement among the experts, staff reached out to potentially affected facilities to ensure that those facilities had the opportunity to attend meetings or provide written feedback. Additionally, the draft rule change was advertised as a discussion point at the January 2019 Statewide Trauma Advisory Committee meeting and the State Emergency Medical and Trauma Services Advisory Council meetings on Jan. 9 and 10 respectively. On Jan. 10, 2019, SEMTAC voted to recommend the proposed changes be brought to the Board of Health by the Department.

Stakeholder Group Notification

The stakeholder group was provided notice of the rulemaking hearing and provided a copy of the proposed rules or the internet location where the rules may be viewed. Notice was provided prior to the date the notice of rulemaking was published in the Colorado Register (typically, the 10th of the month following the Request for Rulemaking).

- Not applicable. This is a Request for Rulemaking Packet. Notification will occur if the Board of Health sets this matter for rulemaking.
- Yes.

Summarize Major Factual and Policy Issues Encountered and the Stakeholder Feedback Received. If there is a lack of consensus regarding the proposed rule, please also identify the Department's efforts to address stakeholder feedback or why the Department was unable to accommodate the request.

There were many points of disagreement along the way in this rulemaking process. The Department took all feedback back to the task force for additional discussion. When task force members disagreed or when there was disagreement from members of the public at task force meetings, the group looked for options where consensus could be reached. In the few instances where consensus could not be reached, the task force membership voted and majority-approved language was adopted. The draft that the Board of Health is considering was adopted unanimously by the task force members with acknowledged disagreement from one facility.

The task force acknowledged that requiring transfer for those patients with the most serious brain and spinal cord injuries does mean that three facilities in Colorado may be required to transfer a small number of patients for which they currently care. It would appear that the number of patients affected by the proposed changes is small. In these cases, the task force felt that for certain high acuity and low frequency injuries, the patients would be better served in facilities that regularly care for patients with serious brain and spinal cord injuries.

Please identify the determinants of health or other health equity and environmental justice considerations, values or outcomes related to this rulemaking.

Select all that apply.

	Improves behavioral health and mental health; or, reduces substance abuse or suicide risk.	X	Reduces or eliminates health care costs, improves access to health care or the system of care; stabilizes individual participation; or, improves the quality of care for unserved or underserved populations.
	Improves housing, land use, neighborhoods, local infrastructure, community services, built environment, safe physical spaces or transportation.		Reduces occupational hazards; improves an individual's ability to secure or maintain employment; or, increases stability in an employer's workforce.
	Improves access to food and healthy food options.		Reduces exposure to toxins, pollutants, contaminants or hazardous substances; or ensures the safe application of radioactive material or chemicals.
X	Improves access to public and environmental health information; improves the readability of the rule; or, increases the shared understanding of roles and responsibilities, or what occurs under a rule.	X	Supports community partnerships; community planning efforts; community needs for data to inform decisions; community needs to evaluate the effectiveness of its efforts and outcomes.
	Increases a child's ability to participate in early education and educational opportunities through prevention efforts that increase protective factors and decrease risk factors, or stabilizes individual participation in the opportunity.		Considers the value of different lived experiences and the increased opportunity to be effective when services are culturally responsive.
	Monitors, diagnoses and investigates health problems, and health or environmental hazards in the community.		Ensures a competent public and environmental health workforce or health care workforce.
	Other: _____ _____		Other: _____ _____

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Health Facilities and Emergency Medical Services Division

STATEWIDE EMERGENCY MEDICAL AND TRAUMA CARE SYSTEM

6 CCR 1015-4

Adopted by the Board of Health on _____, 2019. Effective _____, 2019.

CHAPTER THREE - DESIGNATION OF TRAUMA FACILITIES

306. Expanded Scope of Care for Designated Trauma Centers Level III - IV

1. All designated Level III and IV trauma centers shall define their Scope of Care (SOC) based on the resources that are available at the facility. Physicians shall be allowed to transfer patients when in the best interest of the patient and shall not be encumbered by organizational restrictions to keep patients within a system. Facilities that provide an expanded scope of care shall have:
 - A. A written policy for the management of each expanded scope service line being offered, for example, orthopedic surgery, plastic surgery or neurosurgery.
 - B. A written policy and plan for patient management when each service is not available, to include:
 - (1) A defined service that manages inpatient care for continuity.
 - (2) A written plan to ensure continuity of care for all admitted patients when the service is not available.
 - (3) Regular communication with transport providers and referring hospitals on availability of the expanded scope service(s).
 - (4) Hospital defined continuity of care plan that includes time of availability and proof of communication between services.
 - C. Formal transfer guidelines for times when a facility does not have specialty coverage and for unusual conditions such as weather, disaster, etc.
 - D. Management guidelines based on the defined scope of care and nationally recognized best practice standards.
 - E. For Level IV facilities, if there is an emergency physician serving as the trauma medical director, there shall be a physician with surgical expertise to assist with performance improvement.
2. Emergent Surgery at Level III and IV Trauma Centers
 - A. All Level III and IV trauma centers may attempt emergent surgery if appropriate resources are available. Once the patient is stabilized to the extent of the facility's capabilities, if the facility does not have the clinical

43 platform to care for the patient and for potential complications, the facility
44 shall consult with a higher level trauma center or Transfer at the discretion of
45 the surgeon.

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47 B. For patients at Level IV trauma centers that require emergent surgery, the
48 emergency physician shall consult the trauma surgeon on call to determine if
49 the time to transfer would exceed the time to surgeon and operating room
50 availability. If the surgeon's arrival and operating room capability time exceeds
51 the transfer time, the patient shall be transferred to a higher level trauma
52 center.

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54 C. If the surgeon on call is encumbered in the operating room, the attending
55 emergency department physician shall consult the surgeon to determine the
56 plan of care, including the potential to transfer to or consult with a higher
57 level trauma center.

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59 3. Mandatory Transfers and Consideration for Transfer

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61 A. **NOTHING IN THESE RULES SHALL PRECLUDE ANY FACILITY WITH THE**
62 **APPROPRIATE RESOURCES FROM PROVIDING EMERGENT SURGERY AS DESCRIBED**
63 **ABOVE.**

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65 AB. All Level III and IV trauma centers shall transfer patients with any injuries
66 requiring resources beyond those available under the facility's scope of care
67 and patients with the following injuries, in addition to patients with injuries
68 described in 6 CCR 1015-4, Chapter Two:

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70 (1) Hemodynamically unstable pelvic fracture.
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72 (2) Pelvic fracture requiring operative fixation.
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74 (3) Fracture or dislocation with vascular injury requiring operative vascular
75 repair.

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77 BC. All Level III and IV trauma centers shall consult a trauma surgeon at a Level I or
78 II key resource facility regarding any multiply injured patient requiring massive
79 transfusion protocol (MTP). The consult for consideration of transfer shall occur
80 within two hours of the initiation of the massive transfusion protocol.

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82 CD. All Level IV Trauma Centers shall transfer trauma patients under the following
83 conditions, in addition to patients with injuries described in 6 CCR 1015-4,
84 Chapter Two:

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86 (1) Bilateral femur fractures.
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88 (2) Femoral shaft fracture with any of the following:
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90 a. Head injury with any evidence of intracranial hemorrhage,
91 depressed skull fracture or skull fracture with sinus
92 involvement.
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94 b. Chest injury - multiple rib fractures (> 4 unilaterally or > 2
95 bilaterally) or hemothorax.
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97 c. Abdomen - hollow organ or solid visceral injury, intra or
98 retroperitoneal bleeding.

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- (3) Age greater than 65 years with multiple rib fractures >4 unilaterally or >2 bilaterally.
- (4) Flail chest; 3 or more ribs, any age.
- (5) Persistent pneumothorax that is unresponsive after adequately placed chest tube having a massive or prolonged air leak.
- (6) Hemothorax treated with an initial chest tube that does not achieve complete evacuation within twenty-four (24) hours.
- (7) Mechanical ventilation anticipated to be greater than twenty-four (24) hours if the facility does not have the clinical platform to provide ongoing ventilator management.
- (8) Solid visceral or hollow organ injury if the facility does not have the clinical platform to care for the patient.
- (9) Vascular injury requiring operative vascular repair.
- (10) Crushed, de-gloved or mangled extremity.
- (11) Suspected or actual evidence of non-accidental trauma requiring social or clinical care beyond the facility's resources.

E. LEVEL III TRAUMA CENTERS WITH NO NEUROSURGICAL/ORTHOPEDIC SPINE COVERAGE AND ALL LEVEL IV AND V TRAUMA CENTERS RECEIVING TRAUMA PATIENTS OF ANY AGE UNDER THE FOLLOWING CONDITIONS, IN ADDITION TO PATIENTS WITH INJURIES DESCRIBED IN 6 CCR 1015-4, CHAPTER TWO:

- (1) SHALL TRANSFER THE FOLLOWING:
 - a. GLASGOW COMA MOTOR SCORE \leq 4 DUE TO TRAUMA WITH A NORMAL CT SCAN.
 - b. ANY INTRACRANIAL HEMORRHAGE ON ANTI-COAGULATION OR ANTI-PLATELET THERAPY.
 - c. LATERALIZING OR FOCAL NEUROLOGIC DEFICIT.
 - d. ANY OPEN, DEPRESSED OR BASILAR SKULL FRACTURE.
 - e. ANY UNSTABLE SPINAL COLUMN FRACTURE.
 - f. SPINAL COLUMN FRACTURE WITH ANY MOTOR OR SENSORY DEFICIT.
 - g. NO SPINAL COLUMN FRACTURE BUT NERVE ROOT INJURY WITH FOCAL MOTOR DEFICIT OR BILATERAL SENSORY DEFICIT.
- (2) SHALL CONSIDER TRANSFERRING THE FOLLOWING:
 - a. ANY PATIENT WITH INTRACRANIAL HEMORRHAGE OR EVIDENCE OF CEREBRAL EDEMA DUE TO TRAUMA. CONSULT A

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NEUROSURGEON AT A HIGHER LEVEL OF CARE FOR CONSIDERATION OF TRANSFER. IF THE PATIENT IS ADMITTED AT THE LEVEL III OR IV, AFTER CONSULTATION, THE TRAUMA SURGEON SHALL ADMIT AND MANAGE THE PATIENT THROUGH THE COURSE OF HIGH ACUITY CARE.

- b. ANY PATIENT WITH A SPINAL COLUMN FRACTURE OTHER THAN A LUMBAR OR THORACIC TRANSVERSE PROCESS FRACTURE. CONSULT A SPINAL SPECIALIST AT A HIGHER LEVEL OF CARE FOR CONSIDERATION OF TRANSFER.

F. ALL LEVEL III TRAUMA CENTERS WITH PART-TIME NEUROSURGICAL/ ORTHOPEDIC SPINE COVERAGE SHALL:

- (1) HAVE A PUBLISHED CALL SCHEDULE.
- (2) COMMUNICATE WITH PRE-HOSPITAL REGARDING AVAILABILITY OF NEUROSURGICAL COVERAGE.
- (3) MEET THE STANDARDS IN 6 CCR 1015-4, CHAPTER THREE 306. E. WHEN THERE IS NO NEUROSURGICAL/ORTHOPEDIC SPINE COVERAGE.

G. ALL LEVEL III TRAUMA CENTERS WITH FULL OR PART-TIME NEUROSURGICAL/ORTHOPEDIC SPINE COVERAGE SHALL TRANSFER ANY PATIENT WITH A GLASGOW COMA SCORE < 9 DUE TO TRAUMA OR ANY SPINAL CORD INJURY EXCEPT THOSE WITH A TRANSIENT OR UNILATERAL SENSORY DEFICIT.

DH. All Level III and IV trauma centers shall transfer patients if the facility does not have the resources and clinical expertise to manage their medical co-morbidities such as:

- (1) Severe chronic obstructive pulmonary disease with home O2 requirement > 4L.
- (2) Pulmonary hypertension.
- (3) Critical aortic stenosis.
- (4) Coronary artery disease and/or recent myocardial infarction within 6 months.
- (5) Renal disease requiring dialysis.
- (6) End stage liver disease with a MELD score >19.
- (7) Unmanageable coagulopathy.
- (8) Body mass index > 40.
- (9) Pregnancy > 20 weeks.

EI. All Level IV trauma centers with part-time specialty coverage:

- (1) Level IV facilities with part-time orthopedic coverage shall not operate on femoral fractures unless there is general surgery availability.

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- (2) Cases shall be reviewed for projected length of stay. If the length of stay is greater than the specialty coverage and general surgery availability, then the patient shall be transferred.