2017-2022

Area Trauma Advisory Board 7

2017-2022

Approved by the Oregon Health Authority & Area Trauma Advisory Board, Region 7 on June 28th, 2017

Area Trauma Plan

AREA TRAUMA PLAN

COMPONENT I: Communications and Dispatch

STANDARD

Statewide Access to medical help via 9-1-1

A. System Access: Residents and visitors in a communications coverage area will access emergency medical services by calling a single number.

   Public Safety Answering Points may be referenced at:
   www.oregon.gov/OMD/OEM/or911/docs/psap_directory.pdf

B. All medical dispatching will use a medical dispatch system, which utilizes pre-arrival medical instruction, and call prioritization based on appropriate level of responding units and based on medical needs.

C. Dispatching of medical calls will be coordinated with fire, and police vehicles. Processing of medical calls will be based upon a medical dispatch system utilizing pre-arrival instructions.

Most dispatch agencies are currently processing medical calls utilizing Central Oregon Medical Emergency Dispatch system (COMED) using pre-arrival instructions.

The majority of response agencies in this region are unable to staff more than one medical response unit at any given time. Those that can staff more than one unit are manning with the highest level of personnel available for the type of call that is dispatched. Multiple calls, when they do occur, are currently being prioritized and dispatched based upon medical need.

ATAB 7 Dispatch Points		Pre-Arrival	Prioritization
COUNTY			
Crook:	Prineville	yes	no
Deschutes:	Bend	yes	yes
Grant:	John Day	yes	no
Harney:	Burns	yes	no
Jefferson:	Condon	yes	no
Klamath:	Klamath Falls	yes	no
Lake:	Lakeview	yes	no
Wheeler:	Condon	yes	no

COMPONENT I: Communications and Dispatch (continued)

STANDARD

All emergency medical services dispatchers will have a list of routinely available police, fire responders, air and ground ambulances, quick response teams, and special responders for extrication, water rescue, hazardous material incidents and protocols for their use.

D. Special Resources: All medical dispatch centers will have access to a listing of special resources, which are needed to assist in the delivery of emergency medical care.

COUNTY

Crook: Search & Rescue (SAR) provided through Crook Co. Sheriff's office. Bureau of Land Management (BLM), US Forest Service (USFS), AirLink, Life Flight 11 (Redmond), Prineville Fire Department,

Deschutes: Deschutes Co. SAR (water and dive rescue, steep angle rescue), Bend Fire Department (heavy extrication, water rescue, rope rescue), AirLink, Life Flight 11, BLM, US Forest Service.

Grant: AirLink, Life Flight 11, Life Flight 77 (Boise), BLM, Grant Co. SAR (water & dive rescue).

Harney: Burns Fire Department Rescue, Harney Co. SAR (aircraft, heavy equipment, divers), AirLink, Lifeflight 11, LifeFlight (Boise).

Jefferson: Jefferson Co. SAR (dive and water rescue), Jefferson Co. EMS District & Jefferson County Fire District #1, AirLink, Life Flight 11, Warm Springs SAR/Fire & Safety.

Klamath: Klamath Co. SAR and Dive Team – Search and Rescue and Dive Rescue; Klamath Falls AirLink – Air Ambulance, Chemult Ambulance – Rescue; Central Cascades Fire and EMS – QRT, Extrication and Rescue; Crescent RFPD – Extrication and Rescue; Klamath/Lake Regional Hazardous Materials Response Team 4 – Hazmat; Chiloquin/Agency Lake RFPD – Rescue and Extrication; Klamath County Fire District 3 – QRT; Rocky Point Fire Rescue – Rescue and Extrication; Keno RFPD – Rescue and Extrication; Klamath County Fire District 4 – Rescue, Extrication and Confined Space Rescue; Klamath County Fire District 1 – Rescue, Extrication and Confined Space Rescue; Kingsley Field Fire Department – Rescue, Extrication and Aircraft Rescue and Fire Fighting; Bonanza RFPD – Rescue and Extrication; Klamath County Fire District 5 – Rescue and Extrication; Merrill Fire Department – Rescue and Extrication; Malin Fire Department – Rescue and Extrication; Bly Fire Department – Rescue and Extrication; AirLink, - Air Ambulance, Mercy Flights Medford – Air Ambulance.

Lake: Lakeview Disaster Unit, Paisley Disaster Unit, Christmas Valley Ambulance, AirLink Air Ambulance, Lakeview Fire Department, Mercy Flights, Klamath Falls SAR/Diving, Lake County Search & Rescue.

Wheeler: AirLink, Life Flight

COMPONENT I: Communications and Dispatch (continued)

STANDARD

Transporting vehicles will have the necessary dedicated radio frequency(ies) that will allow communication with the receiving hospital(s), other EMS providers, and medical control 90% of the time. Due to the many areas in ATAB 7, which create "communication holes" satellite, assisted communication is the ultimate goal.

E. Pre-hospital/Hospital: Transporting vehicles will have either a UHF or VHF radio and/or mobile telephone that will allow communications with the base hospital or their dispatch center. If the information has to be relayed through the dispatching agency, that agency will be responsible to relay patient information to the hospital.

Due to the remoteness of ATAB 7 response areas "communication holes" are a common problem. Satellite communications is the only practical solution to this dilemma. Funding for this is non-existent on a local basis-State, Federal, or private grants will be required to achieve this goal.

All ambulances have the ability to communicate on the HEAR frequency. In addition, a secondary frequency can be utilized for communication to St. Charles Medical Center off of Pine Mountain. (155.400)

COUNTY

Crook: VHF - Ambulance/Hospital - 155.340, secondary - 155.400

Deschutes: VHF - Ambulance/Hospital - 155.340, secondary - 155.400

Grant: VHF - Ambulance/Hospital/Dispatch - 155.340

Harney: VHF – Ambulance 155.220/Fire & Dispatch 154.130
Hospital/Ambulance/Mutual Aid - 155.340

Jefferson: VHF - Ambulance/Hospital - 155.340
Ambulance/Dispatch - 155.940
Fire - 155.250

Klamath: VHF - Ambulance/Hospital - 155.340

Lake: VHF - Ambulance/Hospital - 155.340

Wheeler: VHF - Ambulance/Hospital - 155.340

COMPONENT I: Communications and Dispatch (continued)

STANDARD

All hospitals will have the ability to communicate by landline, computer link, or radio transmission.

F. Inter-hospital Communications: All hospitals will have the ability to communicate by landline via telephone.

Due to the topography and current technology hospitals in ATAB 7 cannot uniformly communicate by radio transmission. Hospitals on the Highway 97 corridor and Pioneer Memorial Hospital in Prineville can communicate by radio transmission.

Therefore, landline communications for hospitals, via telephone, High-Frequency and/or HAM radios will be the standard method of communication in ATAB 7.

The radio frequency utilized is the HEAR frequency - 155.340MHZ.

COMPONENT I: Communications and Dispatch (continued)

STANDARD

All emergency dispatchers will be trained to the Emergency Medical Dispatcher level or equivalent.

G. Training: The majority of dispatch centers in ATAB 7 are currently using Central Oregon Emergency Medical Dispatch (COMED) system. This is a standardized form of EMD and includes pre-arrival instructions for dispatchers to utilize.

ATAB 7 recommends CPR and EMD training be renewed on an annual basis.

DISCUSSION

Pre-arrival instructions shall be reviewed annually for adherence to current State standards.

COUNTY

Crook: Dispatch center is located in Prineville and is currently utilizing the COMED system.

Deschutes: Dispatch center is located in Bend and is currently utilizing the NAED system.

Grant: Dispatch center is located in John Day and is currently utilizing the EMD system.

Harney: Dispatch center is located in Burns and is currently utilizing the COMED system.

Jefferson: Dispatch center is located in Condon and is currently utilizing the COMED system.

Klamath: Dispatch center is located in Klamath Falls and is currently utilizing EMD.

Lake: Dispatch center is located in Lakeview and has an EMD system available to dispatchers.

Wheeler: Dispatch center is located in Condon and is currently utilizing the COMED system.

AREA TRAUMA PLAN

COMPONENT II: Responders

All ATAB 7 counties will have an approved Ambulance Service Area plan.

STANDARD

A. Ambulance Service Areas: All ATAB 7 counties have achieved an ambulance service area plan specified by the Oregon Health Authority (OHA). The plan will recognize the trauma system and integrate trauma system components.

Resource: ASA Plans I-VIII

STANDARD

Responsibility for directing the care of the trauma system patient in the pre-hospital setting, in the case of response by multiple providers, shall be assigned to the most qualified Emergency Medical Service Provider who has PHTLS or BTLS training.

B. Field Command: All organizations, which provide pre-hospital care, recognize the principle that the person in charge of patient care at a trauma scene is the most qualified. The National Incident Management System (NIMS) Incident Command System (ICS) model should be followed.

ATAB 7 recognizes this premise as mandatory in order to provide the highest level of care for the trauma patient.

ATAB 7 is NIMS compliant and will maintain scene control using ICS, and patient care using the highest appropriately trained personnel on-scene. In every case all trauma patients will be treated by qualified Emergency Medical Service Providers. However, there may be some locations where not every trauma patient will be treated by a provider who has PHTLS or BTLS.

STANDARD

ASA's in ATAB 7 will have a uniform protocol for medical control activation and utilization of air ambulance services.

C. Utilization of Air Ambulance: Each ASA shall have a written protocol for activation and utilization of air ambulance services described in EMS protocols or Agency Policies/Procedures.

Reference: ECEMS protocols - C1, Klamath, Blue Mtn Hospital Ambulance, Grant, Harney & Lake County Standing Orders, Administrative Rules and Operations Protocols

AREA TRAUMA PLAN

STANDARD

There will be an area wide pre-hospital care report form, which will be utilized for all trauma patients.

D. Pre-hospital Care Report Form: Pre-hospital care agencies in ATAB 7 will use an accepted form as advocated by the OHA or equivalent.

Resource: See PHCRF I & II.

STANDARD

Patients meeting the criteria for trauma system entry shall have a single identification number for tracking patient progress.

E. TRAUMA BANDING

A trauma band, as provided by the OHA, shall be placed on any patient whose injuries require trauma system entry OHA Exhibit 2. The band should be placed on the patient's wrist or ankle as soon as possible. In the event the patient already has a band on, no additional band shall be placed on the patient. Banding may be omitted in the pre-hospital phase of large multiple patient incidents.

ATAB 7

AREA TRAUMA PLAN

(Included in Component III as page C-1 of Pre-hospital care protocols - ECEMS Council and Klamath, Grant, Harney & Lake County Standing Orders, Administrative Rules and Operations Protocols).

In general, an ALS helicopter may be utilized when the net savings in scene + transport time to the hospital for the seriously ill or injured patient may be shortened by 10-15 minutes, or greater. The pre-hospital provider must keep in mind the ready/travel time for the helicopter to the scene, the loading time at the scene, and possibility for a shortened rendezvous site for lengthy flights or to high quality landing zones. When the need is unclear, EMS Providers shall consider discussing the flight with medical control before or after the aircraft is activated. Exceptions to this standard include:

For patients in cardiac arrest who are over 5 minutes from the hospital, the cabin restrictions of an ALS helicopter may limit the use of the helicopter for ALS transport. Exceptions include small children and the hypothermia victim.

In the absence of auto-launch criteria, Klamath & Grant County Protocols indicate that:

- Aeromedical evacuation should be used when available and when it will decrease total patient transport time by 20 minutes or more.
- The decision to use the aeromedical resource for transport rests with the ground EMS personnel. This decision may be made in conjunction with aeromedical personnel if necessary.
- Only the highest medically trained EMS person on scene can cancel the helicopter and must document the reason on the patient care report.
- Any person on scene working for a government sponsored agency can place the helicopter on standby or launch the helicopter. (Police, Fire, EMS, Forest Service, etc.) It is preferred that non-medical personnel place the helicopter on standby only first. If no EMS medical personnel arrive within ten minutes to perform a medical assessment and in their best judgment an air ambulance is needed, then the helicopter may be launched.
- If any discrepancy or confusion exists on whether to launch/ use aeromedical transport, call medical control.

A seriously ill trauma patient is defined as a patient who meets one or more Exhibit 2 Criteria (Box 1 and/or 2 only). Situations in which helicopter use should be considered include, but are not limited to:

1. Profound respiratory distress from upper airway injury, lung trauma, or pulmonary edema.

2. Exsanguinating hemorrhage and/or signs of shock: severe chest or abdomen injury, extremity amputation, or scalping.

3. Deep coma and/or, Glasgow Coma Scale score of 8 or less.

4. Compromised spinal cord function, i.e., paralysis and where extremes in road quality are judged to be an additional hazard to spinal immobilization.

5. Extensive burns.

6. Mechanism of injury such as penetration of neck or torso, falls from heights over 20 feet, prolonged extrication (more than 20 minutes), death of passenger, ejection from vehicle, and pedestrians struck and thrown by vehicle impact.

AREA TRAUMA PLAN

COMPONENT III: Medical Control and Treatment

STANDARD

Emergency medical service providers are consistently performing at their highest skill level under physician direction.

OFF-LINE MEDICAL CONTROL:

Off-line medical control is considered to include all the patient management protocols, peer review, educational programs, quality assurance auditing, and individual criticism, advice and counseling. The primary authority for off-line medical control will rest with each ambulance service's Medical Director. This person will also function as the State Certified Medical Director/ Physician Advisor to the local EMS providers. These Directors may use the Pre-hospital Care Protocols developed by the East Cascade Emergency Medical Services council, Klamath, Grant, Harney and Lake Counties, and reviewed by the Area 7 Trauma Advisory Board as minimum standards for off-line medical control. The off-line medical control protocols are subject to annual review by their respective advisory committees, and these may be modified to reflect local variations.

TRIAGE CRITERIA:

ATAB 7 will utilize the trauma system referenced in OAR 333-200-0080 (4) Exhibit 2 triage criteria. These are further described in Component IV, Triage and Transport, and in the Pre-hospital Care Protocols.

PREHOSPITAL CARE PROTOCOLS:

The pre-hospital care protocols developed and approved by ECEMS, Klamath, Grant, Harney or Lake County shall serve as both on-line and off-line protocols.

Adherence to these protocols will be addressed in the Quality Control and Quality Assurance Standards of this document as outlined in Component VIII. Specifically, the ATAB 7 Quality Assurance Subcommittee will assure consistent area-wide coordination, data collection and area-wide quality assurance responsibility with regard to medical control policies and procedures.

AREA TRAUMA PLAN

COMPONENT III: Medical Control and Treatment (continued)

STANDARD

A qualified physician will provide 24 hour on-line medical control in each communications coverage area at any given time.

1. On-line medical control: On-line medical control for ATAB 7 will be exercised by both St. Charles Medical Center Redmond and St. Charles Medical Center Bend for the ambulance services that routinely transport to these hospitals. These two base stations share only a small common communications area in that there is no substantial overlap in coverage areas. ATAB 7 has decided that these two base stations should continue to provide medical control for their transporting pre-hospital agencies.

2. Because of the vastness of Area 7 and recognizing that tremendous communication difficulties exist in this geographic area, individual ambulances may contact local medical facilities and communicate with qualified medical personnel for necessary medical advice on dealing with specific patient problems.

3. Off-line medical control: In areas where no communication is possible, off-line protocols shall be followed until communications with the nearest hospital or base station can be established.

4. If a qualified physician is present with the patient and assumes care of the patient, he/she assumes the position of medical control and will travel with the transporting ambulance to the receiving facility. The transport shall be to the categorized facility so identified by the physician. The great distances between categorized facilities within ATAB 7 will sometimes warrant consideration of initial resuscitation of acutely injured patients in such facilities as Indian Health Services Clinic (Warm Springs), Strawberry Wilderness Community Clinic-John Day & Monument and Lake County Public Health Office (Christmas Valley).

5. For ground transportation for all patients being transferred from another medical care facility, on-line medical control shall be by the transferring facility as long as radio or mobile phone contact is possible.

6. Medical control is transferred to the receiving facility when communications with the transferring facility are lost or when medical control is specifically relinquished by the transferring facility and accepted by the receiving facility.

7. For air medical transports, medical control is provided by the receiving facility, in that radio communication from the air is far more reliable than from the ground.

8. In all cases where it is necessary to provide Advanced Life Support, standard protocols will be followed as the mode of medical control.

9. In all situations in which the patient's condition is judged to be serious, and especially when there are multiple critically ill or injured patients, early notification of the receiving hospital is paramount. In critical trauma and medical patients, however, efforts to establish medical control communication should not inappropriately delay the expeditious evaluation and transport of these patients.

AREA TRAUMA PLAN

COMPONENT III: Medical Control and Treatment (continued)

STANDARD

In the event of two or more categorized or designated facilities in a hospital catchment area, there is a system in place to continuously reflect current status of trauma care capabilities.

HOSPITAL STATUS:

ATAB 7 has two Level III hospitals (St. Charles Medical Center- Redmond, and Sky Lakes medical Center- Klamath Falls) and one Level II facility (St. Charles Medical Center- Bend).

In order to serve as a supportive partner in the trauma network, the physician-on-duty in the Emergency Department of each respective hospital shall be aware of the internal readiness of his/her facility. In the event that one facility is unable to render trauma care, it is the responsibility of the physician on duty at that facility to notify the physician on duty at the other facility of that status. Thus, in the event of potential or real transfers, the state of readiness of the receiving facility will be either known or can be assumed by Medical Control.

Oregon's hospital capacity web system (HOSCAP) allows health care and emergency preparedness partners to share real time status data, which includes the following:

For SCMC-B, the availability of:

1. CT Scanner
2. Helicopter Transport
3. OR Room and Personnel
4. ICU Beds

For SCMC-R, the availability of:

1. CT Scanner
2. OR Room and Personnel
3. ICU Beds

For Sky Lakes Medical Center-Klamath Falls, the availability of:

1. CT Scanner
2. OR Room and Personnel
3. ICU Beds
4. Helicopter Transport

AREA TRAUMA PLAN

COMPONENT III: Medical Control and Treatment cont'd

STANDARD

All medical control physicians are familiar with pre-hospital equipment and operations, experienced in pre-hospital emergency care and actively involved with trauma patient management, emergency pre-hospital care training, physician's trauma training and medical audit.

QUALIFICATIONS OF MEDICAL CONTROL:

1. On-line medical control physicians shall be current in ATLS and ACLS training or their equivalent as directed by their respective hospital by-laws and be familiar with the pre-hospital care protocols and the capabilities of local EMS personnel. The transmission of information regarding patient's condition, treatment and progress will remain confidential to the greatest extent possible. All requests by EMS rescue personnel for medical guidance will be accommodated promptly and with an attitude of participation, responsibility and cooperation.

2. The on-line physician will issue treatment instructions based on an objective analysis of the patient's needs and the hospital's capabilities and proximity to the scene. When a base station hospital is acting as an agent for another hospital, information regarding the patient shall be given to the receiving hospital in an accurate and timely manner.

AREA TRAUMA PLAN

COMPONENT IV: Triage, Activation, Transport, and Tagging

STANDARD

Patients who are at a particularly high risk of dying from multiple and/or severe injuries will be quickly identified for trauma team activation with a minimum of over-triage and no under-triage.

A. TRIAGE

1. Victims of trauma shall be evaluated at the scene as soon as possible to assess whether they meet the triage criteria for trauma system entry activation.

   Hospitals Only: Criteria for Full and Modified trauma team activation are set forth in OAR 333-200-0080 (4), (5) (b). The most current version is found on-line through the Oregon Health Authority website @ http://public.health.oregon.gov/ProviderPartnerResources/EMSTraumaSystems/TraumaSystems/Pages/rules.aspx. Full or Modified trauma team activation is the determination and responsibility of the receiving hospital.

STANDARD

Patients meeting the criteria for trauma team activation shall have the team activated as soon as possible.

B. TRAUMA TEAM ACTIVATION

1. PREHOSPITAL - as soon as a patient is triaged and it is determined they meet criteria for trauma system entry, the receiving hospital will be contacted by EMS ground and/or flight crews as early as possible with notification of a trauma system entry. The hospital shall be provided with the criteria for activation (as set in OAR 333-200-0090, Exhibit 2). For example, "St. Charles Medical Center, Bend from ambulance 371: we are requesting a trauma team activation for a patient with a GCS of 8". Updates on changes in patient condition are strongly encouraged.

2. HOSPITAL - a Full or Modified trauma team response (as described in OAR 333-200-0900, exhibit 3) shall be initiated as soon as it is determined that the patient meets criteria for Full or Modified trauma team activation, as listed in that exhibit.

COMPONENT IV: Triage, Activation, Transport, and Tagging (continued)

STANDARD

Patients meeting the criteria for trauma system entry shall be transported to the appropriate trauma system hospital.

C. TRANSPORT

1. DESTINATION: Those patients meeting the criteria for trauma system entry in OAR 333-200-0090 Exhibit 2 boxes one (1) and two (2) will be transported to the nearest Level I or II trauma system hospital unless otherwise advised by on-line medical control or under the following circumstances:

(a) If unable to establish and maintain an adequate airway, the patient shall be taken to the nearest hospital to obtain definitive airway control. Upon establishing and maintaining airway control, the patient shall be immediately transferred to a Level I or Level II trauma hospital;

(b) If the scene time plus transport time to a Level I or Level II trauma hospital is significantly greater than the scene time plus transport time to a closer Level III or Level IV trauma hospital; An air ambulance may be considered when it is thought to have the potential to reduce total pre-hospital (scene and transport) time of a trauma system patient by 10 – 15 minutes or greater. The EMT acknowledges that trauma system patients can benefit from safe and rapid transport. The time of the air ambulance to respond to the scene should also be considered.

(c) If the hospital is unable to meet hospital resource standards as defined in Exhibit 4, when there are multiple patients involved, or the patient needs specialty care;

(d) If on-line medical control overrides these standards for patients with special circumstances, such as membership in a health maintenance organization, and if the patient's condition permits; and

(e) Those patients meeting the criteria for trauma system entry in Exhibit 2 boxes 3-4 shall be transported to the most appropriate receiving facility; and

(f) Application of subsections (b), (c), and (d) of this section must not delay definitive medical or surgical treatment.

COMPONENT V: Hospital Resources

STANDARD

Trauma patients will be treated in hospitals which have been identified and evaluated as being committed to optimal trauma care.

A. Trauma System Hospital Identification: On April 6, 1988, ATAB 7 voted to use categorization as the method of identifying trauma system hospitals as described under OAR 333-200-0090 (1) through (3).

STANDARD

All trauma hospitals will achieve the highest possible level of resource commitment to trauma care.

B. Resource Criteria: On April 6, 1988, ATAB 7 voted to accept the standards for Hospital Resources as set forth in Exhibit IV of OAR 333-200-0090 (1) through (3) as appropriate for trauma system hospitals in Area 7.

COMPONENT VI: Inter-hospital Transfer

STANDARD

Patients who are at a particularly high risk of dying from multiple and/or severe injuries should be treated in a Level I or Level II trauma hospital where care of such problems by a multi-disciplinary team may afford a patient an optimum outcome.

All hospitals must have protocols and transfer agreements for the identification and transfer of multi-trauma and special care patients.

1. On April 6, 1988, ATAB 7 voted to accept the Inter-hospital criteria as set forth in OAR 333-200-0080 1 (6) (a) Exhibit 5.

2. A protocol for transfer has been standardized for all Area 7 hospitals.

3. Transfer agreements are not binding and do not restrict the choice of the transferring physician to select the appropriate hospital to transfer to.

4. Each facility's quality improvement process shall monitor all cases meeting inter-hospital transfer criteria.

5. Area 7 Management Quality Improvement Committee shall have a QI process to review inter-hospital transfers.

6. HMO:

    a. Trauma system hospitals shall facilitate the transfer of a member of a health maintenance organization or other managed health care organization when the emergency medical condition of the member permits and no deterioration of that condition is likely to result from or occur during the transfer of the patient. Trauma system hospitals shall transfer a patient in accordance with the provisions of ORS 431.611 (2) (a) and (b) and any other applicable laws or regulations.

    b. A patient will be deemed stabilized, if the treating physician attending to the patient in the trauma hospital has determined, within reasonable clinical confidence, that the emergency medical condition has been resolved.

    c. Hospitals or health maintenance organizations may not attempt to influence patients and families, prior to the patient's stabilization, into making decisions affecting their trauma treatment by informing them of financial obligations if they remain in the trauma facility.

COMPONENT VI: Inter-hospital Transfer (continued)

TRANSFER CRITERIA

The following patients should be considered for transfer to a Level I or Level II trauma hospital OAR 333-200-0080 (6)(a) Exhibit 5:

Head & Central Nervous System

a. Penetrating injuries or open fracture of the skull
b. GCS<14 or lateralizing neurologic signs (if no neurosurgical consultation is available)
c. Spinal fracture or spinal cord deficit
d. Carotid or vertebral artery injury

Chest

a. More than two unilateral rib fractures or bilateral rib fractures with pulmonary contusion (if no critical care consultation is available)
b. Torn thoracic aorta or great vessel
c. Cardiac injury or rupture
d. Bilateral pulmonary contusion with PaO_2:FlO_2 ratio less than 200 (requires protracted ventilation)

Pelvis & Abdomen

a. Major abdominal vascular injury
b. Grade IV or V liver injuries requiring transfusion
c. Unstable pelvic fracture requiring transfusion
d. Complex pelvis/acetabulum fractures
e. Open pelvic injury

Multiple System Injury

a. Significant head injury combined with significant face, chest, abdominal or pelvic injury
b. Significant torso injury with advanced comorbid disease (such as coronary artery disease, chronic obstructive pulmonary disease, diabetes, type 1, mellitus, or immunosuppression)
c. Burns with associated injuries
d. Fracture or dislocation with loss of distal pulses

Secondary Deterioration of Trauma Patient (Life Sequelae)

a. Patients requiring long term ventilation
b. Sepsis
c. Single or multiple organ system failure (deterioration in CNS, cardiac, pulmonary, hepatic, renal or coagulation system)
d. Major tissue necrosis

Exhibit 2

COMPONENT VI: Inter-hospital Transfer (continued)

POLICY AND PROCEDURES FOR TRANSFER TO ANOTHER FACILITY

PURPOSE

To provide communication and documentation that will allow informed transfer of care.

POLICY

1. Prior to transfer, the patient will be resuscitated and/or condition stabilized to a level deemed appropriate by transporting physician, which may include operative intervention. (do not waste time).

2. Transfer shall not be delayed for diagnostic procedures which have no impact on the transfer process or the immediate need for resuscitation.

3. The referring physician wishing to transfer a patient will be in direct communication with the receiving physician, utilizing the Transfer Center. This should not be left to the nurse or other professionals to arrange.

4. The receiving and referring physicians are responsible for arrangement and details of the transfer, including the transportation. If local ambulances are used to move the patient, the referring physician will be involved with the details of the transfer to ensure optimal care of the patient.

5. The transferring physician will give instructions to the personnel transferring the patient.

6. Trauma system hospitals will facilitate transfer of the member of a health maintenance organization or other managed health care organization when the medical condition of the member permits.

7. The decision to retain or transfer the patient shall be based on medical knowledge, experience, and resources available to the patient. Patients will not be transferred or refused transfer based on ability to pay.

PROCEDURE

1. The referring physician will call the receiving physician, via the Transfer Center, and make arrangements for the transfer, including mode of transportation.

2. The referring physician will notify staff of the mode of transfer and necessary personnel and equipment.

3. The transferring physician will give patient care and treatment instructions to the transporting personnel.

COMPONENT VI: Inter-hospital Transfer (continued)

4. Pertinent transfer information should be completed and a copy sent with the patient. Those should include:
   a. A copy of the emergency department or hospital record (with patient name, address, hospital number, age, and the name, address and phone number of the next of kin) and nurse flow records.
   b. Trauma Flowsheet
   c. A copy of the completed pre-hospital care record.
   d. Copies of the lab reports and EKG.
   e. A copy of the progress report by the transferring physician.
   f. Inter-hospital transfer form.

COMPONENT VII: Rehabilitation

Returning the trauma patient as a functioning member of society should be achieved by providing early access to appropriate rehabilitation medicine expertise.

Resources: Capabilities for trauma rehabilitation in each trauma system area and transfer procedures to other rehabilitation facilities must be described. Rehabilitation resources for burns, pediatrics, neuro-trauma, extended care and re-implantation must be included.

Describe specialized rehabilitation capabilities within the trauma system area. Describe any out-of-area transfer procedures for the following rehabilitation specialties: neuro-trauma, pediatrics, burns, pain, extended care, routine home health rehabilitation, re-implantation.

CURRENT ATAB REHABILITATION CAPABILITIES

Hospitals	PT	OT	Speech	Long Term	Sp. Cord	Brain Inj.
Blue Mountain Hospital	Yes	Yes	Yes	Yes	No	No
SCMC- Bend	Yes	Yes	Yes	Yes	Yes	Yes
Harney County Hospital	Yes	No	No	No	No	No
Lake District Hospital	Yes	No	No	Yes	No	No
SCMC-Madras	Yes	Con	Con	Yes	No	No
Pioneer Memorial Hospital	Yes	No	Con	No	No	No
SCMC-Redmond	Yes	Yes	Yes	No	Yes	Yes
Sky Lakes Medical Center	Yes	Yes	Yes	No	No	No

"Con" refers to service provided on a contract basis.

HOME HEALTH SERVICES

COUNTIES:	PT	OT	Speech
Deschutes			
Cascade Home Care	Yes	Yes	Yes
Crook			
Pioneer Memorial Home Health	Yes	Yes	Yes
Cascade Home Care	Yes	Yes	Yes
Jefferson			
Mountain View Home Health	Yes	Con	Con
Grant			
Blue Mountain Home Health	Yes	Yes	Yes
Harney			
Harney County Home Health	Yes	No	Yes
Wheeler			
Limited services available via physician's assistant Asher Clinic.			
Klamath			
Sky Lakes Home Health	Yes	Yes	Yes
Lake			
Lake District Hospital Home Health Services (area goes to Picture Rock Pass)	Yes	No	No

EXTENDED CARE FACILITIES

FACILITIES WITH REHAB CAPABILITES:	PT	OT	Speech
Central Oregon Health Care Center - Bend	Yes	Yes	Yes
Bend Transitional Care	Yes	Yes	Yes
Cascade View – Bend	Yes	Yes	Yes
Harmony House – Bend	Yes	Yes	Yes
Ochoco Care Center – Prineville	Yes	Yes	Yes
Redmond Health Care Center – Redmond	Yes	Yes	Yes
SCMC-Madras	Yes	Con	Con
Blue Mountain Care Center	Yes	Con	Con
Lake District Hospital and Long Term care Yes	Yes	Yes	No
Marquis Care at Plum Ridge - Klamath County	Yes	Yes	Yes

None in Silver Lake, Summer Lake, Christmas Valley, Fort Rock or Stauffer.

TRANSFER PROCEDURES FOR REHABILITATION SERVICES

Neuro-trauma

St. Charles Rehabilitation Center

Pediatrics

St. Charles Rehabilitation Center

Burns

Transfer agreements with the Burn Center in Portland. Burn patients are transferred to Emanuel Hospital in Portland. Arrangements are made on an individual basis.

Extended Care

No formal transfer agreements exist for transfer of patients to extended care outside of ATAB 7. Arrangements for such transfers are made on an individual basis.

Routine Home Health Rehabilitation

No formal transfer agreements exist for transfer of patients to home health care outside of ATAB 7. Such arrangements are made on an individual basis.

Re-implantation

St. Charles Medical Center- Bend is the only facility in ATAB 7 with the capability to perform re-implantation surgery. No formal agreements exist for the transfer of such patients outside of ATAB 7. Such arrangements are made on an individual basis to transfer to a specialty hospital.

COMPONENT VIII: Quality Improvement

STANDARD

The performance of the components of the trauma system will be evaluated on an on-going basis to assure that standards are met and the highest possible quality of care is delivered.

Monitoring and Evaluation: ATAB 7 will meet on a quarterly basis in an executive session to evaluate all pre-hospital and hospital review sheets presented to the committee. The summary of cases reviewed will include, but shall not be limited to:

- All trauma deaths
- Personal or agency requests for review
- Any trending that shows problem areas or issues

In addition to the above, any concern registered by a patient, member of the public, or a provider will be reviewed by this group.

1. ATAB 7 Management Quality Improvement Committee

2. Pre-hospital Review - Each EMS completes a pre-hospital care report for each patient encounter. Those reports will be reviewed by the Medical Director of each agency with special attention given to the below listed categories:

   a) Needle or Surgical airway
   b) Needle Thoracostomy
   c) Peds < 8 yrs
   d) Trauma Code
   e) Trauma transported by air

3. Hospital Review: Each area trauma hospital in ATAB 7 will develop and implement its own process for ongoing quality improvement. In addition to the QI issues noted above, those which have a regional impact on trauma care, or would otherwise benefit the ATAB though discussion will be referred to the ATAB 7 Management Quality Improvement Committee. As issues or changes indicate, quality indicators will be added or deleted by consensus of ATAB 7 Management Quality Improvement Committee. Each hospital will report to the ATAB 7 Management Quality Improvement Committee quarterly.

4. Pre-hospital Review: Each EMS in ATAB 7 will develop and implement its own process for ongoing quality improvement. In addition to the QI issues noted above, those which have a regional impact on trauma care, or would otherwise benefit the ATAB though discussion will be referred to the ATAB 7 Management Quality Improvement Committee. As issues or changes indicate, quality indicators will be added or deleted by consensus of ATAB 7 Management Quality Improvement Committee. Each pre-hospital agency will report to the ATAB 7 Management Quality Improvement Committee quarterly.

COMPONENT VIII: Quality Improvement (continued)

5. Finalization of Case Review

At the conclusion of the case review, the committee will arrive at these conclusions:

a. No further action
b. Need more information at subsequent meeting.
c. Request follow-up report from presenting institution.
d. Make a recommendation to the presenting institution.
e. Suggest specific education.
f. Suggest referral to the Oregon Health Authority, State Trauma Advisory Board (STAB).
g. Morbidity/mortality: preventable and potentially preventable (system, behavior, knowledge, or process) or not preventable.

6. A quarterly report shall be submitted to OHA by the ATAB or its representatives on confidential forms.

AREA TRAUMA PLAN
ATAB 7

Area Trauma Advisory Board 7
Case Review Form

- REFER TO TMC REVIEW FORM

Summary of case:

- Review of case

Summary of issues:

Committee Findings/Discussion:

Variance:

Action:

- ☐ No action necessary/case closed
- ☐ Committee discussion of related topic; topic of_____
- ☐ Refer to STAB QA
- ☐ Letter
  - Response requested from:_____
  - Information letter to: _____
  - Focus of letter: _____
  - Other: _____

Please return at the next ATAB review

CONFIDENTIAL: In Accordance with ORS 41.675 relating to Quality Assurance, Utilization Review, Teaching and Supervision of Medical Staff Physicians.

For office use only: Case identifier _____ ATAB 2016/Case Review Form.doc

Oregon Health Authority Statement of Compliance with Confidentiality Requirements for

AREA TRAUMA ADVISORY BOARD 7

PURPOSE

This document assures that Area Trauma Advisory Board 7 Management Quality Improvement Committee members understand their responsibility to maintain the confidentiality of the committee's proceedings.

RELEVANT LAWS

Oregon Law requires that patients' records be kept confidential (ORS 192.525). It also allows all trauma system monitoring activity to be kept confidential (ORS 431.627 & 41.675).

Disclosure by a committee member of any trauma system quality assurance committee discussion of the care provided to patients is a violation of Oregon law and exposes that committee member to liability and prosecution.

PROCEDURES

The Health Authority has provided the Chair and staff of the committee with guidance concerning procedures for conducting committee meetings. Anyone who attends a quality improvement committee meeting must abide by the following:

> No information may leave the room except as assigned by the Chair and staff. All written material related to the review must be returned to the staff member to store or destroy. Members may discuss the matters and decisions of the meetings only as official business of the committee.

STATEMENT

The undersigned has read and understands the above and agrees to comply with requirements to maintain confidentiality of quality assurance and activities.

_____

Signature Date

COMPONENT IXa: Education and Research

STANDARD

Trauma system hospitals shall provide or assist in the provision of pre-hospital trauma management courses to all Emergency Medical Service Providers involved in the pre-hospital emergency medical care of severely injured patients.

COMPONENT IXb: Education and Research

STANDARD

Not applicable

COMPONENT X: Prevention

STANDARD

ATAB 7 recognizes that trauma prevention and reduction of injuries can only be accomplished through the education of the public and State legislation.

a. Public Education: Each area trauma hospital and EMS agency is working on public education and awareness and will work with ATAB 7 or subcommittee to improve and increase public understanding of the trauma system and trauma prevention. These activities shall be appropriate to the size and resources of the area.

b. Development and Evaluation: the subcommittee on Education and Prevention will coordinate trauma prevention activities.

COMPONENT XI: Disaster Management (THIS SECTION IS UNDER REVISION)

STANDARD

All ATAB 7 Emergency Medical Service Providers will use the National Incident Management System (NIMS) Incident Command System (ICS) for response and operations at Mass Casualty Incidents (MCI).

ASA's in ATAB 7 will have standard protocols for operations at MCI incidents (50 or less patients)[1].

All ATAB 7 first responders, pre-hospital care providers and trauma facilities shall have a standard method of categorizing and identifying trauma patients in MCI incidents[1].

Each trauma facility in ATAB 7 will have the capability to determine the ability of area trauma and non-trauma facilities to receive each category of trauma patient and relay that information to the MCI scene within 10 minutes or less.

STANDARD

Each ASA and trauma facility shall have a MCI drill annually, using other ASA and trauma facility resources. Ideally, this would include tabletop through full scale events.

Each county will have a comprehensive major disaster plan that fully integrates all components into an area-wide emergency service system. There must be contingency plans to include other area's resources as well.

COMPONENT XI: Disaster Management (continued)

STANDARD

A. Trauma facilities in ATAB 7 will have the capability to determine the ability of area trauma and non-trauma facilities to receive each category of trauma patient and relay the information to MCI scenes within 10 minutes or less.

DISCUSSION

It is critical, for proper patient care, to not only transport the right patient to the right facility in trauma incidents, but to transport the patient to a facility that has the staff and resources immediately available to provide care. The officer in charge of transportation of patients from the MCI scene must have current knowledge of the receiving capabilities of area trauma and non-trauma facilities in order to avoid flooding those facilities with more patients than they can adequately treat. This is especially important if other nearby facilities are available with adequate staffing and resources.

Agencies using the ECEMS pre-hospital protocols use St. Charles Health System Transfer Center as the single point of contact for hospital capabilities and capacity during MCI events. The Transfer Center uses the Oregon Health Authority resource EMResource (HOSCAP) to track and communicate hospital capability during MCI events.

ASAs not using ECEMS protocols should identify a consistent process to determine hospital capability during MCI events

Each county will have a comprehensive major disaster plan that fully integrates all components into an area-wide emergency service system. There must be contingency plans to include other area's resources as well.

STANDARD

A. Integration: All counties in the trauma system area shall have a medical component in their disaster plan, which shall include any non-system hospitals and appropriate mutual aid agreements.

B. Review: There shall be a mechanism in place for ongoing review of the medical component of the county disaster plan. Major Disaster planning is, by law, the realm of county government. The medical management of the plans is the responsibility of the County Health Officer. The plans for medical management rely heavily upon the existing area hospital disaster plans.

1. Resource: ATAB 7/ECEMS MCI General Guidelines http://www.centraloregonfireservices.org/?zone=/unionactive/view_article.cfm&HomeID=446119&page=ECEMS, and Klamath County EMS MCI Plan http://www.kcfd1.com/docs/standingorders.pdf Section E.