

**AMERICAN COLLEGE OF SURGEONS COMMITTEE ON TRAUMA  
Trauma Systems Evaluation and Planning Committee**

**EMS and Trauma System Consultation  
RECOMMENDATIONS**

7.15.2019

**State of Washington**

# EMS and TRAUMA SYSTEM ASSESSMENT

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## Injury Epidemiology

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Recommendations:

- Perform a formal data-based gap analysis of the Washington State Trauma System.
- Develop and disseminate a standard Trauma System Report for the lead agency and regional system stakeholders to drive Emergency Care System Strategic Plan advancement.
- Develop an internal policy and procedure for data requests and release of information.
- Integrate data from the entire continuum of trauma care including medical examiner, prehospital, rehabilitation, and post-discharge status.
- Design a standard process to identify trauma system performance improvement issues.
- Expand the focus of injury epidemiology to highlight injury outcomes in context of the trauma system.
- Produce a trauma system “fact sheet” to inform legislators and the public about the critical value of their trauma system.
- Develop and implement strategies to augment data analytic capability to improve responsiveness to stakeholder requests.

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## Indicators as a Tool for System Assessment

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Recommendations:

- Develop trauma system indicators with benchmarks that are tied to strategic plan goals.
- Establish a statewide collaborative effort to share risk-adjusted outcomes data and best practices.

# EMS and TRAUMA SYSTEM POLICY DEVELOPMENT

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## Statutory Authority and Administrative Rules

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Recommendations:

- Update statutes to include additional time critical services that have been added to the EMS, Trauma, Cardiac and Stroke Care System.
  - Review and repeal outdated statutes.
  - Establish an objective and standardized statewide process to revise the Minimum and Maximum criteria for all trauma designation levels.
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## System Leadership

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Recommendations:

- Foster implementation of trauma system benchmarking per national standards.
  - Promulgate the shared vision and mission to guide the evolution of the Washington State trauma system.
  - Augment the Washington State Department of Health staff with both a dedicated EMS Medical Director and a Trauma Medical Director to provide system oversight and advance the vision and mission of the trauma system.
  - Develop and disseminate a comprehensive Washington State Trauma System Plan with broad stakeholder engagement to guide the evolution of the state and regional trauma systems.
  - Support the functional development of all EMS and Trauma Regional Councils with broad stakeholder engagement.
  - Promote the value of the Washington State trauma system to the general public and the legislature.
  - Consider rebalancing the representation on the Steering Committee to appropriately reflect the constituency of trauma system stakeholders.
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## Coalition Building and Community Support

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Recommendations:

- Realign the composition of the eight EMS and Trauma Regional Councils with that of the State EMS and Trauma Care Steering Committee to ensure adequate representation of all stakeholders in regional systems planning and oversight.
- Increase engagement with strategic partners inside the Department of Health.

- Partner with Prevention and Community Health to combine efforts to enhance prevention and trauma reduction activities.
- Partner with Emergency Preparedness and Response to combine efforts to enhance disaster planning and response activities.
- Develop strategic partnerships with community programs such as MADD, the Injury and Violence Prevention Network, AARP, church groups, and Safe Kids to promote community awareness and partnership for injury reduction programs.
- Ensure all stakeholders have sufficient representation on the EMS and Trauma Care Steering Committee.
- Ensure that the EMS and Trauma Regional Councils network with local health districts and community groups for injury prevention efforts.
- Ensure that EMS and Trauma Regional Councils network with trauma centers in their regions.
- Provide sufficient resources to regional offices to allow for coalition building and community engagement.

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## **Lead Agency and Human Resources within the Lead Agency**

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### Recommendations:

- Establish a contracted Medical Director position, dedicated to trauma within the lead agency. This should be a trauma surgeon with responsibilities to provide greater support to trauma system development.
- Establish a contracted Medical Director position for the EMS, Trauma, Cardiac and Stroke Care System within the lead agency. This should be an emergency physician with responsibilities to provide consistent statewide support to the local EMS Medical Directors.
- Hire 1.0 FTE State Trauma System PI Coordinator to support state and regional PI activities.
- Ensure system-wide accountability and consistency in the enforcement of the EMS and trauma statutes and rules.
- Review and update agency job descriptions to clearly define the staff roles and responsibilities as a result of the recent program re-organization.
- Increase the injury prevention resource staff from 0.5 to 1.0 FTE.

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## **Trauma System Plan**

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### Recommendations:

- Review the current statute pertaining to the Trauma System Plan (RCW 70.168.030).
  - Assemble the multidisciplinary EMS and Trauma Care Steering Committee to write a comprehensive EMS and Trauma System Plan that aligns with the requirements of the statute.

- Operationalize the EMS and Trauma System Plan using the results of the analysis through consensus-based goals and objectives.
  - Revise Regional Plans to be consistent with the revised EMS and Trauma System Plan.
- Ensure TAC strategic work plans are consistent in regard to organization, formatting, development, and ensure regular updating.

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## **System Integration**

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### Recommendations:

- Ensure that EMS assets are strategically placed and sufficient in number to meet the needs of the state's population, including air and critical care ground transport.
- Develop, or maintain through partnership, a real time searchable database of available beds within the Statewide Trauma System that is accessible to all system end users.
- Integrate Public Safety Answering Points (PSAPs), or E-911 centers as active partners in all areas of the trauma system, especially in planning and quality improvement efforts.
- Ensure that EMS services and Medical Program Directors (MPDs) are consistently represented in all EMS and trauma regional committee, planning, and oversight structures.
- Collect data on the percent of time trauma centers are on diversion.
  - This should be reviewed by the EMS and Trauma Care Steering Committee at each committee meeting for review, analysis, and corrective action if necessary.
- Develop a statewide or regional dashboard to allow hospitals and EMS services to have real time knowledge of available resources.

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## **Financing**

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### Recommendations:

- Seek additional and sustainable statewide funding to support the EMS, Trauma, Cardiac and Stroke Care System.
  - Consider appointing a sub-committee of the EMS & Trauma Care Steering Committee to develop a strategy to increase system-wide funding.
- Increase the regional council funding to meet the needs of current regionalization efforts.
  - Consider reallocating a portion of the Trauma Fund to support EMS and Trauma Regional Councils.
- Seek independent funding for the time critical services that have added additional responsibilities to the system.
- Increase the vehicle lease and sales fee as well as the fee for moving violations to support and sustain the statewide EMS and Trauma Cardiac and Stroke Care System.

- Establish performance-based contracts for each region and clearly define the activities to be carried out for the Department.

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## **EMS AND TRAUMA SYSTEM ASSURANCE**

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### **Prevention and Outreach**

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#### Recommendations:

- Identify key stakeholders in the state and strengthen partnerships for the delivery of data driven injury prevention programs.
  - Utilize existing resources, infrastructure, and expertise within the state, such as the Harborview Injury Prevention Center and schools of public health.
- Increase DOH EMS and Trauma IVP staff from 0.5 FTE to 1.0 FTE.
  - Expand this FTE's responsibilities to enable the lead agency to serve as a robust resource for agencies and trauma centers within the state; inform, educate, and deliver injury prevention education to local leaders.
- Create and implement a plan to routinely educate and inform the public and legislators on the status of injury prevention activities.
  - Integrate injury prevention and outreach activity into the annual trauma system report.
  - Implement contemporary media messaging processes and protocols (e.g. social media).
  - Develop a strategy in collaboration with the TAC and Regional TAC's to support timely media responses and messaging.
- Dedicate appropriate funding to support injury prevention personnel at the regional level.
- Create and widely distribute an injury prevention training module created by the lead agency that will help educate injury prevention coordinators, TPM's, and others on the basics of coordinating and leading injury prevention initiatives.
- Widely distribute the "Injury and Violence Prevention Guide" and other materials to support local injury prevention leaders.
- Create a web-based resource center for trauma centers and other agencies looking for injury prevention templates, programs, and educational materials.

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### **Emergency Medical Services**

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#### Recommendations:

- Mandate that all EMS agencies submit data into the WEMSIS system, and develop data linkages with the trauma registry.
- Ensure trauma destination protocols are consistently followed by EMS agencies.
- Establish an objective and standardized statewide process to revise the Minimum and Maximum criteria for the number of EMS agencies in the system.
- Ensure trauma and EMS quality improvement efforts are occurring.

- Ensure all EMS response agencies meet the criteria to be trauma verified services.
- Develop requirements for equipment, personnel credentials and training, and designation for critical care ground transport agencies.
- Provide consistent financial support for EMS agency growth, such as block grants and subsidized training programs.
- Incentivize additional physician engagement as Medical Program Directors to ensure there is sufficient oversight of EMS agencies.
- Provide ongoing Medical Program Director education to remain current with state requirements, for process improvement efforts and loop closure, and to support EMS system growth.

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## **Definitive Care Facilities**

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### Recommendations:

- Establish a clear and transparent process for calculation of minimum/maximum numbers for trauma centers in each region, based on a uniform statewide approach with potential for regional adjustment.
  - Potentially utilize a Geographic Information System (GIS) Tool for modeling.
- Re-evaluate the purpose and function of the Level I trauma center role, and adjust requirements accordingly.
- Provide state-level data and analytic support to assist regions with assessment of minimum/ maximum numbers for trauma centers.
- Require all acute care facilities in the state to participate in the system with a minimum set of readiness standards as a condition of licensure.
- Re-evaluate the formula for distribution of trauma center funding to eliminate potential adverse influence on selection of center designation levels.
- Re-evaluate the optimal system balance between centralization of resources and need for regionalized care, resilience, and surge capacity.

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## **System Coordination and Patient Flow**

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### Recommendations:

- Provide stronger state-level support for regional operations, especially in the areas of data analysis, capacity assessment, and quality assurance.
- Strengthen the development and use of decision tools for triage and transport at the regional level, and establish a system to routinely monitor compliance.
- Improve the use of the state-level centralized platform for resource tracking and information sharing within and across regions.
- Consider development of state-level support/coordination for long-distance transfers.

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## Rehabilitation

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### Recommendations:

- Develop a methodology for better communication between rehabilitation facilities and trauma facilities with focus on the following:
  - Bed availability
  - Specialized capabilities, specifically SCI and TBI
  - Charity beds and the process of accessing them
- Coordinate in-person visits by trauma centers to rehabilitation facilities to gain better understanding of the rehabilitation capabilities and to strengthen relationships.
- Ensure rural trauma facilities know how to access rehabilitation facilities, which are primarily located in more urban settings.
- Complete the process for linking rehabilitation data with the state trauma registry and disseminate linked data to system stakeholders.

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## Disaster Preparedness

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### Recommendations:

- Develop a regional contingency plan and system redundancy in the event Level I and II centers become incapacitated.
- Develop enhanced, centralized operational control by better utilization of incident command to coordinate care.
- Improve the integration of the trauma system and Emergency Preparedness and Response Systems.
  - Integrate trauma system and emergency preparedness stakeholders in drills.
- Utilize lessons learned in the After-Action Reports (AAR) from previous mass casualty incidents (MCI) and drills to develop improvements in the disaster plan.
- Increase military involvement in the State's trauma system planning and disaster preparedness efforts.
- Develop a statewide patient movement plan to transport patients to appropriate level care facilities during disasters.

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## System-wide Evaluation and Quality Assurance

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### Recommendations:

- Develop a master plan for system performance improvement on the state and regional levels to implement and complete data-driven performance improvement initiatives.
- Develop and disseminate contemporary resources, toolkits, and a 'how-to' manual to support state and regional PI activity.



- Seek Department of Health legal review and interpretation of the current peer review protection statute and educate trauma and EMS system stakeholders.
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## **Trauma Management Information Systems**

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### Recommendations:

- Ensure that trauma registry data are systematically used for trauma system development, evaluation, and performance improvement.
  - Establish a Trauma Registry TAC to provide dedicated leadership for the registry, and to optimize registry management and utilization.
    - Trauma Registry TAC members should include registrars, program managers, and PI coordinators.
  - Develop a proactive analytic approach to monitor registry data quality over time, determine root causes, and implement solutions to improve data quality.
  - Develop and implement standard operating procedure 1) to ensure that state registry data elements are consistent with the NTDS and 2) to conduct regular review of state registry data elements to ensure relevance and to minimize data collection burden on hospitals.
  - Create an internal Department of Health operational manual to detail registry activities and staff responsibilities in order to ensure ongoing functionality through staffing or program transitions.
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## **Research**

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### Recommendations:

- Utilize data usage agreements (DUAs) to enhance the availability of Department of Health data.
- Encourage data use to perform studies aimed at enhancing the safety of the citizens of Washington State.
- Develop a method to encourage Level II-V trauma centers to be more involved in research.