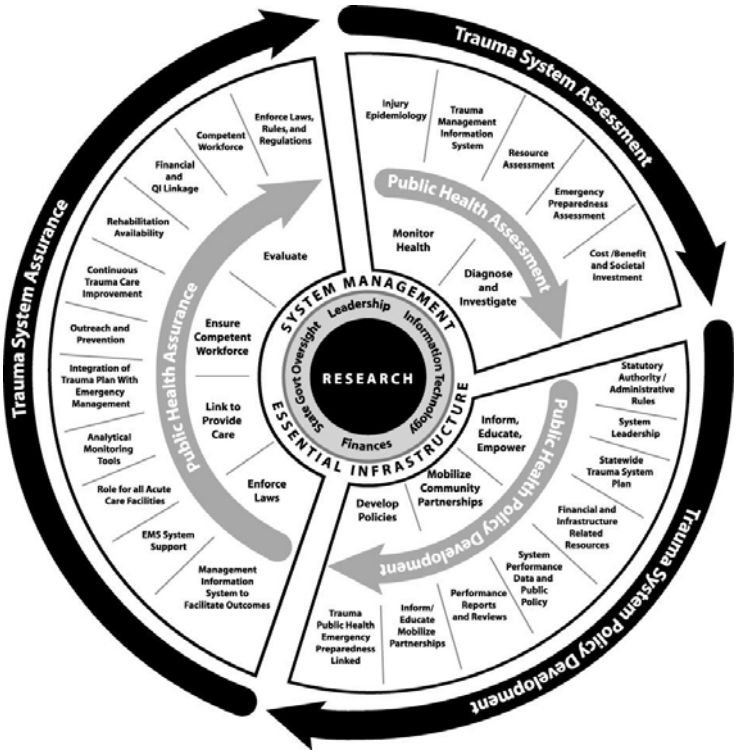
State Trauma System Planning Guide



A COMPANION DOCUMENT TO THE 2006 HRSA MODEL TRAUMA SYSTEM PLANNING AND EVALUATION DOCUMENT

June, 2006

National Association of State Emergency Medical Services Officials (NASEMSO)

This document made possible with FY 2005 support from the U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), Division of Healthcare Preparedness (DHP), Trauma-EMS Systems Program

1. Introduction

The development and use of a strategic and relevant statewide trauma plan is important for a number of reasons:

- The development process requires a careful assessment of the trauma system's current capabilities which involves the input of all system participants and builds consensus;
- It describes the goals and methods for achieving continued progress;
- It provides for communication of goals and will provide for system continuity in the event of staff and other key personnel turnover; and
- It is increasingly required in order to be eligible for some Federal funding opportunities.

The development process suggested by The Trauma-EMS System Program of the Health Resources and Services Administration (HRSA) therefore contains two closely related initiatives: assessment with strategic planning, and tactical planning with implementation.

The 2006 HRSA "Model Trauma System Planning and Evaluation" (MTSPE) document addresses state trauma system self-assessment and broader strategic planning. The MTSPE may be found at http://www.hrsa.gov/trauma/model.htm. This document, the "State Trauma System Planning Guide" (STSPG), addresses the more tactical specifics of planning and implementation. It is intended as a companion and implementation tool for the MTSPE, and together they replace the 1992 Model Trauma Care Systems Plan. The MTSPE explains the public health planning model for trauma system development and provides a system self-assessment tool. The STSPG demonstrates at least one way to move from self-assessment to implementation and provides a planning tool that may be useful.

This set of two documents is the result of several years of development and review by some of the nation's experts in trauma system planning, operations and evaluation.

2. Development of This Planning Guide and Tool

This document is the result of a contract between National Association of State Emergency Medical Services Officials (NASEMSO) and the HRSA Trauma-EMS System Program. Work on the Project began in early 2005, with sessions developed for the 2005 NASEMSO annual meeting to explain the status of the MTSPE and the development of the STSPG. At the Annual Meeting, participants were solicited to serve as members of the project steering committee. Additional members were added to ensure appropriate representation and included state EMS directors, state trauma managers, emergency physicians, trauma surgeons, and trauma system consultants. HRSA Trauma-EMS staff also participated in the steering committee process. A list of Steering Committee Members and Staff may be found in Appendix A at the end of this document.

The steering committee met in Washington D.C. in December, 2005 to review a draft Planning Guide and Tool document. Following that meeting, revised drafts were sent to the committee and further revisions were made. The document was then sent to state EMS directors and state trauma managers for review and comment. It was delivered to the HRSA Trauma Program for use in May, 2006.

3. Suggested Planning Process, Participants

Process

The MTSPE and self-assessment tool and the STSPG and planning tool are intended to be implemented separately and sequentially.

States should conduct the Benchmarks, Indicators, and Scoring (BIS) process described in the MTSPE. The results will provide the state EMS office with a comprehensive assessment of the status of trauma system development within the state (the scoring is not designed to be used in interstate trauma system comparisons). The MTSPE self-assessment tool allows states to stratify indicators by score, but is not intended to replace strategic decision-making processes that a state EMS office uses to prioritize future initiatives. Those decisions will require internal deliberation about other factors such as urgency of need, resource availability, feasibility of achieving results, and stakeholder interests. States may benefit from consulting colleagues in other states that have piloted this evaluation (early pilots included Utah, Virginia, Texas, and Montana).

Once the MTSPE results are available, the state trauma manager and selected stakeholders should develop or enhance the state's trauma plan.

Both the MTSPE and the STSPG are large documents because they comprehensively include the elements of a trauma system. Stakeholders involved in using either document to assess/plan the trauma system may feel overwhelmed by the task and/or may not feel knowledgeable about all of the elements of the system. Early experience has suggested that matching stakeholders carefully to the system elements they are assessing or planning is important. So too, is the use of carefully planned processes which are either a multiday affair with significant preparation of the participants in advance, or an iterative writing process with staff creating initial "strawman" drafts for reaction by stakeholders matched to the appropriate sections of the document.

Note: *All states should conduct the MTSPE evaluation, but all states may not need to use the STSPG and tool in its entirety or at all. This tool simply provides states that need it with a new, "fill in the blank" template from which to create a plan. States with a robust and up-to-date trauma system plan which actively serves to guide activities and the use of resources may be best-served by continuing to use their own plan format. Once state planners have used the MTSPE evaluation process to consider the importance of all the indicators it suggests, they should elect the trauma system plan format which best suits their needs.*

The STSPG trauma plan writing tool should an intuitive extension of the MTRSPE self-assessment tool. It contains the same overall format of Core Functions, Benchmarks, and Indicators. But for each Indicator it adds the planning elements of "Goals", "Objectives", and "Tasks". Each Task includes the specific components of "Who", "What", "When", "Where", "How", "Barriers", "Strategies for Overcoming Barriers", and "Resources Required".

Participants

The state trauma system manager should work with an interested, multidisciplinary subcommittee of the state lead trauma authority's trauma advisory committee to develop the plan. If a state trauma advisory committee does not exist, a multidisciplinary trauma stakeholder group of ten to twelve people might be utilized. This may be supplemented by a larger group of expert stakeholders to assist with areas of the plan beyond the expertise of the core group.

Again, it may be valuable to have the state trauma manager create initial drafts for subcommittee review, and/or to have subcommittee members draft specific sections of the initial "strawman" plan based on their individual expertise. Completion of the plan would likely be accomplished using an iterative writing/consensus process between the subcommittee and the state trauma manager. Once consensus has been achieved among the subcommittee members on the overall draft, the draft should then move to the statewide trauma advisory committee and lead trauma authority for approval as dictated by state administrative procedures.

4. Using the Tool

Core Functions, Benchmarks, Indicators and Scoring Descriptors

The tool user is strongly encouraged to retain the **Core Functions and Benchmarks** be maintained, because these are fundamental ideals in trauma system planning and create a logical planning format consistent with the MTSPE.

Users are also encouraged to retain the MTSPE-based **Indicators** and scoring descriptors unless there is a compelling rationale for change. The Indicators are very specific and their importance to, or consistency with, a state's current trauma system may constitute this rationale for changing them. Provisions are made, therefore, to "Keep", "Ignore", or "Revise" Indicators. The state may also add Indicators and create "Status" and "Goal" descriptors for them.

The end of this section includes two examples for completing the STSPG. The first is for an Indicator which a state wishes to use as is, and the other is for an Indicator which a state wants to revise.

The MTSPE **Scoring Descriptors** constitute the "Status" and "Goal" for each indicator. Consequently they will shape the Tasks that must be accomplished to achieve desired

system goals. Scoring Descriptor modifications may result with or without Indicator changes.

Benchmark Prioritization

Each Benchmark has an opportunity to assign a "Priority". States may complete this to assign priority to each large section of the plan. There is also an opportunity to "prioritize" Indicators within the Benchmarks below. A number of prioritization methods may be employed and a State's planning conventions dictate which is used:

- Short Range, Medium Range, Long Range;
- Low, Medium, High; or
- Numerical stratification (e.g. 1-5);

Indicator Format Contents

For each Indicator, the following steps should be taken:

1. Review of Current Applicability for State
Select the most appropriate:

- **Keep** the Indicator, but assign a priority to it (per the prioritization methods discussion above) so that it is addressed in a reasonable order given a state's needs and resources;
- **Ignore** the Indicator. This means that the Indicator is essentially assigned a lowest priority and will not be addressed in the time-frame of the current plan, and not that it is eliminated from consideration permanently; and/or
- **Revise** the Indicator and/or its MTSPE scoring descriptors.

2. Revised Indicator for State
If an Indicator is revised, enter the revised indicator. A revision to an Indicator may require a revision to the scoring descriptors (i.e. Status and Goal descriptors used). This should be avoided if possible.

3. Status: MTSPE scoring descriptor best defining current status
Enter scoring descriptor from MTSPE self-assessment, or from revised Indicator, selected as best describing current state of trauma system.

4. Goal: Selected scoring descriptor to improve current status
Enter scoring descriptor from evaluation process, or from revised Indicator, selected as best describing desired state of trauma system.

5. Objective(s) to achieve goal
Identify the specific, measurable objectives to achieve the goal.

6. Tasks to achieve objective(s)

Assign tasks for each objective. Tasks should be presented in a narrative or table format and include:

- Who is responsible for completing and who needs to be involved in review/approval?
- What is the measurable task to be accomplished?
- When are start and completion dates?
- Where is the task (statewide or limited to a region, municipality, facility, EMS service, or other)?
- How is the task to be completed (if not self-explanatory, what are the steps needed to accomplish the task)?
- Barriers that stand in the way of accomplishing the task.
- Strategies for Overcoming Barriers identified.
- Resources Required to accomplish the task.

Conventions for Use:

1. If Indicators are marked as "ignored" in the plan, they should physically remain in the body of the plan with an explanation of why they are being ignored. This will allow national planners to consider the need for revisions to the tool based on state feedback
2. If Indicators are added, the user is asked to assign a new ID number highlighting its state of origin (e.g. 101.8.Utah). This ID number should not duplicate an ID from an existing or eliminated Indicator. The "Review of Current Applicability…" line would reflect Keep". The "Revised Indicator…" line would contain the scoring descriptors adopted for the new Indicator.
3. If Indicators are revised, the revisions should be noted in the line provided under each Indicator labeled "Revised Indicator for State". The user is asked to revise ID number adding its state of origin to the end of the original Indicator number (e.g. 101.3.Utah; see Example B at the end of this section). If scoring descriptors are also modified, that line should also contain the set of modified descriptors. This is so that planners will have a record of the descriptors used for future plan redrafting purposes. The "Status" and "Goal" lines would reflect changed scoring descriptors as deemed appropriate by the state.
4. If an Indicator is maintained, but scoring descriptors are changed, the new scoring descriptors should be entered in the "Revised Indicator for State" line. This so that planners will have a record of the descriptors used for future plan redrafting purposes. The "Status" and "Goal" lines would reflect changed scoring descriptors as deemed appropriate by the state.

Example A

State "XY" has completed the MTSPE for Benchmark 201/Indicator 201.1 by selecting scoring descriptor "1" as the State's current status below. It completes the associated STSPG section that follows as described below.

Benchmark	
201. Comprehensive State statutory authority and administrative rules support trauma system leadership and maintain trauma system infrastructure, planning, oversight, and future development.	
Essential Service: Develop Policies	
Indicator	Scoring
201.1 Legislative authority (statute and regulations) plans, develops, implements, manages, and evaluates the trauma system and its component parts, including the identification of the lead agency and the designation of trauma facilities.	0. Don't know 1. There is no specific legal authority or mandate to plan, develop, manage, and evaluate, or fund, the trauma system and its component parts. 2. There is legislation and legal authority for establishing a trauma system, and specific timelines for adoption are being drafted and reviewed by trauma and injury constituencies. 3. The lead agency is identified in State statute and is required to plan and develop a statewide trauma system. 4. The lead agency is authorized (has a legal basis) to take actions to implement the trauma system and to report on the progress and effectiveness of system implementation. 5. The State lead agency is required (exercises the legal authority) to plan, develop, manage, monitor, and improve the trauma system while reporting regularly on the status of the trauma system within the State.

Benchmark 201. Comprehensive State statutory authority and administrative rules support trauma system leadership and maintain trauma system infrastructure, planning, oversight, and future development.

Priority: *High*

> **Indicator 201.1** Legislative authority (statute and regulations) plans, develops, implements, manages, and evaluates the trauma system and its component parts, including the identification of the lead agency and the designation of trauma facilities.
>
> Review of Current Applicability for State: ☑ Keep ☐ Ignore ☐ Revise
>
> Revised Indicator for State:
>
> Status: MTSPE scoring descriptor best defining current status. *1. There is no specific legal authority or mandate to plan, develop, manage, and evaluate, or fund, the trauma system and its component parts.*

Goal: Selected scoring descriptor to improve current status. *5. The State lead agency is required (exercises the legal authority) to plan, develop, manage, monitor, and improve the trauma system while reporting regularly on the status of the trauma system within the State.*

Objective(s) to achieve the goal: *Amend state EMS statute to include the language "XY EMS is required to establish a Trauma Advisory Committee and to plan, develop, manage, monitor, and improve the trauma system while reporting regularly on the status of the trauma system within the State".*

Tasks to achieve objective:
Who: *Trauma manager to draft proposed language; review with director. Director to review with state EMS advisory committee and submit through departmental process. Director and departmental legislative liaison to shepard through process.*
What: *Passage of amendment to XY EMS statute, with fiscal note to add full-time trauma manager and trauma registry.*
When: *2008 session.*
Where: *Statewide*.
How: *Draft language, determine fiscal impact. Review by Director, department, and state EMS advisory committee. Publicize to stakeholders statewide. Submit language through departmental process, get bill sponsors and recruit supporters (EMS, hospital, medical/surgical community, etc.). Testify at hearings and coordinate support.*
Barriers: *(1) Hospitals to trauma center designation, participation in trauma registry and system reporting. (2) Fiscal impact to state.*
Strategies for Overcoming Barriers: *(1) Devise inclusive system of designation with hospital association; fund trauma registry; coordinate trauma system reporting through trauma advisory committee and assure seats on committee for trauma center and non-trauma center hospitals and the hospital association. (2) Educate key Appropriations Committee members.*
Resources Required: *Staff time, hospital/medical/EMS community support.*

Example B

State "XY" has completed the MTSPE for Benchmark 201/Indicator 201.3 by selecting scoring descriptor "1" as the State's current status below. However, State "XY" is very small and its healthcare and EMS systems are centrally coordinated and regulated without state or local levels of organization. It completes the associated STSPG section that follows as described below. The Objective(s) and Tasks are irrelevant to this example of a revised Indicator and so are not elaborated upon.

Essential Service: Develop Policies	
Indicator	Scoring
201.3 Administrative rules direct the development of operational policies and procedures at the State, regional, and local levels.	0. Don't know 1. There is no legal authority to adopt administrative regulations regarding the development of a trauma system at the State, regional, or local level. 2. There is legal authority, but there are no administrative regulations governing trauma system development including, components of the trauma system such as: designation of trauma facilities, adoption of triage guidelines, integration of prehospital providers and rehabilitation centers, communication protocols, and integration with public health and disaster preparedness plans. 3. There are draft State, regional, or local requirements and procedures for the different components of trauma system development including integration with public health and disaster preparedness. 4. There are existing statewide administrative regulations for planning, developing, and implementing the trauma system and its components at the State, regional, and local levels. 5. The lead agency regularly reviews, through established committees and stakeholders, the regulations governing system performance including policies and procedures for system operations at the State, regional, and local levels that include integration with disaster services and public health preparedness plans.

Indicator 201.3 Administrative rules direct the development of operational policies and procedures at the State, regional, and local levels.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☑ Revise

Revised Indicator for State: *201.3XY Administrative rules direct the development of operational policies and procedures Statewide.*

Status: MTSPE scoring descriptor best defining current status. *1. There is no legal authority to adopt administrative regulations regarding the development of a trauma system Statewide*.

Goal: Selected scoring descriptor to improve current status. *5. XY EMS regularly reviews, through established committees and stakeholders, the regulations governing system performance including policies and procedures for system operations Statewide that include integration with disaster services and public health preparedness plans.*

Objective(s) to achieve the goal: *Etc.*

Tasks to achieve objective: *Etc.*
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

5. Trauma System Plan Tool

Core Function 100. ASSESSMENT

Regular systematic collection, assembly, analysis, and dissemination of information on the health of the community.

Benchmark 101. There is a thorough description of the epidemiology of injury in the system jurisdiction using both population based data and clinical databases.

Priority:

Indicator 101.1 There is a thorough description of the epidemiology of injury mortality in the system jurisdiction using population-based data.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 101.2 There is a description of injuries within the trauma system jurisdiction including the distribution by geographic area, high-risk populations (pediatric, elderly, distinct cultural/ ethnic, rural, and others), incidence, prevalence, mechanism, manner, intent, mortality, contributing factors, determinants, morbidity, injury severity (including death), and patient distribution using any or all the following: vital statistics, emergency department (ED) data, EMS data, hospital discharge data, State police data (those from law enforcement agencies), medical examiner data, trauma registry, and other data sources. The description is updated at regular intervals. Note: Injury severity should be determined through the consistent and system-wide application of one of the existing injury scoring methods, e.g., Injury Severity Score. See trauma systems dictionary for a list of examples of clinical databases.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 101.3 There is a comparison of injury mortality against national, regional, and other data.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 101.4 Collaboration exists between EMS, other public health officials, and trauma system personnel to complete injury risk assessments.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 101.5 Integration of injury into other public health risk assessments that occurs at State, regional, and community levels, resulting in the integration into key reports and planning documents such as *Healthy People 2010*.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 101.6 The trauma system works with the EMS and public health systems to complete a jurisdiction-wide study of the determinants of injury using existing data sources and public health tools.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What

When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 101.7 The trauma system works with EMS and public health to identify special at-risk populations.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 102. There is an established trauma management information system for ongoing injury surveillance and system performance assessment.

Priority:

Indicator 102.1 There is an established injury surveillance process that can, in part, be used as a system performance measure.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What

When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 102.2 Injury surveillance is coordinated with statewide and local community health surveillance.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 102.3 Trauma data are electronically linked from a variety of sources. Note: Deterministically means with such patient identifiers as name and date of birth. Probabilistically means computer software is used to match likely records through such less certain identifiers as date of incident, patient age, gender, and others.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers

Strategies for Overcoming Barriers
Resources Required

Indicator 102.4 There is a process to evaluate the quality, timeliness, completeness, and confidentiality of the data.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 102.5 There is an established method of collecting trauma financial information from all health care facilities and trauma agencies including patient charges as well as administrative and system costs.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 103. A resource assessment for the trauma system has been completed and is regularly updated.

Priority:

Indicator 103.1 The trauma system has completed a comprehensive system status inventory that identifies the availability and distribution of current capabilities and resources.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 103.2 The trauma system has completed a gap analysis based on the internal and external system status inventories and system resource standards.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 103.3 There has been an initial assessment (and periodic reassessment) of overall system effectiveness.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 103.4 The trauma system has undergone a jurisdiction-wide external independent analysis.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 104. An assessment of the trauma system's disaster/emergency preparedness has been completed including coordination with the public health and EMS systems and the emergency management agency.

Priority:

Indicator 104.1 There is a resource assessment that identifies the trauma system's expanded capability to respond to mass casualty incidents in an all-hazards approach.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 104.2 There has been a consultation by external experts to help identify current status and needs of the trauma system to be able to respond to mass casualty situations.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 104.3 The trauma system has completed a gap analysis based on the resource assessment for trauma disaster preparedness.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 105. The system assesses and monitors its value to its constituents in terms of cost/benefit analysis and societal investment.

Priority:

Indicator 105.1 The benefits of the trauma system, in terms of years of productive life lost (YPLL), quality—adjusted life years (QALY), disability—adjusted life years (DALY), and so on, are described.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 105.2 Cases that document the societal benefit are reported on so that the community sees and hears the benefit of the trauma system to society.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 105.3 An assessment of the needs of the media concerning trauma system information has been conducted.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 105.4 An assessment of the needs of the public officials concerning trauma system information has been conducted.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 105.5 An assessment of the needs of the general public concerning trauma system information has been conducted.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 105.6 An assessment of the needs of the health insurers concerning trauma system information has been conducted.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers

Strategies for Overcoming Barriers
Resources Required

Indicator 105.7 An assessment of the needs of the general medical community, including physicians, nurses, prehospital care providers, and others, concerning trauma system information, has been conducted.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Core Function 200. POLICY DEVELOPMENT

Promoting the use of scientific knowledge in decision making that includes building constituencies; identifying needs and setting priorities; legislative authority and funding to develop plans and policies to address needs; and assuring the public's health and safety.

Benchmark 201. Comprehensive State statutory authority and administrative rules support trauma system leadership and maintain trauma system infrastructure, planning, oversight, and future development.

Priority:

Indicator 201.1 Legislative authority (statute and regulations) plans, develops, implements, manages, and evaluates the trauma system and its component parts, including the identification of the lead agency and the designation of trauma facilities.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 201.2 The legislative authority states that all the trauma system components, EMS, injury control, emergency manage trauma system (infrastructure is in place).

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 201.3 Administrative rules direct the development of operational policies and procedures at the State, regional, and local levels.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 201.4 The lead agency has adopted clearly defined trauma system standards (e.g., facility standards, triage and transfer guidelines, and data collection standards) and has sufficient legal authority to ensure and enforce compliance.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 202. Trauma system leadership (lead agency, trauma center personnel, and other stakeholders) is used to establish, maintain, and constantly evaluate and improve a comprehensive trauma system in cooperation with medical, professional, governmental, and citizen organizations. (Stress the process nature of this activity.)

Priority:

Indicator 202.1 The lead agency demonstrates that it can bring organizations together to implement and maintain a comprehensive trauma system.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 202.2 The lead agency has developed and implemented a statewide multidisciplinary trauma system committee to provide overall guidance to trauma system planning and implementation strategies. The committee meets regularly and is instrumental in providing guidance to the lead agency.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 202.3 A clearly defined and easily understood structure is in place for the trauma system decision making process.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 202.4 Trauma system leadership has adopted and uses Core Functions and time-specific quantifiable and measurable Indicators for the trauma system.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 203. The State lead agency has a comprehensive written trauma system plan based on national guidelines. The plan integrates the trauma system with EMS, public health, emergency preparedness, and emergency management. The written trauma system plan is developed in collaboration with community partners and stakeholders.

Priority:

Indicator 203.1 The lead agency, in concert with the multidisciplinary, multi-agency trauma system committee, has adopted a trauma plan.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 203.2 A trauma system plan exists and is based on the analysis of the trauma demographics assessment and the resource identification/assessment.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 203.3 There is within the trauma system plan congruence of the population demographics with system development and resource allocation priorities. Note: The comprehensive plan encompasses various components of the system. Needs of specific populations (pediatrics, burns, Native Americans, special health care needs, and other cultural groups) are integrated into the plan. Considerations with regard to age, population characteristics, and urban and rural environments are all part of the planning process.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 203.4 The trauma system plan clearly describes the system design (including the components necessary to have an integrated and inclusive trauma system) and is used to guide system implementation and management. Example: The plan includes references to regulatory standards and documents, and includes methods of data collection and analysis.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 203.5 A written injury prevention and control plan is developed and coordinated with other agencies and community health programs. The injury program is data driven, and targeted programs are developed based on high injury risk areas. Specific Core Functions with measurable Indicators are incorporated into the injury plan.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 203.6 The trauma system plan has established clearly defined methods of integrating with disaster preparedness plans (all hazards).

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 203.7 The trauma system plan has established clearly defined methods of integrating the trauma system plan with the EMS, emergency/disaster, and public health preparedness plans.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 204. Sufficient resources exist, including those both financial and infrastructure related, support system planning, implementation, and maintenance.

Priority:

Indicator 204.1 The trauma system plan clearly identifies the human resources and equipment necessary to develop, implement, and manage the trauma program, both clinically and administratively. (The trauma system plan integrates with the Assessment of Resources done previously.)

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 204.2 Financial resources exist that support the planning, implementation, and ongoing management of the administrative and clinical care components of the trauma system.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers

Strategies for Overcoming Barriers
Resources Required

Indicator 204.3 Designated funding for the trauma system support infrastructure (lead agency) is legislatively appropriated. Note: Although nomenclature concerning designated, appropriated, and general funds varies between jurisdictions, the intent of this indicator is to demonstrate long-term, stable funding for trauma system development, management, evaluation, and improvement.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 204.4 Operational budgets (system administration and operations, facilities administration and operations, and EMS administration and operations) are aligned with the trauma system plan and priorities. Examples: Full-Time Equivalents (FTEs) per population to support the infrastructure. Costs to improve communications system.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 204.5 The trauma system plan includes identification of additional resources (both manpower and equipment) necessary to respond to mass casualty situations.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 205. Collected data are used to evaluate system performance and to develop public policy.

Priority:

Indicator 205.1 Collected data are used for strategic and budgetary planning.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 205.2 Collected data from a variety of sources are used to review the appropriateness of trauma system policies and procedures. Note: The format of the reports in this and other sections may be written, webbased, or other electronic media.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 205.3 The trauma information management system is used to assess system performance, to measure system compliance with applicable standards, and to allocate trauma system resources to areas of need or to acquire new resources.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 205.4 Injury prevention programs use trauma information to develop intervention strategies.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 205.5 Education for trauma system participants is developed based on a review and evaluation of trauma system data.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 206. Trauma system leadership, including its multi-performance reports, in disciplinary advisory committees, regularly reviews system.

Priority:

Indicator 206.1 Trauma data reports are generated by the trauma system not less than once per year and are disseminated to trauma system leadership and stakeholders to evaluate and improve the effectiveness of the system.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 206.2 The multidisciplinary, multi-agency trauma system committee regularly reviews annotated trauma system data reports and system compliance information to monitor trauma system performance and to determine the need for system modifications.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 207. The lead agency informs and educates State, regional, and local constituencies and policy makers to foster collaboration and cooperation for system enhancement and injury control.

Priority:

Indicator 207.1 The lead agency ensures communications, collaboration, and cooperation between State and regional/local systems.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 207.2 The trauma system leadership (lead agency, advisory committees, and others) informs and educates constituencies and policy makers through community development activities, targeted media messaging, and active collaborations aimed at injury prevention, and trauma system development.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 207.3 The trauma system leadership (lead agency, advisory committees, and others) mobilizes community partners in identifying the injury problem throughout the State and in building coalitions of personnel to design systems that can reduce the burden of injury.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 207.4 A public information and education program exists that heightens public awareness of trauma as a disease, the need for a trauma care system, and the preventability of injury.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 208. The trauma, public health, and emergency preparedness systems are closely linked.

Priority:

Indicator 208.1 The trauma system and the public health system have established linkages including programs with an emphasis on population-based public health surveillance, and evaluation, for acute and chronic traumatic injury and injury prevention.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 208.2 The trauma system and the disaster management system have formal established linkages for system integration and operational management.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

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Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

300. ASSURANCE

Core Function: Assurance to constituents that services necessary to achieve agreed-on Core Functions are provided by encouraging actions of others (public or private), requiring action through regulation, or providing services directly.

Benchmark 301. The trauma management information system (MIS) is used to facilitate ongoing assessment and assurance of system performance and outcomes and provides a basis for continuously improving the trauma system including a cost-benefit analysis.

Priority:

Indicator 301.1 The lead trauma authority ensures that each member hospital of the trauma system collects and uses patient data as well as provider data to assess system performance and to improve quality of care. Assessment data are routinely submitted to the lead trauma authority.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 301.2 Prehospital care providers collect patient care and administrative data for each episode of care and provide these data not only to the hospital, but have a mechanism to evaluate the data within their own agency including monitoring trends and identifying outliers.

Review of Current Applicability for State:

Revised Indicator for State: ☐ Keep ☐ Ignore ☐ Revise

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 301.3 Trauma registry, emergency department, prehospital, rehabilitation, and other databases are linked or combined to create a trauma system registry.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 301.4 The lead trauma agency has available for use the latest in computer/technology advances and analytical tools for monitoring injury prevention and control components of the trauma system. There is reporting on the outcome of implemented strategies for injury prevention and control within the trauma system.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 302. The trauma system is supported by an EMS system that includes communication, medical oversight, prehospital triage, and transportation; the trauma system, EMS system, and public health agency are well integrated.

Priority:

Indicator 302.1 There is well-defined trauma system medical oversight integrating the specialty needs of the trauma system with the medical oversight for the overall EMS system. Note: The EMS system medical director and the trauma medical director may, in fact, be the same person.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 302.2 There is a clearly defined, cooperative, and ongoing relationship between the trauma specialty physician leadership (e.g., trauma medical director within each facility) and the EMS system medical director.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 302.3 There is clear-cut legal authority and responsibility for the EMS system medical director including the authority to adopt protocols, to implement a quality improvement system, to restrict the practice of prehospital care providers, and to generally assure medical appropriateness of the EMS system.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 302.4 The trauma system medical director is actively involved with the development, implementation, and ongoing evaluation of system dispatch protocols to assure they are congruent with the trauma system design. These protocols include, but are not limited to, which resources to dispatch (ALS vs. BLS), air-ground coordination, early notification of the trauma care facility, pre-arrival instructions, and other procedures necessary to assure resources dispatched are consistent with the needs of injured patients. Note: The trauma system medical director and the EMS system medical director may be the same individual. However, specific responsibility for, and oversight of, the trauma system must be assured.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 302.5 The retrospective medical oversight of the EMS system for trauma triage, communication, treatment, and transport is closely coordinated with the established quality improvement processes of the trauma system.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 302.6 There are mandatory system-wide prehospital triage criteria to ensure that trauma patients are transported to an appropriate facility based on their injuries. These triage criteria are regularly evaluated and updated to ensure acceptable and system-defined rates of sensitivity and specificity for appropriately identifying the major trauma patient.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 302.7 There is a universal access number for citizens to access the EMS/trauma system, with dispatch of appropriate medical resources. There is a central communications system for the EMS/trauma system to ensure field-to-facility bidirectional communication, interfacility dialogue,

and disaster service communications among all system participants. Note: In some systems with limited resources, e.g., rural, the available resources are, at least initially, the “appropriate resources.”

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 302.8 There are sufficient and well-coordinated transportation resources to ensure EMS providers
arrive at the scene promptly and expeditiously transport the patient to the correct hospital by the correct transportation mode.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 302.9 There is a procedure for communications among medical facilities when arranging for interfacility transfers including contingencies for radio or telephone system failure.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 302.10 There are established procedures for EMS and trauma system communications in a disaster that are effectively coordinated with the overall disaster plan for the jurisdiction.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 303. Acute care facilities are integrated into a resource-efficient, inclusive network that meets required standards and that provides optimal care for all injured patients.

Priority:

Indicator 303.1 The trauma system plan has clearly defined the role and responsibilities of all acute care facilities treating trauma and of facilities that provide care to specialty populations (e.g., burns, pediatrics, spinal cord injury, etc).

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 303.2 The trauma system lead agency should ensure the number, levels, and distribution of trauma centers required to meet system demand are available.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 303.3 The trauma lead authority ensures that trauma facility patient outcomes and quality of care are monitored. Deficiencies are recognized and corrective action is implemented. Variations in standards of care are minimized, and improvements are made routinely.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 303.4 When injured patients arrive at a medical facility that cannot provide the appropriate level of definitive care, there is an organized and regularly monitored system to ensure the patients are expeditiously transferred to the appropriate, system-defined trauma facility.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 303.5 The specific needs of unique populations (e.g., migrant/transient, remote, rural, and others) are accommodated within the existing trauma system.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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When
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How
Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 304. The jurisdictional lead agency, in cooperation with other agencies and organizations, uses analytical tools to monitor the performance of population-based prevention and trauma care services.

Priority:

Indicator 304.1 The lead agency, along with partner organizations, prepares annual reports on the status of injury and trauma care in the State, regional, or local areas. Note: Annual reports may be distributed electronically rather than, or in addition to, printed copies.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 304.2 The trauma system MIS database is available for routine public health surveillance. There is concurrent access to the databases (emergency department, trauma, medical examiner, and public health epidemiology) for the purpose of routine surveillance and monitoring of health status that occurs regularly and is a shared responsibility. Note: All legal requirements for confidentiality and safeguarding of patient information must be met when sharing data between or among agencies.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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When
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How
Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 305. The lead agency ensures that its trauma system plan is integrated with, and complementary to, the comprehensive mass casualty plan for natural disasters and manmade disasters, including an all-hazards approach to disaster planning and operations.

Priority:

Indicator 305.1 The trauma system and the disaster medical system have operational trauma and disaster response plans and have established an ongoing cooperative working relationship to assure trauma system readiness to "all hazard" multiple patient events.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 305.2 Disaster exercises routinely include situations involving natural (e.g., earthquake), unintentional (e.g., school bus crash), and intentional (e.g., terrorist explosion) trauma-producing events that test expanded response capabilities and surge capacity of the trauma systems.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 305.3 The trauma system through the lead trauma agency has access to additional equipment, materials, and personnel for large-scale traumatic events. Note: The lead trauma agency will work with other appropriate national, State, regional, and local agencies to secure these additional resources.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 306. The lead agency ensures that the trauma system demonstrates prevention and medical outreach activities within its defined service area.

Priority:

Indicator 306.1 The trauma system has developed mechanisms to engage the medical community and other system participants in their research findings and quality improvement efforts.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 306.2 The trauma system is active within its jurisdiction with the evaluation of prevention programs and injury-related community-based activities, e.g., CERT (community emergency response teams) training and response.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 306.3 The effect or impact of outreach programs (both medical community training/support and prevention strategies) are evaluated as part of a system performance improvement process. Note: “Evaluation” implies both informal evaluation processes and more structured research.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 307. To maintain its State, regional, or local designation, each hospital must continually work to improve the trauma care as measured by patient outcomes.

Priority:

Indicator 307.1 The trauma system engages in regular evaluation of all licensed acute care facilities that provide trauma care to trauma patients and designated trauma hospitals. Such evaluation involves independent external reviews.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 307.2 The trauma system implements and regularly reviews a standardized report on patient care
outcomes as measured against national norms. Note: This process may include clinical and bench research conducted by trauma center or other research entities.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 308. The lead agency ensures that adequate rehabilitation facilities have been integrated into the trauma system and that these resources are made available to all populations requiring them.

Priority:

Indicator 308.1 The lead agency has incorporated, within the trauma system plan and the trauma center standards, requirements for rehabilitation facilities including interfacility transfer of trauma patients to rehabilitation centers.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 308.2 Rehabilitation centers and out-patient rehabilitation services providing care for trauma
patients provide data to the trauma system registry that include final disposition, functional outcome, and rehabilitation costs and also participate in quality improvement processes.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 309. The financial aspects of the trauma systems are integrated into the overall quality improvement system to assure ongoing "fine-tuning" and cost-effectiveness.

Priority:

Indicator 309.1 Cost data are collected and provided to the system trauma registry for each major component including: prevention, prehospital, acute care, disaster planning, and rehabilitation.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 309.2 Collection and reimbursement data are submitted by each agency or institution on at least an annual basis.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 309.3 Cost, charge, collection, and reimbursement data are aggregated with other data sources including insurers and data system costs and are included in annual trauma system reports. Note: "Outside" financial data means costs that may not routinely be captured in trauma center or registry data, e.g., transportation, communication, training, infrastructure, and the overall cost of readiness.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 309.4 Financial data are combined with other cost, outcome, or surrogate measures (e.g., YPLL, QALY, and DALY), length of stay, length of Intensive Care Unit (ICU) stay, number of ventilator days, and others, to estimate and track true system costs and cost-benefits.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 310. The lead trauma authority assures a competent workforce.

Priority:

Indicator 310.1 In cooperation with the prehospital certification/licensure authority, sets guidelines for prehospital personnel for initial and ongoing trauma training including trauma-specific courses and those courses that are readily available throughout the State.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 310.2 In cooperation with the prehospital certification/licensure authority, assure that prehospital care providers who routinely respond to trauma have a current trauma training certificate, e.g., PHTLS, BTLS, and others, or that trauma training needs are driven performance improvement mechanisms.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 310.3 As part of the trauma system standards and regulations, set appropriate levels of trauma training for all nursing personnel who routinely care for trauma patients in acute care facilities.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 310.4 Assure that appropriate/approved trauma training opportunities are provided for nursing personnel on a regular basis.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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When

Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 310.5 In cooperation with the nursing licensure authority, assure that all nursing care providers who routinely respond to trauma have a current trauma training certificate (e.g., ATCN, TNCC, or any national or State trauma nursing verification course). As an alternative after initial trauma course completion, training can be driven by PI processes.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
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How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 310.6 As part of the trauma system regulations, set appropriate levels of training for physician personnel who routinely care for trauma patients in all facilities.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 310.7 Assure that appropriate, approved trauma training opportunities are provided for physicians on a regular basis.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 310.8 In cooperation with the physician licensure authority, assure that all physician providers who routinely respond to trauma have a current trauma training certificate of completion (e.g., Advanced Trauma Life Support [ATLS] and others). Alternatively, physicians may maintain trauma competence through continuing medical education programs following initial ATLS completion.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 310.9 Conduct at least one multidisciplinary trauma conference annually that encourages system and team approaches to trauma care.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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When
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How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 310.10 As new protocols and treatment approaches are instituted within the system, structured mechanisms are in place to inform all personnel in those changes in a timely manner.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 310.11 There are mechanisms within the system quality improvement processes to identify and correct systemic personnel deficiencies. Note: Systemic personnel deficiencies are those that cut across multiple agencies and institutions and impact the system as a whole. As an example, if trauma triage protocols are not being adhered to by most prehospital providers from multiple agencies, then it is a systemic problem that could involve communication, training, medical direction, or quality improvement issues.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 310.12 There are mechanisms in place within institutional and agency quality improvement processes to identify and correct individual personnel deficiencies.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 310.13 There is authority to hire, and a clear job description for, the lead agency trauma physician medical director, including requisite education, training, and certification. Note: The trauma medical director and the EMS medical director may be one and the same.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who

What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Benchmark 311. The lead trauma authority acts to protect the public welfare by enforcing various laws, rules, and regulations as they pertain to trauma system components and the system overall.

Priority:

Indicator 311.1 The lead trauma authority works in conjunction with the prehospital regulatory agency to ensure that prehospital care is provided by licensed agencies and that those agencies are in compliance with any rules, regulations, or protocols specific to prehospital trauma delivery (e.g., taking patients to the correct facility in accordance with pre-existing destination protocols). Note: In many cases, the trauma lead agency and the prehospital regulatory agency are one and the same.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
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Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 311.2 The lead trauma authority refers issues of personnel noncompliance with trauma laws, rules, and regulations to appropriate boards or licensure authorities.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
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When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 311.3 The lead trauma authority enforces laws, rules, and regulations concerning the verification of trauma centers, including the ability to de-designate trauma facilities for matters of noncompliance.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
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Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 311.4 Laws, rules, and regulations are routinely reviewed and updated to continually strengthen and improve the trauma system.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When

Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 311.5 The lead agency routinely evaluates all components of the system to assure compliance with various laws, rules, and regulations pertaining to their role and performance within the trauma system.

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers
Strategies for Overcoming Barriers
Resources Required

Indicator 311.6 Incentives are provided to individual component agencies and institutions to seek State or nationally recognized accreditation in areas that will contribute to overall improvement across the trauma system (e.g., Commission on Accreditation of Ambulance Services [CAAS] for prehospital agencies, Council on Allied Health Education Accreditation [CAHEA] for training programs, American College of Surgeons [ACS] verification for trauma facilities, and others).

Review of Current Applicability for State: ☐ Keep ☐ Ignore ☐ Revise

Revised Indicator for State:

Status: MTSPE scoring descriptor best defining current status.

Goal: Selected scoring descriptor to improve current status.

Objective(s) to achieve the goal:

Tasks to achieve objective:
Who
What
When
Where
How
Barriers

Strategies for Overcoming Barriers
Resources Required

APPENDIX A

STEERING COMMITTEE MEMBERS AND STAFF

Clay O'Dell	State Trauma Manager – New Hampshire
Mary Beachley	State Trauma Manager – Maryland
Jolene Whitney	State Trauma Manager – Utah
Janet Griffith-Kastl	State EMS Director - Washington
Steve Blessing	State EMS Director - Delaware
Keith Parker	State EMS Director - Mississippi
Cesar Aristeiguieta	State EMS Director - California
Gene Wikle	State EMS Director - Arizona
Jon Krohmer	Emergency Physician - Michigan
Bill Jermyn	Emergency Physician - Kentucky
Robert MacKersie	Trauma Surgeon - California (Reviewer; unable to attend steering committee meeting)
Peg Trimble	Trauma System Consultant - California
Kevin McGinnis	Project Principal Investigator
Dan Smiley	State EMS Deputy Director - California
Christoph Kaufmann	Trauma Surgeon - Oregon
Cheryl Anderson	HRSA Division of Healthcare Preparedness
Hazel Perez	HRSA Division of Healthcare Preparedness
Karen Beckham	HRSA Division of Healthcare Preparedness
Terry Mullins	Trauma-EMS Technical Assistance Center
Jane Ball	Trauma-EMS Technical Assistance Center

Alabama Trauma System Planning, Development, and Evaluation Document

Benchmark Scoring
Current Status/Goal/Priority

Please provide your assessment of the Benchmark Indicators listed and return by email or fax to Robin Moore. Priority 1 = High, 2 = Intermediate, 3 = Long-term, 4 = Unknown.
Email: robin.moore@adph.state.al.us
Fax: 334-206-5260

Benchmark Indicator #	Current score for indicator #	Goal score for indicator #	Priority (1-4) for Indicator #	Comments
301.1				
301.2				
301.3				
302.1				
302.2				
302.3				
302.4				
302.5				
302.6				
302.7				
302.8				
302.9				
302.10				
303.1				
303.2				
304.1				
304.2				
305.1				
305.2				
305.3				
305.4				
305.5				
305.6				
305.7				
306.1				
306.2				
306.3				
306.4				
306.5				
306.6				

Other Comments:_____
_____
_____
_____
_____

Use space below and other pages if needed.

Alabama Trauma System Planning, Development, and Evaluation Document

Benchmark Scoring
Current Status/Goal/Priority

Priority 1 = High, 2 = Intermediate, 3 = Long-term, 4 = Unknown.

Email: robin.moore@adph.state.al.us
Fax: 334-206-5260

Benchmark Indicator #	Current score for indicator #	Goal score for indicator #	Priority (1-4) for Indicator #	Comments
301.1	2	5	1	Currently somewhere between 2 & 3
301.2	3	5	2	Currently somewhere between 2 & 3
301.3	2	4	3	Currently somewhere between 1 & 2
302.1	5	5	1	Other input needed
302.2	3	5	1	Other input needed
302.3	5	5	1	
302.4	5	5	1	"Feedback loop" to educate dispatchers?
302.5	4	5	1	
302.6	4	5	2	"Statewide" or "regional standards"?
302.7	4	5	2	*See Below
302.8	5	5	1	Possibly somewhere between a 3 and 5
302.9	3	5	2	
302.10	1	5	3	All hazards response under development
303.1	4	5	2	Burns and pediatric care addressed
303.2	1	5	2	Suitable period for data collection needed
304.1	2	5	3	All hazards response under development
304.2	3	5	3	ME data access needed to complete
305.1	5	5	1	
305.2	4	5	2	Paramedics only
305.3	2	4	1	Trauma centers set training requirements
305.4	1	3	2	
305.5	1	5	3	Board certification + ATLS minimum
305.6	3	4	2	
305.7	1	5	2	
306.1	5	5	1	
306.2	3	5	1	
306.3	4	5	1	
306.4	3	5	1	No regular period specified
306.5	2	5	1	
306.6	1	3	3	Long-term goal

Other Comments:

Do written procedures exist for mass casualty events exist?

Briefly discuss yellow highlighted rows.

Use space below and other pages if needed.

300. Assurance. ***Assurance to constituents that services necessary to achieve agreed-on goals are provided by encouraging actions of others (public or private), requiring action through regulation, or providing services directly.***

Benchmark

301. **The trauma management information system (MIS) is used to facilitate ongoing assessment ongoing assessment and assurance of system performance and outcomes and provides a basis for continuously improving the trauma system including a cost-benefit analysis.**

Essential Service**:** *Evaluation*
Indicator:
301.1 The ADPH OEMST ensures that each member hospital of the ATS collects and uses patient data as well as provider data to assess system performance and to improve quality of care. Assessment data are routinely submitted to the ADPH.
Scoring:

0 Not known.
1 There is no system-wide management information data collection system that the trauma centers and other community hospitals regularly contribute to or use the evaluate trauma care.
2 There is a trauma registry system in place in the trauma centers but it is not used by all facilities within the ATS nor the ADPH to assess system performance.
3 The trauma MIS contains information from all facilities within the state.
4 The trauma MIS is used by the trauma centers to assess provider and system performance.
5 Hospital trauma registry data are routinely submitted to the Alabama Trauma Registry, are aggregated, and are used to evaluate overall system performance.

Essential Service**:** *Evaluation*
Indicator:
301.2 Prehospital care providers collect patient care and administrative data for each episode of care and provide these data not only to the hospitals but have a mechanism to evaluate the data within their own agency including monitoring trends and identifying outliers.
Scoring:

0 Not known.
1 There is no jurisdiction-wide prehospital data collection.
2 Prehospital care providers have a patient care record (PCR) for each episode of care but it is not yet automated or integrated with the trauma MIS.
3 The prehospital PCR electronically captures patient care provided by field personnel and can be transferred or entered into the trauma registry system within individual trauma centers.

4 The prehospital patient data system is integrated into the trauma MIS and is used by prehospital and hospital personnel to review and evaluate prehospital and ATS performance.

5 Individual prehospital provider data are electronically submitted to the ATR, are aggregated with other prehospital agency data, and are used to evaluate overall ATS performance.

Essential Service**:** *Evaluation*

Indicator:

301.3 Hospital trauma registry, emergency department (ED), prehospital, rehabilitation, and possibly other databases are linked or combined to create a trauma system registry.

Scoring:

0 Not known.

1 Some hospital trauma registry and prehospital patient records are manually entered into a database when needed to answer system questions. There is no rehabilitation registry.

2 There are databases for trauma hospitals, emergency departments, prehospital, and rehabilitation as well as statewide injury databases. None of the databases are routinely linked.

3 There are electronic hospital trauma registries and prehospital patient record databases which are linked but the ATS does not use these data for routine review of system performance. Some rehabilitation data are collected independently from the ATR.

4 There is an integrated MIS that includes, at a minimum, hospital and prehospital databases. The information is linked and providers use the databases for system evaluation. Rehabilitation centers routinely provide electronic data to the ATR.

5 There is an integrated MIS that includes hospital trauma registry, ED, prehospital, Trauma Communications Center, and rehabilitation databases that are regularly used by the ADPH and system provider agencies to monitor ATS performance.

Benchmark

302. **The trauma system is supported by an EMS system that includes communications, medical oversight, prehospital triage, and transportation. The trauma system, EMS system, and public health agency are well integrated.**

Essential Service: *Link to Provide Care*
Indicator:

302.1 There is well-defined trauma system medical oversight integrating the specialty needs of the trauma system with the medical oversight of the overall EMS prehospital performance as a part of the ATS. Also, medical oversight of investigations of specific incidents where the system fails or falls well short of established system outcome parameters.

Scoring:

0 Not known.
1 There is no medical oversight for EMS providers within the ATS.
2 EMS medical oversight for all levels of prehospital providers caring for the trauma patient is provided, but such oversight is provided outside the purview of the ATS.
3 The EMS and trauma medical directors have integrated prehospital medical oversight for prehospital personnel caring for trauma patients.
4 Medical oversight is routinely given to EMS providers caring for trauma patients. The ATS has integrated medical oversight for prehospital providers and routinely evaluates the effectiveness of both on-line and off-line medical oversight.
5 The EMS and trauma system fully integrate the most up-to-date medical oversight and regularly evaluate program effectiveness. ATS providers are included in the development of medical oversight policies.

Essential Service**:** *Link to Provide Care*
Indicator:

302.2 There is a clearly defined, cooperative, and ongoing relationship between the trauma specialty care physician leadership, e.g. the trauma medical director within each facility, and the EMS system medical director.

Scoring:

0 Not known.
1 The trauma specialty physician leaders and the EMS system medical director provide conflicting medical oversight to emergency care providers.
2 There is no formally established, ongoing relationship between the trauma medical director (within each trauma center) and the EMS system medical director. There is no evidence of informal efforts to cooperate and communicate.
3 There is no formally established, ongoing relationship between the trauma medical director (within each trauma center) and the EMS medical director; however, the trauma medical director and the EMS system medical director meet or visit informally to resolve problems, "to plan strategies' and to coordinate efforts.
4 There are formal, written procedures delineating the responsibilities of the trauma medical director within each trauma center and the EMS system medical director.

The procedures specify the formal method by which they work together also. However there is no evidence that the procedures are regularly used.

5 There are formal, written procedures delineating the responsibilities of the trauma medical director within each trauma center and the EMS system director which also specifically state how they formally work together. There is written documentation including, for instance, meeting minutes indicating this relationship is regularly used to coordinate efforts.

Essential Service: *Link to Provide Care*
Indicator:

302.3 There is clear-cut legal authority and responsibility for the EMS medical director including the authority to adopt protocols, to implement a quality improvement system, to restrict the practice of prehospital care providers, and to generally assure medical appropriateness of the EMS system.

Scoring:

0 Not known.
1 There is no EMS system medical director.
2 There is an EMS system medical director with a written job description; however, the individual has no specific legal authority or time allotted for these tasks.
3 There is an EMS system medical director with a written job description but with no specific legal authority. The system medical director has adopted protocols , implemented a performance improvement program, and is generally taking steps to improve the medical appropriateness of the EMS system.
4 There is an EMS system medical director with a written job description whose specific legal authorities and responsibilities are formally granted by law or by administrative rule.
5 There is an EMS system medical director with a written job description whose specific legal authorities and responsibilities are formally granted by law or by administrative rule. There is written evidence that the system medical director has, consistent with the formal authority, adopted protocols, implemented a performance program, is overseeing the practice of prehospital care providers, and is making significant efforts to improve the medical appropriateness of the EMS system and to fully integrate EMS into the trauma care system.

Essential Service: *Ensure competent Workforce*
Indicator:

302.4 The ATS Medical Director (who may be the same person as the EMS system medical director) is actively involved with the development, implementation, and ongoing evaluation of system dispatch protocols to ensure they are congruent with the ATS design. These protocols include, but are not limited to, which resources to dispatch, air-ground coordination, early notification of the trauma care facility, pre-arrival instructions, and other procedures necessary to ensure resources dispatched are consistent with the needs of injured patients.

Scoring:

0 Not known.
1 There are no trauma dispatch system protocols.

2 Trauma system dispatch protocols have been adopted but without regard to the design of the trauma system.
3 Trauma system dispatch protocols have been adopted and are not in conflict with the trauma system design but there has been no effort to coordinate the use of protocols with the ADPH OEMST or trauma centers.
4 Trauma system dispatch protocols have been developed in close coordination with the ATS Medical Director and are congruent with the ATS design.
5 Trauma dispatch protocols have been developed in close coordination with the ATS Medical Director and are congruent with the ATS design. There are established procedures to involve the dispatchers and their supervisors in trauma system performance improvement and a "feedback loop" to change protocols or to update dispatcher education when appropriate.

Essential service: *Evaluation*
Indicator:
302.5 The retrospective medical oversight of the EMS system for trauma triage, communications, treatment, and transport is closely coordinated with the established performance improvement processes of the trauma system.
Scoring:
0 Not known.
1 There is no retrospective medical oversight procedure for trauma triage, communications, treatment, and transport.
2 There is a retrospective medical oversight procedure for trauma triage, communications, treatment, and transport by both the trauma system and the EMS system but the two procedures are in conflict with each other or use different review criteria.
3 There is a retrospective medical oversight procedure for trauma triage, communications, treatment, and transport by the performance improvement processes of the trauma system or by the EMS system; however, these procedures are not coordinated between the EMS system and the ATS.
4 By the performance improvement processes of the trauma system, there is retrospective medical oversight for trauma triage, communications, treatment, and transport that is coordinated with the EMS system medical direction, or by performance improvement processes of the EMS system that are coordinated by the ATS.
5 There is a retrospective medical oversight procedure for trauma triage, communications, treatment, and transport that is coordinated with the EMS system retrospective medical direction. There is evidence this procedure is being regularly used to monitor system performance and to make system improvements.

Essential service: *Link to Provide Care*
Indicator:
302.6 There are mandatory system-wide prehospital triage criteria to ensure that trauma patients are transported to an appropriate facility based on their injuries. These triage

criteria are regularly evaluated and updated to ensure acceptable and system-defined rates of over- and under-triage for appropriately identifying the major trauma patient.
Scoring:

0 Not known.
1 There are no mandatory universal triage criteria to ensure trauma patients are transported to the most appropriate hospital.
2 There are differing triage criteria guidelines used by different providers. Appropriateness of triage criteria and subsequent transportation are not evaluated for over- and under-triage.
3 Universal triage criteria are in the process of being linked to the management information system for future evaluation.
4 The triage criteria are used by all prehospital providers. There is system-wide evaluation of the effectiveness of the triage tools in identifying trauma patients and in ensuring that they are transported to the appropriate facility.
5 System participants routinely evaluate the triage criteria for effectiveness. There is linkage with the Trauma System. Over- and under-triage rates of the tools used are regularly reported through the ADPH OEMST.

Essential Service: *Link to Provide Care*
Indicator:

302.7 There is a universal access number for citizens to access the EMS/Trauma system with dispatch of appropriate medical resources. There is a central communication system for the EMS/trauma system to ensure field-to-facility bidirectional communications, inter-facility dialogue, and all-hazards based communications among all system participants.

Scoring:

0 Not known
1 There is no universal access number for easy citizen access to the EMS/trauma system and no coordinated communication system for triage, treatment, and transport of trauma patients for either single or multiple patient encounters.
2 There is a universal access number for quick citizen access to care; however, there is no coordinated communication system within a jurisdiction to allow for communications to occur among system participants either routinely or during all-hazards events.
3 There is a universal access number and a central communication system for quick citizen access to care. A communication plan for the trauma system has been completed.
4 The universal access number and central communication system are integrated and communications regularly occur among dispatch, field providers, hospitals and other system providers. The communication plan is implemented. Evaluation of the effectiveness of the communication system is done routinely and corrective action is implemented as needed.
5 A state-of-the-art electronic communication system is available within the jurisdiction. The trauma system communication plan is integrated with other system plans. The system is also available in all-hazards responses and can be used as a quick call system and as a paging network and is linked to public health

and other nontraditional partners. Evaluation of the communication system interface with the trauma system occurs routinely.

Essential Service: L*ink to Provide Care*
Indicator:

302.8 There are sufficient and well-coordinated transportation resources to assure EMS providers arrive at scenes promptly and expeditiously transport patients to correct hospitals by correct transportation modes.

Scoring:

0 Not known.
1 There is no coordination of transportation resources within a jurisdiction. Multple ambulances or aeromedical providers, or both, can all arrive on scene simultaneously.
2 There is a priority dispatch system in place that sends transportation resources to the scene.
3 There is a priority dispatch system that ensures appropriate system resources arrive on scene promptly and transport patients to the hospital. A plan for transporting trauma patients from the field to the hospital has been completed.
4 There is a priority dispatch system and transportation system that ensures appropriate system resources for prompt transport of trauma patients to trauma centers. A trauma transportation plan has been implemented. System issues are evaluated and corrective plans are implemented as needed.
5 The transportation system has a priority dispatch system. It regularly assesses its ability to get the right resources to the scene and to transport patients by using the correct mode of transportation. The transportation system is part of the overall EMS, trauma, and all-hazards response system.

Essential Service: L*ink to Provide Care*
Indicator:

302.9 There is a procedure for communicating among medical facilities when arranging for interfacility transfers including contingencies for radio or telephone system failure.

Scoring:

0 Not known.
1 There are no specific communication plans or procedures to ensure communications among medical facilities when arranging for interfacility patient transfers.
2 Interfacility communication procedures are generally included in the patient transfer protocols for each medical facility but there is no system-wide procedure.
3 There are uniform, system-wide procedures to facilitate communications among medical facilities when arranging for interfacility patient transfers but there are no fall-back procedures in the event of power or other communication system failures.
4 There are uniform, system wide procedures for communications among facilities when arranging for interfacility patient transfers, and there are fall-back procedures in the event of power or other communication system failures.

5 There are uniform, system-wide procedures for communications among facilities when arranging for interfacility transfers. There are back-up procedures in the event of power or other communication system failures. The effectiveness of these procedures is regularly reviewed and changes made, if necessary, during the performances improvement process.

Essential Service: *Link to Provide Care*
Indicator:
302.10 There are established procedures for EMS and trauma system communications in an all-hazards or major EMS incident that are effectively coordinated with the overall all-hazards response plan for the State.
Scoring:

0 Not known.
1 There are no written procedures for EMS and trauma system communications in the event of an all-hazards or major EMS incident.
2 Local EMS systems have written procedures for EMS communications in the event of an all-hazards or major EMS incident. However, there is no coordination among the local jurisdictions.
3 There are statewide or regional EMS communication procedures in the event of an all-hazards or major EMS incident. These plans are not coordinated with the overall all-hazards response plan and incident management system.
4 There are statewide or regional EMS communications procedures in the event of an all-hazards or major EMS incident that are coordinated with the overall all-hazards response plan, and with the incident management system.
5 There are statewide or regional EMS communications procedures in the event of an all-hazards or major EMS incident that are coordinated with the overall all-hazards response plan and with the incident management system.

Benchmark

303. **Acute care facilities are integrated into a resource-efficient, inclusive network that meets required standards and that provides optimal care for all traumatically injured patients.**

Essential Service: *Link to Provide Care*
Indicator:
303.1 The ATS plan has clearly defined the roles and responsibilities of all acute care facilities treating trauma and of facilities that provide care to specialty populations, e.g. burn, pediatric, spinal cord injury, etc.
Scoring:

0 Not known.
1 There is no ATS plan that outlines roles and responsibilities of all acute care facilities treating trauma and of facilities that provide care to special populations.
2 There is an ATS plan, but it does not address the roles and responsibilities of licensed acute care and specialty care facilities.

3 The ATS plan addresses the roles and responsibilities of licensed acute care facilities, but not both.
4 The ATS plan addresses the roles and responsibilities of licensed acute care facilities and specialty care facilities.
5 The ATS plan clearly defines the roles and responsibilities of all acute care facilities treating trauma within the State. Specialty care services are addressed within the plan, and appropriate policies and procedures are implemented and tracked.

Essential Service: *Link to Provide Care*
Indicator:
303.2 The ADPH OEMST should ensure that the number, levels, and distribution of trauma centers required to meet system demand are available.
Scoring:
0 Not known.
1 There is no trauma system plan to identify the number, levels, and distribution of trauma center required to meet system demand.
2 There is a ATS plan, but it does not identify the number, levels, or distribution of trauma centers needed for the jurisdiction served.
3 There is an ATS plan that identifies the number, levels, and distribution of trauma centers needed for the State. The plan, however, is not based on available data.
4 There is an ATS plan that identifies the number and levels of trauma centers needed based on actual available data. However, the plan is not used to make decisions about trauma facility designations.
5 There is a trauma system plan that identifies the number and levels of trauma centers based on needs identified through the needs assessment process. The plan is used to make decisions about trauma center designations and should account for facility resources and their geographic distribution, population densities, injured patient volumes, and transportation resource capabilities and times. The plan is reviewed and revised periodically.

Benchmark

304. **The ADPH assures the ATS plan is integrated with, and complimentary to, the comprehensive mass casualty plan for natural disasters and manmade disasters, including an all-hazards approach to disaster planning and operations.**

Essential Service: *Link to Provide Care*
Indicator**:**
304.1 The EM System, Trauma System, and the disaster medical system have operational trauma and disaster response plans and have established an on-going cooperative working relationship to assure trauma system readiness to "all hazard" multiple patient events.

Scoring:

0 Not known.

1 There is no system for integration between the EM System, the ATS, and the all-hazards medical response system, but no formal plans have been developed.

2 There have been some discussions between the EM System, the ATS, and the all-hazards medical response system but no formal plans have been developed.

3 Formal plans for the EM System, the ATS, and the all-hazards medical response systems integration are in development and have started the approval process. Working relationships have formed and cooperation is evident.

4 There are plans in place to ensure that the EM System, the ATS, and the all-hazards medical response system are integrated and operational. All-hazards exercises and simulated incident drills have the cooperation and participation of the ATS.

5 The EM System, ATS, and all-hazards response plans are integrated and operational. Routine working relationships are present with cooperation and sharing of information to improve trauma system readiness for all-hazards responses

Essential Service: *Evaluation*

Indicator:

304.2 The ATS MIS database is available for routine public health surveillance. There is concurrent access to the databases (emergency department, trauma, prehospital, medical examiner, and public health epidemiology) for the purpose of routine surveillance and monitoring of health status that occurs regularly.

Scoring:

0 Not known.

1 There is no sharing of databases between emergency department, trauma, prehospital, medical examiner, or public health epidemiology.

2 The databases can be accessed by only the APDH and sharing of information goes through a formal request process.

3 There is concurrent access to the databases but no sharing of databases that would support public health surveillance.

4 The databases are shared among emergency department, trauma, prehospital, medical examiner, and public health epidemiology. Access issues have been resolved, and epidemiologic monitoring is beginning to routinely monitor the data for unusual events.

5 The databases of emergency departments, trauma, prehospital, medical examiner, and public health epidemiology are shared files. The epidemiology staff can review all the databases and registries for routine surveillance and unusual occurrences.

Benchmark:

***305.* The lead trauma authority assures a competent workforce.**

Essential Service: *Ensure Competent Workforce*

Indicator:

305.1 In cooperation with the prehospital certification/licensure authority, sets guidelines for prehospital personnel for initial and ongoing trauma training including trauma-specific courses and those courses are readily available throughout the State.
Scoring:

0 Not known.
1 There are no trauma training guidelines for prehospital personnel as part of initial or ongoing certification or licensure.
2 Trauma training is incorporated into initial prehospital training programs following the National Highway Traffic Safety Administration (NHTSA) curricula.
3 Prehospital personnel are offered trauma training during their initial education and specialty trauma continuing education courses are available periodically.
4 Prehospital trauma continuing education courses are regularly scheduled throughout the state.
5 Prehospital personnel receive trauma training as part of their initial certification and licensure. Routine continuing education is prehospital trauma care is provided. Such additional certification as Basic Trauma Life Support (BTLS) and Prehospital Trauma Life Support (PHTLS) are offered regularly throughout the state.

Essential Service: *Ensure Competent Workforce*
Indicator:
305.2 In cooperation with the prehospital certification/licensure authority, assure that prehospital care providers who routinely respond to trauma calls have a current trauma training certificate, e.g. PHTLS, BTLS, and others, or that after initial certification, training needs are driven by quality assurance or performance improvement (QA/PI) mechanisms, or both.
Scoring:

0 Not known.
1 There is no mechanism to ensure that prehospital personnel, e.g. Emergency Medical Technicians (EMTs) routinely providing care to trauma patients are certified in PHTLS and BTLS or have completed other trauma training
2 There is a requirement for EMTs routinely providing care to trauma patients to complete a certification course in trauma; however, no mechanism to ensure compliance has been instituted.
3 There is a requirement for EMTs providing care to trauma patients to complete a prehospital trauma course. Compliance with training requirements is the responsibility of the employing agency as part of the quality assurance process.
4 Requirements for EMT trauma training are provided by trauma centers, the ADPH OEMST, or other educational training institutions. Monitoring compliance with meeting the requirement is beginning.
5 Regular EMT trauma training is conducted through a variety of venues. Other trauma training as identified through the performance improvement process is completed in cooperation with the appropriate authorities, e.g. trauma centers and

ADPH OEMST, to ensure a collectively competent prehospital workforce in issues of trauma care.

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Essential Service: *Ensure Competent Workforce*
Indicator:
305.3 As part of the trauma center standards and regulations, set appropriate levels of trauma training for all nursing personnel who routinely care for trauma patients in acute care facilities.
Scoring:

0 Not known.
1 There are no trauma training standards for nursing personnel who routinely care for trauma patients in ATS trauma centers. Examples of applicable training are Advanced Trauma Care for Nurses (ATCN), Trauma Nursing Core Course (TNCC). Training courses may include any national or State recognized trauma nurse verification course.
2 There are trauma training standards for trauma center nursing personnel but no requirements for them to attend courses of to achieve certifications.
3 There are trauma training standards for nursing personnel written into the trauma plan.
4 There are trauma training standards (and associated rules/regulations) for nursing personnel written into the trauma plan, and nurses who care for trauma patients attend trauma training courses.
5 Nursing personnel working in acute care facilities that see trauma patients receive initial and continuing trauma training including updates in trauma care, continuing education, and trauma nurse certifications, as appropriate. Outcome data are monitored for performance improvement and subsequent training opportunities.

Essential Service: *Ensure Competent Workforce*
Indicator:
305.4 Ensure that appropriate training regarding ATS operating rules and equipment training are provided for trauma center nursing personnel on a regular basis.
Scoring:

0 Not known.
1 There is no mechanism for providing training regarding ATS operating rules and equipment for trauma center nursing personnel throughout the jurisdiction.
2 There is a process to provide appropriate ATS operating rules and equipment training courses for trauma center nursing personnel, but courses are sporadic and not conducted by all Trauma Regions as overseen by Regional Trauma Advisory Committees.
3 There are appropriate approved training courses for ATS operating rules and equipment for trauma center nursing personnel in all Trauma Regions and these courses are overseen by the Regional Trauma Advisory Committees.

4 These approved training courses are provided in a regular manner and will include initial courses as well as opportunities for special topics identified by the STACs and/or RTACS as needed.
5 Approved trauma training courses for ATS operating rules and equipment are provided regularly within each trauma region and within individual trauma centers. Courses are open to nurses from ANY facility that treats trauma patients and are matched to needs identified by either statewide or regional performance improvement activities.

Essential Service: *Ensure Competent Workforce*
Indicator:
305.5 Ensure that appropriate trauma training courses are provided for physicians on a regular basis.
Scoring:
0 Not known.
1 There is no method to approve or provide appropriate trauma training courses for physicians throughout the state.
2 There is a process to provide appropriate, approved training courses for physicians but courses are sporadic and are not coordinated with needs.
3 There are appropriate, approved trauma training courses provided regularly for physicians.
4 Trauma courses appropriate for physicians have been approved and are provided regularly. There are initial trauma courses and opportunities for special courses as needed.
5 Trauma courses for physicians are provided regularly throughout the state and within trauma centers. Courses are open to physicians from any facility that treats trauma patients and are matched to needs identified in the performance improvement process.

Essential Service: *Ensure Competent Workforce*
Indicator:
305.6 Conduct at least one multidisciplinary trauma center conference annually that encourages system and team approaches to trauma care.
Scoring:
0 Not known.
1 There are no multidisciplinary trauma conferences conducted within the state.
2 There are sporadic multidisciplinary trauma conferences conducted within the state.
3 Multidisciplinary trauma conferences are conducted occasionally and attendance by trauma practitioners is monitored and reviewed.
4 Multidisciplinary trauma conferences are conducted at least annually within the state.
5 Multidisciplinary (EMS, physicians, nurses, physiatrists, policy makers, consumers, and others) trauma conferences are conducted regularly. New findings from quality assurance and performance improvement processes are

shared; and the conferences are open to all practitioners within the system. Regular attendance is required.

Essential Service: *Ensure Competent Workforce*
Indicator:
305.7 As new protocols and treatment approaches are instituted within the ALTrauma System, structured mechanisms are in place to inform all personnel in those changes in a timely manner.
Scoring:

0 Not known.
1 There is no structured mechanism to inform or educate personnel in new protocols or treatment approaches within the jurisdiction.
2 A structured mechanism is in place to inform or educate personnel in new protocols or treatment approaches but it has not been tried or tested.
3 A structured mechanism is in place to inform personnel in new protocols or treatment approaches as changes in the system are identified.
4 A structured mechanism is in place to educate personnel in new protocols and treatment approaches.
5 A structured mechanism exists to educate personnel in new protocols and treatment approaches in a timely manner and there is a method to monitor compliance with new procedures as they are instituted.

Benchmark

306. The ADPH Office of Emergency Medical Services and Trauma (OEMST) acts to protect the public welfare by enforcing various laws, rules, and regulations as they pertain to the Alabama Trauma System

Essential Service: *Enforce Laws*
Indicator:
306.1 The ADPH OEMST (the OEMST is the lead ATS agency and the State prehospital regulatory agency), will act to ensure that prehospital care is provided by licensed agencies and that those agencies are in compliance with any rules, regulations, or protocols specific to prehospital trauma care delivery (e.g. taking patients to the correct facility in accordance with pre-existing destination protocols).
Scoring:

0 Not known.
1 There is no evidence that the OEMST ensures appropriate provider agency licensure and compliance.
2 The OEMST investigates complaints concerning issues of prehospital performance.
3 The OEMST works to resolve complaints involving prehospital agencies that relate to trauma system performance.
4 The OEMST monitors compliance of prehospital provider agencies with any rules, regulations, or protocols specific to prehospital trauma care delivery.

5 The OEMST is involved in ongoing trauma system performance improvement processes and prehospital compliance with any rules, regulations, or protocols specific to prehospital care delivery, e.g. taking patients to the correct facility in accordance with pre-existing destination protocols.

Essential Service: *Enforce Laws*
Indicator:
306.2 The OEMST investigates issues of personnel noncompliance with ATS laws, rules, and regulations.
Scoring:

0 Not known
1 Individual personnel performance is not monitored.
2 Complaints about individual personnel noncompliance with ATS laws, rules, and regulations go directly to appropriate boards or licensure authorities.
3 Trauma authority personnel collaborate actively with licensure authorities to resolve complaints involving individual noncompliance with trauma laws, rules, and regulations.
4 Individual personnel performance issues are addressed within trauma performance improvement processes unless they involve breaches of State or Federal statute.
5 Appropriate boards or licensure authorities are involved in the system performance improvement processes addressing individual personnel performance issues.

Essential Service: *Enforce Laws*
Indicator:
306.3 The OEMST enforces laws, rules, and regulations concerning the verification of trauma centers including the ability to designate trauma facilities for matters of noncompliance.
Scoring:

0 Not known.
1 The ADPH OEMST does not have the authority to remove trauma facilities from the ATS for lack of compliance.
2 The OEMST has the authority to remove trauma facilities from the ATS for matters of noncompliance but does not monitor facility performance.
3 The OEMST has the authority to remove trauma facilities from the ATS for matters of noncompliance and monitors system performance..
4 The OEMST has the authority to remove trauma facilities from the ATS for matters of noncompliance.
5 Trauma facilities are represented in the system performance improvement process and benchmark their performance against local and national standards, issues of noncompliance are monitored and addressed as part of the performance improvement process. Removal of facilities from the ATS is reserved only as a final public health safeguard.

Essential Service: *Enforce Laws*
Indicator:

306.4 Laws, rules, and regulations are routinely reviewed and updated to continually strengthen and improve the trauma system.
Scoring:

0 Not known.
1 There is no process for examining laws, rules, or regulations.
2 Laws, rules, and regulations are reviewed and revised only in respons to a "crisis" (e.g. malpractice insurance costs).
3 Laws, rules, and regulations are reviewed and revised on a periodic schedule, e.g. every 5 years.
4 Laws, rules, and regulations are reviewed by agency personnel on a continuous basis and are revised as needed.
5 Laws, rules, and regulations are reviewed as part of the performance improvement process involving representatives of all system components and are revised when they negatively impact system performance.

Essential Service: *Enforce Laws*
Indicator:
306.5 The OEMST routinely evaluates all components of the system to assure compliance with various laws, rules, and regulations pertaining to their role and performance within the trauma system.
Scoring:

0 Not known.
1 The OEMST does not have the authority to evaluate all system components, e.g. prehospital.
2 Complaints concerning individual component performance within the ATS go directly to the licensure agency responsible for that component.
3 ATS personnel collaborate actively with licensure agencies to resolve complaints involving component performance within the trauma system.
4 Deficiencies in individual system components are addressed as part of the trauma system improvement process.
5 System components are equitably represented in the ATS improvement process and work to improve individual component compliance and overall trauma system performance.

Essential Service: *Enforce Laws*
Indicator:
306.6 Incentives are provided to individual component agencies and institutions to seek State or nationally recognized accreditation in areas that will contribute to overall improvement across the ATS, e.g. Commission on Accreditation of Ambulance Services (CAAS) for prehospital agencies, Council on Allied Health Accreditation (CAHEA) for training programs, American College of Surgeons (ACS) verification for trauma facilities, and others.
Scoring:

0 Not known.
1 There are no incentives for outside review and accreditation.

2 Accreditation processes are generally encouraged but are not specifically acknowledged; for example, no special dispensation is offered to agencies or institutions completing such accreditation.
3 Accreditation processes are strongly encouraged, and some incentives are provided, for example extension of EMS agency review from 2 years to 3 years after CAAS accreditation.
4 Incentives are provided to agencies that successfully complete outside accreditation processes, for example, acceptance of CAAS accreditation instead of local EMS agency review.
5 As part of the system performance improvement process, the impact of outside review and accreditation on various agencies and institutions is monitored, and incentives are provided as appropriate.