

Introduction

Regional Trauma Network Development

MDCH Administrative Rules R325.125 through R325.138 requires the submission of an application by the Medical Control Authorities (MCA) in a geographic region (formally known as emergency preparedness region). Approval of the application by the Michigan Department of Community Health serves to formally recognize this entity as a Regional Trauma Network (RTN).

“Establish Regional Trauma Networks, consistent with current emergency preparedness regions, to provide system oversight of the trauma care provided in each region of the state.” R325.129 Rule 5 (k)

The application template that follows is an adaptation of the US Department of Health and Human Services (HRSA) *Model Trauma System Planning and Evaluation (2006)*. The application has adopted or adapted 20 of the HRSA indicators in order to initiate a regional evaluation of current trauma system status.

Application

Section 1 – Governance: Documentation that the organizational network structure described in the administrative rules above has been addressed.

Section 2- Work plan: Administrative Rule 325.132 requires that each regional network submit a comprehensive system development plan as a component of the application for recognition as a RTN. The following sections are devised as a means by which each RTN and its subcommittees, including the Regional Trauma Advisory Council (RTAC) and Peer Standards Review Organization (PSRO), can assess the current status of the region's trauma system and by which the STAC and EMSCC may objectively review each application. After assessing each indicator, the RTN must write at least one SMART objective (specific, measurable, attainable, relevant, and time-bound) to address the indicator, with the understanding that progress towards a mature, fully functioning, all inclusive regional trauma system is the goal. The cumulative set of written objectives will then serve as the region's **initial** system development plan.

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The 10 required components of the Regional Trauma Network Plan are:

- 1) Injury prevention
- 2) Access to the system
- 3) Communications
- 4) Medical oversight
- 5) Pre-hospital triage criteria
- 6) Trauma diversion policies
- 7) Trauma bypass protocols
- 8) Regional trauma treatment guidelines
- 9) Regional quality improvement plans
- 10) Trauma education

Upon completion, each RTN application will have an assessed score. Scoring of the assessment provides a means for each RTN to individually track progress over time. The assessment score is meant only to assess and track the status of each individual region; assessment scores will not be used to compare and/or rank RTN status or progress against each other. Renewal applications are expected to reflect progress in system development.

Application Scoring

All Regional Trauma Network applications will be submitted to the Statewide Trauma Advisory Committee (STAC) for scoring and comments. STAC will utilize the HRSA model which describes trauma system indicators and offers a scoring process: meeting the highest score (5) in every indicator would describe a mature highly functioning trauma system. Each RTN, with the advice of the RTAC, should realistically assess the current status of the region's trauma care system, using the 0-5 scoring scale, in order to arrive at a baseline score. The current score should suggest the gap between the system's current status and a desirable for subsequent assessment.

Scoring the 10 System Components

Benchmarks are global goals, expectations or outcomes that refer to the components of the trauma system plan. In scoring the trauma system, a benchmark identifies a broad system attribute.

Indicators are the tasks or outputs that characterize the benchmark. Indicators identify actions or capacities within the benchmark and are the measurable components of the benchmark.

Scoring reduces the indicator to action steps. The score offers an assessment of the current status, and subsequent scoring will mark progress over time in reaching a desirable benchmark.

Within each of the 10 *functions* there are a variety of potential benchmarks based, to the extent possible, on HRSA guidelines for model trauma system planning. For each of the 10 functions, a number of descriptive *indicators* further define the function's potential benchmark and a score for each indicator to assist in identifying efforts, progress, compliance, or any combination of these. Each indicator contains a scoring "mechanism" of ordered statements to assist in assessing progress to date.

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The following criteria are used to assess the region’s conformance to the indicator:

Score	Progress Scoring
0	Not known
1	No
2	Minimal
3	Limited
4	Substantial
5	Full

The table below is an example of how the above criteria are used to assess trauma system progress for a specific indicator.

Example of Progress Scoring

Indicator: A thorough description of the epidemiology of injury in the region exists, using both population-based data and clinical data bases.

Score	Criteria
0	The scorer does not know enough about the indicator to evaluate it effectively.
1	There is no detailed analysis of injury mortality.
2	Death certificate data have been used to describe the incidence of trauma deaths aggregating all etiologies, but no E-code reporting is available.
3	Death certificate data, by E-code, are reported on a statewide basis, but are not reported regionally.
4	Death certificate data, by E-code, are reported on a statewide and regional basis. These data are compared to national benchmarks, if available.
5	Death certificate data, by E-code, are used as part of the overall assessment of trauma care both statewide and regionally, including rural and urban preventable mortality studies.

In this example, the region should review the listed criteria and select the one that best describes its current ability to describe injury mortality, ranging from none (0) in neophyte systems to the ability to accurately describe preventable deaths (5) occurring with the trauma care system of the most mature trauma systems. A median score of 3 would indicate that there is evidence of limited, but demonstrable, progress in meeting the expectation.

Although the scoring mechanism provides a quantitative descriptor of each indicator, and the region in general, the scoring process has limitations:

- The benchmarks focus on process measures, not outcomes. The assumption is that meeting these process measures will result in improved outcomes.
- The evaluation method relies on the qualitative judgments of the region’s evaluators.
- The regions are cautioned not to draw conclusions from the numerical “score”. Because the scale points are not discrete points on an ordered scale it is not possible to state that a 4 is twice as good as a 2. The score only denotes relative progress in achieving the benchmark.

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- The benchmarks and indicators are not comprehensive. As the document evolves these are expected to change.

The application's scoring tool is intended to help each region meet the trauma system development plan requirement of the administrative rules, and to assist the regions in identifying individual strengths and weaknesses, prioritize actions and measure progress against itself over time

Michigan has had limited opportunity to fully address these indicators in a systemic fashion, so each regional trauma network should expect their average indicator scores to be within the range of 1-3. The expectation for this initial application is that the evaluation of each region's indicators will drive a systems approach for outlining the governance, goals, objectives, strategies and timelines that address each indicator, and that the region will build on them in a systematic, foundational way until the system maturity is reached.

Filing Instructions

The application must be completed, typed and signed. An application checklist has been included in the application packet to facilitate the process.

Completed applications should be mailed to:

Michigan Department of Community
Health Bureau of Legal Affairs
Crime Victims, EMS and Trauma Division
Trauma Section
Capitol View Bld., 6th Floor
201 Townsend Street
Lansing MI 48913
Attention: Eileen Worden, State Trauma Manager

A registered letter will be mailed to the contact listed on the application within 90 days of receipt of the completed application.

For questions please contact Eileen Worden wordene@michigan.gov (517) 241-3020 or your Regional Trauma Coordinator.

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System Governance: Each region shall establish a regional trauma network. All Medical Control Authorities within a region must participate in a regional network and life support agencies shall be offered membership on the regional trauma advisory council. Regional trauma advisory committees shall maximize the inclusion of their constituents. The regional trauma network establishes a process to assess, develop and evaluate the trauma system in cooperation with the regional stakeholders in trauma care.

➔ Indicates current status.

Rule HRSA #	Indicator	Score
325.132(3) 202.2	The RTN has developed and implemented a multi-disciplinary, multi-agency Regional Trauma Advisory Council to provide overall guidance for trauma system planning and implementation. The committee meets regularly and is responsible for providing guidance to the RTN.	0. Not known. 1. ➔ <i>There is no multi-disciplinary, multi-agency RTAC to provide guidance to the RTN.</i> 2. An RTAC has not been appointed, and attempts to organize one have not been successful but are continuing. 3. The RTAC has been appointed, but its meetings are infrequent, and the RTN has not always sought its guidance or the RTAC is not active. Collaborative working arrangements have not been realized. 4. The RTAC is active and members regularly attend meetings. Collaboration and consensus are beginning. 5. The RTAC is active and has well defined goals and responsibilities. It meets regularly and has the support of the RTN. The RTAC routinely provides assistance and guidance to the RTN on system issues and responsibilities. The RTAC has multiple subcommittees that meet as needed to resolve specific system issues and to report back to the RTAC and RTN. There is strong evidence of consensus building among system participants.
325.132(3)(c)(i) 202.3	A clearly defined and easily understood governance and communication structure is in place for regional trauma system operations.	0. Not known. 1. There is no defined structure (written process) for the RTN or committees. 2. There is an informal process for operations that the RTN uses when convenient, although not regularly or consistently. 3. ➔ <i>The regional governance structure and communication pathways are defined within the RTN bylaws, although the process has not been fully implemented.</i> 4. The regional governance structure and communication pathways are defined in the bylaws, and there are policies and procedures to guide system operations. Use of this process is infrequent. 5. There are clearly defined structure and communication pathways for the region. The regional operation is articulated in the bylaws and maximizes the inclusion of the regional stakeholders in trauma care.

2013 - 2014 "System Governance" objectives are located on the next page.

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2013 - 2014 System Governance Objective(s):

1. *By March 31, 2014, the Region 7 RTN will have appointed a RTAC in accordance with the Region 7 Bylaws which includes, at a minimum, representatives of the following disciplines for each of its counties:*
 - *Medical Control Authorities*
 - *Life Support Agencies*
 - *Hospitals*
 - *EMS Physicians*
 - *Trauma Surgeons*
 - *Trauma Program Managers*
 - *EMS personnel*
 - *Nurses*
 - *Consumers*
2. *By December 31, 2014, the RTAC membership will be active and meeting at least quarterly as evidenced by meeting minutes.*
3. *By March 31, 2014, a clearly defined structure and communication pathway will be in place for the region which will maximize the inclusion of the regional stakeholders in trauma care as evidenced through a written policy adopted by the RTN.*

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Injury Prevention: The RTN, in cooperation with other agencies and organizations, uses analytical tools to monitor the performance of population-based (regional) injury prevention programs.

➔ Indicates current status.

Rule HRSA #	Indicator	Score
325.132(3)(c)(ii)(A) 306.2	The RTN is active within the region in the monitoring and evaluation of community-based injury prevention activities and programs.	0. Not known. 1. ➔ The RTN does not actively participate in the monitoring and evaluation of injury prevention activities and programs in the region. 2. The RTN does some minimal monitoring and evaluation of injury prevention activities and programs in the region. 3. The RTN monitors and evaluates injury prevention activities and programs in the region. 4. The RTN is an active participant in injury prevention programs in the region, including the evaluation of program effectiveness. 5. The RTN is integrated with injury prevention activities and programs in the region. Outreach efforts are well coordinated and duplication of effort is avoided. Ongoing evaluation is routine and data are used to make program improvements.
325.132(3)(c)(ii)(A) 203.5	The RTN has developed a written injury prevention and control plan that is coordinated with other agencies and community health programs in the region. The injury prevention program is data driven and targeted programs are developed based upon high injury risk areas. Specific goals with measurable objectives are incorporated into the injury prevention plan.	0. Not known. 1. ➔ There is no written plan for coordinated injury prevention programs within the region. 2. Although the RTN has a written injury prevention and control plan, it is not fully implemented. There are multiple injury prevention programs within the region that may compete with one another, or conflict with the goals of the regional trauma system, or both. 3. There is a written plan for coordinated injury prevention programs within the region that is linked to the regional trauma system plan, and that has goals and time-measurable objectives. 4. The regional injury prevention and control plan is being implemented in accordance with established objectives, timelines and the region is collecting data. 5. The injury prevention plan is being implemented in accordance with established timelines. Data concerning the effectiveness of the injury prevention programs are being collected and are used to validate, evaluate, and modify the program.

2013 – 2014 “Injury Prevention” objectives are located on the next page.

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2013 – 2014 Injury Prevention Objective(s):

- 1. By March 31, 2014, the Region 7 RTN shall appoint an injury prevention subcommittee which will consist of representatives from the RTAC along with other persons from the region with regional injury prevention program expertise, as evidenced by a membership roster.*
- 2. By December 31, 2014, the Injury Prevention Subcommittee will have established a process for identification, monitoring and evaluation of injury prevention activities and programs in the region as evidenced by a written procedure for inclusion in the region's injury prevention plan.*
- 3. By March 31, 2015, the Injury Prevention Subcommittee will have identified the top 5 injury mechanisms in the region for adults and for children as reported to the RTN in subcommittee meeting minutes.*
- 4. By June 30, 2015, the Injury Prevention Subcommittee will have developed a written set of goals and S.M.A.R.T. objectives for the region's injury prevention and control plan.*

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Citizen access to the trauma system: The trauma system is supported by EMS medical oversight of dispatch procedures and coordinated response resources.

➔ Indicates current status.

Rule HRSA #	Indicator	Score
325.132(3)(c)(ii)(B) 302.4	The trauma system EMS medical directors are actively involved with the development, implementation, and ongoing evaluation of EMS system dispatch protocols to ensure they are congruent with the trauma system design. These protocols include, but are not limited to, which resources to dispatch (ALS v BLS), air-ground coordination, early notification of the trauma facility, pre-arrival instructions, and other procedures necessary to ensure dispatched resources are consistent with the needs of injured patients.	0. Not known. 1. ➔ <i>There are no trauma specific regional EMS dispatch protocols.</i> 2. Trauma dispatch protocols have been adopted independent of the design of the regional trauma system. 3. Regional trauma specific 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 the protocols with the RTN or trauma centers. 4. Regional trauma specific dispatch protocols have been developed in close coordination with the RTN and are congruent with regional trauma system design. 5. Regional trauma specific dispatch protocols have been developed in close coordination with the RTN and are congruent with the regional trauma system design. There are established procedures to involve dispatchers and their supervisors in trauma system performance improvement and a “feedback loop” to change protocols or to update dispatcher education when appropriate.
325.132(3)(c)(ii)(B) 302.8	There are sufficient, well-coordinated air and ground ambulance resources to ensure that EMS providers arrive at the trauma scene to promptly and expeditiously transport the patient to the correct hospital by the correct transportation mode.	0. Not known. 1. ➔ <i>There is no regional coordination of transportation resources. Air or ground ambulances from multiple jurisdictions can all arrive on the trauma scene unannounced.</i> 2. Each medical control authority has a priority dispatch system in place that sends appropriate transportation resources to the scene. 3. Each medical control authority has a priority dispatch system that ensures appropriate resources arrive on scene promptly to transport patients to the hospital. A plan for transporting trauma patients to the hospital has been completed. 4. Each medical control authority has a priority dispatch system that ensures appropriate system resources for prompt transport of trauma patients to trauma centers. A trauma transport plan has been implemented. System issues are evaluated, and corrective action plans are implemented as needed. 5. Region wide priority dispatch has been established. The dispatch system regularly assesses its ability to get the right resources to the scene and to transport patients by using the correct mode of transportation. The priority dispatch system is integrated into the overall EMS and trauma system.

2013 - 2014 “Citizen Access to the Trauma System” objectives are located on the next page.

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2013 – 2014 Citizen Access to the Trauma System Objective(s):

- 1. By September 30, 2014, the RTN will have convened a sub-committee to meet with Region 7 Central Dispatch Directors to establish dialogue in an effort to work towards a regionalized trauma dispatch protocol as evidenced by sub-committee minutes.*
- 2. By December 31, 2014, all Region 7 medical control authorities will have adopted trauma specific regional protocols for the dispatch of life support agencies which include, but is not limited to, which resources to dispatch (ALS v BLS), air-ground coordination, early notification of the trauma facility, pre-arrival instructions, and other procedures necessary to ensure dispatched resources are consistent with the needs of injured patients as evidenced through MDCH approved protocols.*

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Trauma system communications: The regional trauma system is supported by a coordinated communication system linking and integrated hospitals, life support agencies, the EMS system and the Regional Trauma Network.

➔ Indicates current status.

Rule HRSA #	Indicator	Score
325.132(3)(c)(ii)(C) 302.10	There are established procedures for EMS and trauma system communications for major EMS events or multiple jurisdiction incidents-that are effectively coordinated with the overall regional response plans.	0. Not known. 1. There are no written procedures for regional EMS and trauma systems communications for major EMS events or multiple jurisdiction incidents. 2. ➔ Local medical control authorities have written procedures for EMS communications during major events. However, there is no coordination among the adjacent local jurisdictions. 3. There are written regional EMS communications procedures for major EMS events. These procedures do not involve other jurisdictions and are not coordinated with the overall regional response plans or incident management system. 4. There are written regional EMS communications procedures for major EMS events and multiple jurisdiction incidents that are coordinated with adjacent jurisdictions, with the overall regional response plan and with the incident management system. 5. There are written regional EMS communications procedures for major EMS events and multiple jurisdiction incidents that are coordinated with the overall regional response plan and with the incident management system. These procedures are regularly tested in simulated incident drills, and changes are made in the procedures based on drill results, if needed.
325.132(3)(c)(ii)(C) 302.9	There is a procedure for communications among medical facilities when arranging for inter-facility transfers including contingencies for radio or telephone system failure.	0. Not known. 1. There are no specific communications plans or procedures to ensure communication among medical facilities when arranging for inter-facility patient transfers. 2. ➔ Inter-facility communication procedures are generally included in patient transfer protocols for each medical facility but there is no regional procedure. 3. There are uniform, regional communication procedures for arranging patient transfers, but there are no redundant procedures in the event of communication system failure. 4. There are uniform, regional communication procedures for arranging patient transfers and there are redundant procedures in the event of communication system failure. 5. There are uniform, regional communication procedures for arranging patient transfers and there are redundant procedures in the event of communication system failure. The effectiveness of these procedures is regularly reviewed and changes made based on the performance review, if needed.

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2013 – 2014 Communication Objective(s):

- 1. By December 31, 2014, all MCAs in the region will have adopted a common procedure for EMS and trauma system communications for major EMS events and multiple jurisdiction incidents that are coordinated with the regional disaster response plans as evidenced by RTN approval in meeting minutes.*
- 2. By December 31, 2014, all MCAs in the region will have designated a common primary and backup mode of inter-hospital communications for arranging for inter-facility transfers as evidenced by inclusion in a regional protocol and by RTN approval in meeting minutes.*
- 3. By December 31, 2014, all MCAs in the region will have adopted a common procedure which delineates the information which must be communicated by hospitals when arranging for the inter-hospital transfer of a trauma patient as evidenced by RTN approval in meeting minutes and inclusion in a regional protocol.*
- 4. By June 30, 2015, all MCAs in the region will have a letter on file which states that a common regional EMS protocol which includes the procedures outlined in #1, 2, and 3 above has been approved for adoption by the Department.*

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Medical Oversight: The regional trauma system is supported by active EMS medical oversight of trauma communications, pre-hospital triage, treatment, and transport protocols.

➔ Indicates current status.

Rule HRSA #	Indicator	Score
325.132(3)(c)(ii)(D) 302.1	There is well defined regional trauma system medical oversight integrating the specialty needs of the trauma system the medical oversight of the overall EMS system.	0. Not known. 1. ➔ Medical oversight of EMS providers caring for trauma patients is provided by local medical control authorities, but is outside of the purview of the regional trauma system. 2. EMS and trauma medical directors collaborate in the development of protocols for pre-hospital providers providing care to trauma patients. 3. The RTN has adopted state approved regional trauma protocols. 4. The regional trauma system has integrated medical oversight for pre-hospital providers and evaluates the effectiveness of both on-line and off-line medical control. 5. The EMS and regional trauma system fully integrate the medical oversight processes and regularly evaluate program effectiveness by correlating data with optimal outcomes. Pre-hospital EMS providers from the region are included in the development of medical oversight procedures.
325.132(3)(c)(ii)(D) 302.2	There is a clearly defined, cooperative, and ongoing relationship between regional trauma physician leaders and the EMS system medical directors in the region.	0. Not known. 1. There is no formally established, ongoing relationship between the individual trauma medical directors and the EMS system medical directors. There is no evidence of informal efforts to cooperate or communicate. 2. ➔ There is no formally established, ongoing relationship between the individual trauma medical directors and the EMS system medical directors. However, the trauma medical directors and EMS medical directors informally communicate to resolve problems and coordinate efforts. 3. Trauma medical directors or designated trauma representatives participate in EMS oversight through participation in local medical control authority meetings. However, there is no formal written relationship. 4. There is a formal, written procedure delineating the responsibilities of individual trauma center medical directors and EMS system medical directors that specifies the formal method for cooperation. However, implementation is inconsistent. 5. There is a formal, written procedure delineating the responsibilities of individual trauma center medical directors and EMS system medical directors that specifies the formal method for cooperation. There is written documentation (minutes) indicating this relationship is regularly used to coordinate efforts.

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2013 – 2014 “Medical Oversight” objective(s):

- 1. By December 31, 2014, the RTN will have appointed an EMS medical oversight subcommittee which includes EMS and trauma medical directors as evidenced by a formal roster.*
- 2. By December 31, 2014, the EMS medical oversight subcommittee will begin collaborating in the oversight of pre-hospital providers providing care to trauma patients as evidenced by subcommittee meeting minutes.*
- 3. By June 30, 2015, the EMS medical oversight subcommittee will be meeting at least quarterly to evaluate program effectiveness for both on-line and off-line medical control as demonstrated by meeting minutes submitted to the RTN.*

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Pre-hospital Triage Criteria: The regional trauma system is supported by system-wide pre-hospital triage criteria.

➔ Indicates current status.

Rule HRSA #	Indicator	Score
325.132(3)(c)(ii)(E) 302.6	The region has adopted mandatory regional pre-hospital triage protocols to ensure that trauma patients are transported to an appropriate trauma center based on their injuries. The triage protocols are regularly evaluated and updated to ensure acceptable and region-defined rates of sensitivity and specificity for appropriate identification of a major trauma patient.	0. Not known. 1. ➔ <i>There are no mandatory regional triage criteria to ensure trauma patients are transported to the most appropriate trauma facility.</i> 2. There are different triage criteria used by different providers. Appropriateness of triage protocols and subsequent transportation are not evaluated for sensitivity or specificity. 3. Regional triage criteria are used by all pre-hospital providers. There is no current process in place for evaluation. 4. The regional triage criteria are used by all pre-hospital providers. There is region-wide evaluation of the effectiveness of the triage criteria in identifying trauma patients and in ensuring that patients are transported to the appropriate trauma facility. 5. Region participants routinely evaluate the triage criteria for effectiveness. There is linkage to performance improvement processes, and the over- and under- triage rates of the criteria are regularly reported through the RTN. Updates to the triage protocols are made as necessary to improve system performance.

2013 – 2014 “Trauma Triage Criteria” objectives are located on the next page.

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2013 – 2014 Trauma Triage Criteria Objectives:

- 1. By August 31, 2014, the medical oversight subcommittee will have drafted a regional pre-hospital triage protocol consistent with the intent of the CDC Guidelines for the Field Triage of Injured Patients.*
- 2. By December 31, 2014, the RTN will have adopted a regional pre-hospital triage protocol as demonstrated by way of inclusion in the region's annual report to the Department.*
- 3. By July 31, 2015, all MCAs in the region will have adopted a regional pre-hospital triage protocol to ensure that trauma patients are transported to an appropriate trauma center based on their injuries as evidenced by letters indicating approval of said protocol by MDCH-EMS.*
- 4. By September 30, 2015, the regional education subcommittee will have developed a plan for the education of pre-hospital providers in the regional pre-hospital triage protocol as evidenced by submission of the plan to the RTN for formal approval.*

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Trauma Diversion Policies: Diversion policies ensure that acute care facilities are integrated into an efficient system to provide optimal care for all injured patients.

➔ Indicates current status.

Rule HRSA #	Indicator	Score
325.132(3)(c)(ii)(F) 303.2	The regional trauma network plan should ensure that the number, levels, and distribution of trauma facilities are communicated to all partners and stakeholders. The RTN should develop procedures to insure that trauma patients are transported to an appropriate facility that is prepared to provide care.	<p>0. Not known.</p> <p>1. ➔ <i>There is no regional plan to identify the number, levels, and distribution of trauma facilities. There is no regional diversion protocol.</i></p> <p>2. There is a regional system plan and a diversion protocol but they do not identify the number, levels or distribution of trauma facilities in the region. The plan and protocol are not based on available data.</p> <p>3. There is a regional system plan and a diversion protocol that identifies the number, levels and distribution of trauma facilities. System updates using available data not routine.</p> <p>4. There is a regional system plan and a diversion protocol that identifies the number, levels and distribution of trauma facilities based on available data. However, the regional plan and diversion protocol is not used to make decisions about trauma facility designations.</p> <p>5. There is a regional system plan that identifies the number and levels of trauma facilities. The plan is used to make decisions about trauma center diversion procedures. The plan accounts for facility resources and geographic distribution, population density, injured patient volume, and transportation resource capabilities and transport times. The plan is reviewed and revised periodically.</p>
325.132(3)(c)(ii)(F) 205.3	The state trauma registry is used to identify and evaluate regional trauma care and improve the allocation of resources.	<p>0. Not known.</p> <p>1. ➔ <i>All trauma facilities in the region are not entering data into state registry. Regional data from state trauma registry is limited.</i></p> <p>2. There is limited access to the state trauma registry. Data extraction is not available to evaluate performance or improve resource allocation.</p> <p>3. All trauma facilities in the region enter data into the state trauma registry but data are not being used to improve the system.</p> <p>4. The RTN uses the state trauma registry to routinely report on system performance and resource utilization and allocation.</p> <p>5. State trauma registry reports are used extensively to improve regional trauma care and efficiently allocate trauma resources. The RTN uses these reports to determine deficiencies and allocate resources to areas of greatest need. System performance compliance with standards are assessed and reported.</p>

2013 – 2014 “Trauma Diversion Policy” objectives are located on the next page.

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2013 – 2014 Trauma Diversion Policy Objective(s):

- 1. By December 31, 2014, the RTN will have identified and communicated the current number, levels, and distribution of trauma facilities to all regional stake-holders as evidenced through copies of written communications.*
- 2. By December 31, 2014, the EMS medical oversight subcommittee will develop a facility diversion plan as evidenced by submission of said plan to the RTN for approval.*
- 3. By March 31, 2015, the RTN will have formally adopted the facility diversion plan as demonstrated in meeting minutes.*

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Trauma Bypass Protocols: The roles, resources and responsibilities of trauma care facilities are integrated into a resource efficient, inclusive network that meets standards and provides optimal care for injured patients.

➔ Indicates current status.

Rule HRSA #	Indicator	Score
325.132(3)(c)(ii)(G) 303.1	The regional trauma plan has clearly defined the roles, resources and responsibilities of all acute care facilities treating trauma, and of facilities that provide care to specialty populations (spinal cord injury, burns, pediatrics, other).	0. Not known. 1. ➔ <i>There is no regional plan that outlines roles, resources and responsibilities of all acute care facilities treating trauma and/or of facilities providing care to specialty populations.</i> 2. There is a regional trauma system plan, but it does not address the roles, resources and responsibilities of licensed acute care facilities and/or specialty care facilities. 3. The regional trauma plan addresses the roles, resources and responsibilities of licensed acute care facilities (hospitals) only, not spinal cord injury, pediatrics, burns or others. 4. The regional trauma plan addresses the roles, resources and responsibilities of licensed acute care facilities and specialty care facilities. 5. The regional trauma plan clearly defines the roles, resources and responsibilities of all acute care facilities treating trauma within the region. Specialty care services are addressed within the plan, and appropriate policies and procedures are implemented and tracked.
325.132(3)(c)(ii)(G) 303.4	There is a regional trauma bypass protocol that provides EMS guidance for bypassing a trauma care facility for another more appropriate trauma care facility.	0. Not known. 1. ➔ <i>There is no regional trauma bypass protocol to provide pre-hospital guidance about when to bypass an acute care facility for a more appropriate facility.</i> 2. There is a regional bypass protocol that allows bypass of an acute care facility, but does not provide guidance for what the more appropriate facility may be. 3. There is a regional bypass protocol that provides EMS guidance for bypassing an acute care facility for a more appropriate trauma care facility and provides guidance on the levels of each facility in the region. 4. There is a regional bypass protocol that allows bypass of an acute care facility and provides guidance on what the most appropriate facility is based on the patient's injury. 5. The regional bypass protocol clearly defines the process for bypassing an acute care facility for another trauma facility more appropriate for the patient's injuries. Incidents of trauma facility bypass are tracked and reviewed regularly, and protocol revisions are made as needed.

2013 – 2014 "Trauma Bypass Protocol" objectives are located on the next page.

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2013 – 2014 Trauma Bypass Protocol Objective(s):

- 1. By December 31, 2014, the EMS medical oversight subcommittee will develop a trauma bypass plan as evidenced by submission of said plan to the RTN for approval.*
- 2. By March 31, 2015, the RTN will have formally adopted the trauma bypass plan as demonstrated in meeting minutes.*

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Regional Trauma Treatment Guidelines: The regional trauma network ensures optimal patient care through the development of regional trauma treatment guidelines.

➔ Indicates current status.

Rule HRSA #	Indicator	Score
325.132(3)(c)(ii)(H) 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 that the patients are expeditiously transferred to the appropriate, system-defined trauma facility.	<p>0. Not known.</p> <p>1. ➔ <i>There is no existing process in the region for collecting data on and regularly reviewing the conformity of inter-facility transfers within the trauma system according to pre-established procedures.</i></p> <p>2. There is a fragmented system within the region, usually event based, to monitor inter-facility transfer of trauma patients.</p> <p>3. The regional system for monitoring inter-facility transfers is new, the procedures are in place, but training has yet to occur.</p> <p>4. The region has an organized system for monitoring inter-facility transfers.</p> <p>5. The monitoring of trauma patient inter-facility transfers is integrated into the overall program of system performance improvement. When the system identifies issues for correction, a plan of action is implemented.</p>
325.132(3)(c)(ii)(H) 205.2	Collected data from a variety of sources are used to review the appropriateness of all-inclusive regional trauma performance standards, from injury prevention through rehabilitation.	<p>0. Not known.</p> <p>1. ➔ <i>There are no written, quantifiable regional system performance standards or performance improvement processes.</i></p> <p>2. There are written, quantifiable regional system performance standards for each component of the regional trauma system that conform to standards outlined in the Administrative Rules.</p> <p>3. The RTN has adopted written, quantifiable regional system performance standards.</p> <p>4. The RTN routinely uses data from multiple sources to assess compliance with regional system performance standards.</p> <p>5. The RTN uses regional system compliance data to design changes or make other system refinements. There is routine and consistent feedback to all system providers to ensure that data-identified deficiencies are corrected.</p>

2013 – 2014 Regional Trauma Treatment Guidelines objectives:

1. *By December 31, 2014, the medical oversight subcommittee will develop a trauma transfer protocol to insure patients are expeditiously transferred to an appropriate level of care as evidenced by submission of said plan to the RTN for approval.*
2. *By March 31, 2015, the RTN will have formally adopted the trauma transfer protocol as demonstrated in meeting minutes.*
3. *By March 31, 2015, the medical oversight subcommittee, with input from the RPSRO, will have developed written, quantifiable regional system performance standards for each component of the regional trauma system that conform to standards outlined in the Administrative Rules.*
4. *By March 2015, the RPSRO will have identified and will routinely use data from multiple sources to assess compliance with regional system performance standards.*

Michigan Department of Community Health
 Crime Victims, EMS & Trauma Systems Division

Regional Quality Improvement Plans: The RTN/RTAC uses system data to evaluate system performance and regularly reviews system performance reports to develop regional policy.

➔ Indicates current status.

Rule HRSA #	Indicator	Score
325.132(3)(c)(ii)(I) 206.1	No less than once per year, the RTN generates data reports that are disseminated to all trauma system stakeholders to evaluate and improve system performance.	0. Not known. 1. ➔ <i>The RTN does not generate trauma data reports for evaluation and improvement of system performance.</i> 2. Some general trauma system information is available to stakeholders, but it is not consistent or regular. 3. Regional data reports are done on an annual basis, but are not used for decision-making and/or evaluation of system performance. 4. Routine reports are generated using regional trauma data and other databases so that the system can be analyzed, standards evaluated, and performance measured. 5. Regularly scheduled reports are generated from regional trauma data and are used by the stakeholder groups to evaluate and improve system performance effectiveness.

2013 – 2014 “Regional Quality Improvement Plan” objectives:

1. *By July 1, 2014, the RTN will appoint a regional PSRO committee to review system performance as evidenced by a formal roster of appointees.*
2. *The regional PSRO committee will draft a regional PSRO plan for adoption by the RTN by July 31, 2015.*
3. *The regional PSRO committee will begin submitting an annual report of system performance to the RTN for approval no later than December 31, 2015.*

Michigan Department of Community Health
Crime Victims, EMS & Trauma Systems Division

Trauma Education: The regional trauma network ensures a competent workforce through trauma education standards.

➔ Indicates current status.

Rule HRSA #	Indicator	Score
325.132(3)(c)(ii)(J) 310.(3)(4)(6)	The regional trauma network establishes and ensures that appropriate levels of EMS, nursing and physician trauma training courses are provided on a regular basis.	0. Not known. 1. ➔ <i>There are no regional trauma training guidelines for EMS personnel, nurses or physicians who routinely care for trauma patients.</i> 2. There are regional trauma training standards for EMS personnel, nurses and physicians but there is no requirement for course attendance. 3. There are regional trauma training requirements for EMS personnel, nurses and physicians written into the regional trauma system plan. 4. There are trauma training requirements for EMS personnel, nurses and physicians written into the regional trauma system plan and all personnel providing trauma patient care participate in trauma training. 5. All regional trauma care providers receive initial and ongoing trauma training, including updates in trauma care, continuing education and certifications, as appropriate.
325.132(3)(c)(ii)(J) 310.10	As new protocols and treatment approaches are instituted within the regional trauma system, structured processes are in place to inform or educate all personnel of those changes in a timely manner.	0. Not known 1. ➔ <i>The region has no process in place to inform or educate all personnel on new protocols or treatment approaches.</i> 2. The region has developed a process to inform or educate all personnel on new protocols or treatment approaches but it has not been tried or tested. 3. The region has a process in place to inform or educate all personnel on new protocols or treatment approaches as system changes are identified. 4. The region has a <i>structured</i> process in place to <i>routinely</i> inform or educate all personnel on new protocols or treatment approaches. 5. The region has a structured process to educate all personnel on new protocols or treatment approaches in a timely manner, and there is a method to monitor compliance with new procedures as they are introduced.

2013 – 2014 Regional Trauma Education Objective(s):

1. *By December 31, 2014, the regional trauma education subcommittee will have developed regional trauma training recommendations for EMS personnel, nurses and physicians as evidenced by submission of the recommendations to the RTN for approval.*

2. *By December 31, 2014, the regional trauma education subcommittee will have drafted a process to inform or educate all personnel on new protocols or treatment approaches as system changes are identified as evidenced by submission of the draft process to the RTN.*