

MICHIGAN ANNUAL REGIONAL TRAUMA REPORT-2022

REGION 3

Statutory Reference: R325.132 Rule 8 (3) (a) At least quarterly, a region shall submit evidence of ongoing activity, such as meeting notices, minutes to the department. Annually the regional trauma advisory council shall file a report with the department which describes progress toward system development, demonstrates ongoing activity, and includes evidence that members of the regional trauma advisory council are currently involved in trauma care.

OVERVIEW AND ASSESSMENT OF RESOURCES:

Demographics:

Region 3 is located on the eastern side of the state that is often referred to as the Great Lakes Bay Region. The region is comprised of fourteen counties: Alcona, Arenac, Bay, Genesee, Gladwin, Huron, Iosco, Lapeer, Midland, Ogemaw, Oscoda, Saginaw, Sanilac, and Tuscola. The region has twenty hospitals, ten health departments, and twelve medical control authorities that oversee 22 licensed transporting life support agencies ranging from Basic Life Support (BLS) and Advanced Life Support (ALS) levels along with 2 rotary-wing air ambulances. There is also a pediatric critical care interfacility rotary-wing agency based at Flint Bishop airport, one of two international airports in the region. Region 3 is a highly diverse area comprised of small rural farming communities to medium sized cities. The United States Census Bureau estimates the population of the region to be approximately 1.1 million residents (2019). There are four urban areas within the region: Bay City, Flint, Midland and Saginaw. There is lengthy shoreline of Lake Huron that shares an international border with Canada and attracts many anglers to the Saginaw Bay fishery. The US Coast Guard Station Saginaw River provides supports and protects these waterways. The region is home to several colleges and universities such as the University of Michigan-Flint, Saginaw Valley State University, Northwood University as well as Mott and Delta Colleges. The largest employers include the Dow Chemical company, General Motors, and many of the healthcare systems throughout the region. Region 3 is also home to Frankenmuth, "Michigan's Little Bavaria". The tourist destination has approximately 3 million visitors per year with its many festivals and attractions.

Medical Control Authorities:

MCA Name	Medical Director
Alcona County Northeast MI MCA	Dr. Alison Bracken, DO
Arenac County MCA	Dr. Bobby May, DO
Bay County MCA	Dr. Brad Blaker, DO
Genesee County MCA	Dr. Austin Burgess, MD
Huron County MCA	Dr. Brent Felton, DO
Iosco County MCA	Dr. Bobby May, DO
Lapeer County MCA	Dr. Joseph Zaczkowski, MD
Midland/Gladwin County MCA	Dr. Danny Greig, MD
Ogemaw County MCA	Dr. Paul Bucchi, MD
Oscoda County North Central MCA	Dr. Shaun Ramsey, DO
Saginaw/Tuscola MCA	Dr. Noel Wagner, MD
Sanilac County MCA	Dr. William Starbird, MD

Designation Status of Facilities in Region:

Facility Name	Designated Yes or No	Level of Designation
Hurley Medical Center-Flint	Yes	I Adult II Pediatric
Ascension St. Mary's of Michigan-Saginaw	Yes	II
Ascension Genesys Medical Center-Grand Blanc	Yes	II
Covenant Healthcare-Saginaw	Yes	II Adult II Pediatric

McLaren Lapeer Region - Lapeer	Yes	II
MyMichigan Medical Center-Midland	Yes	II
McLaren Bay Region-Bay City	Yes	III
McLaren Flint	Yes	III
Ascension St. Joseph-Tawas City	Yes	IV
Ascension Standish Hospital	Yes	IV
Deckerville Community Hospital-Deckerville	Yes	IV
Harbor Beach Community Hospital	No	N/A
Hills and Dales General Hospital-Cass City	Yes	IV
Marlette Regional Hospital-Marlette	Yes	IV
McKenzie Memorial Hospital-Sandusky	Yes	IV
McLaren Caro Region-Caro	Yes	IV
Scheurer Hospital-Pigeon	Yes	IV
McLaren Thumb Region-Bad Axe	No	IV Provisional
MyMichigan Medical Center-Gladwin	No	IV Provisional
MyMichigan Medical Center-West Branch	No	IV Provisional

Governance:

Regional Trauma Network (RTN) Board

	Name and Title
Chairperson	Dr. Danny Greig, MD Medical Director
Vice Chairperson	Bruce Trevithick, Executive Director GCMCA

Regional Trauma Advisory Council (RTAC)

	Name and Title
Chairperson	Dr. Leo Mercer, MD Trauma Medical Director
Vice Chairperson	Vacant

Regional Professional Standards Review Organization

	Name and Title
Chairperson	Dr. Leo mercer, MD Trauma Medical Director
Vice Chairperson	Dr. Gul Sachwani-Daswani, MD Pediatric Trauma Medical Director

Governance Activity Report:

The Region 3 Regional Trauma Network Board (RTN) is scheduled to meet quarterly immediately following the Region 3 Regional Trauma Advisory Council (RTAC) meeting.

The Regional Trauma Advisory Council (RTAC) meets quarterly the fourth Tuesday of the month. There are 5 trauma subcommittees: Trauma Triage/Transport, Trauma Registry, Trauma Education, Injury prevention and Trauma Rehabilitation. These subcommittees are scheduled to meet quarterly prior to the RTAC meeting.

The Regional Professional Standards Review Organization (RPSRO) meets quarterly prior to the RTAC meetings. The RPSRO performs case reviews that reflect regional system issues or trends and reviews both MDHHS and MTQIP trauma related data.

Work Plan Objective Progress and Highlights:

Injury Prevention

Indicator 306.2: The RTN is active within the region in the monitoring and evaluation of regional injury prevention activities and programs.
Regional Score: (2) (4)
Objective: The Region 3 Trauma Network will create an injury prevention resource document identifying evidence-based injury prevention programs. of all regional injury prevention programs.
Progress: The Region 3 Injury Prevention Subcommittee has created an injury prevention resource document along with the completed regional injury prevention plan. This document identifies injury prevention resources in a convenient single location.

Indicator 207.4: A trauma system public information and education plan exists that heightens public awareness of trauma as a disease, the need for a trauma care system and the prevention of injury. The RTN will promote evidenced based primary injury prevention activities and projects.

Regional Score: (1) (2)

Objective: The Region 3 Trauma Network will create an injury prevention data base of all regional injury prevention programs and events.

Progress: The Region 3 Injury Prevention Subcommittee has created an injury prevention data base to track and document all injury prevention activities within the region. This data base will allow the region to better understand injury prevention activities at a regional level versus at an individual hospital level. The data base will allow the region to prioritize injury prevention efforts and reduce redundant/overlapping activities.

Indicator 203.5: The RTN has developed a written injury plan. The injury prevention plan 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.

Regional Score: (1) (3)

Objective: The Region 3 Trauma Network will develop a regional injury prevention plan and have it in place.

Progress: The Region 3 Injury Prevention Subcommittee has developed a regional injury prevention plan. The plan was presented, adopted and implemented by the RTN.

Communications

Indicator 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.

Regional Score: (2) ((4)

Objective: The Region 3 Trauma Network will develop a written contingency communication plan/protocol to be used when scheduling inter-facility transports during a radio or telephone failure.

Progress: A Region 3 communications capability template has been completed in the event of a communication failure that includes both hospital to hospital and EMS to hospital options. Additionally, the Region3 Trauma Transfer Envelope/Checklist, tertiary trauma centers are reporting receiving less patients with missing information prior to the transfer envelopes/checklists being implemented. The practice of utilizing these specific

envelope/checklists whenever transferring trauma patients is considered a standard of care for all trauma centers in Region 3.

Indicator 302.10: There are established procedures for EMS and trauma system communications for major EMS and trauma events or multiple jurisdiction incidents-that are effectively coordinated with the overall regional response plan.

Regional Score: (3) (3)

Objective: The Region 3 Trauma Network will meet with regional 911 directors to discuss the regional 911 dispatch infrastructure and the integration of regional trauma protocols into the regional 911 system.

Progress: No progress has been made to this objective for 2022, unable in finding agreeable meeting dates.

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

Regional Score: (1) (1)

Objective: The Region 3 Trauma Network will conduct a needs assessment regarding the general medical community within the region as it relates to the overall availability of information on the regional and state trauma system for physicians, nurses, EMS providers and other pertinent individuals and organizations.

Progress: Initial discussions have taken place on how best to communicate to the general medical community within the region. The RTN will continue to engage shareholders and organizations within the region to develop a needs assessment.

Infrastructure

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 system-defined rates of sensitivity and specificity for appropriately identifying the major trauma patient.

Regional Score: (3) (3)

Objective: The Region 3 RSPRO will develop a process to evaluate the effectiveness of the trauma triage and destination criteria to ensure the transport of trauma patients to the appropriate trauma facility.

Progress: The Region 3 RPSRO and Trauma Triage and Destination Subcommittee has recently formed an ad hoc workgroup to address this objective. The group has met and discussed which data elements from multiple data platforms that will be used to create a report capable of measuring system performance in relation to this objective. The group has been working with staff from biospatial to develop a custom report/template with metrics capable of measuring the effectiveness of the trauma triage and destination criteria. The region understands this to be an important part of monitoring system performance of its current trauma triage and destination criteria/protocol as well as any future modifications such as the recently published ACS field triage guidelines.

Indicator 302.1: There is a well-defined regional trauma system medical oversight integrating the needs of the trauma system with the medical oversight of the overall EMS system.

Regional Score: (3) (4)

Objective: The Region 3 Trauma Network will develop a survey to evaluate the trauma medical director and MCA medical directors or their designee's involvement in the Regional Trauma Network.

Progress: The survey to evaluate the regions trauma medical director and MCA medical directors' involvement has been completed and presented to the regional trauma network. The survey asked them to identify any barriers that would prevent participation. The survey questioned how communication is relayed from the regional meetings to staff, how often they participate in reviewing pre-hospital protocols and preferences regarding meeting schedules and platforms. We will continue to encourage active participation with the Region 3 Regional Trauma Network including oversight, protocol review and development.

Indicator 302.2: There is clearly defined, cooperative and ongoing relationship between regional trauma physician leaders and EMS system medical directors in the region.

Regional Score: (2) (3)

Objective: The Region 3 Trauma Network will develop a written process and procedure for trauma medical directors or their designees to participate in EMS oversight through participation and collaboration with local medical control authorities.

Progress: Relationships have been developed through collaborative work within the RTN where dialogue occurs between local medical control authorities and trauma medical directors. The RTN will continue to encourage these ongoing discussions and develop a written process for EMS oversight.

Indicator 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 ensure that trauma patients are transported to an appropriate facility that is prepared to provide care.

Regional Score: (4) (4)

Objective: The Region 3 Trauma Network will develop a process for utilizing the regional plan and diversion protocol to make adjustments based on facility designation.

Progress: The Region 3 RPSRO utilizes the RPSRO inventory to monitor the status of trauma center designations throughout the region as well as the number of trauma patients being transported to the various trauma centers within the region. Designated trauma centers are expected to provide diversion status via EMResource and report diversions greater than 5% of the time to the RTC.

Indicator 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 (burns, pediatrics, other).

Regional Score: (4) (4)

Objective: The Region 3 RPSRO will begin work to clarify the roles, resources and responsibilities of all regional acute care trauma facilities to ensure the transport of trauma patients to the appropriate trauma facility and adopt, implement and track appropriate policies and procedures.

Progress: The RTN encouraged the participation of the pediatric readiness survey to all facilities within the region. The region will continue to discuss specialty populations and inform what resources are available within the region.

Indicator 208.2: The incident management and trauma systems have formal established linkages for system integration and operational management.

Regional Score: (2) (3)

Objective: The Region 3 Trauma Network will approach the Region 3 Healthcare Coalition to set-up a planning meeting to discuss enhanced cooperation and linkages between both entities.

Progress: The RTC has had initial discussions with the Region 3 HCC Coordinator. These discussions have led to invitation for the RTN to participate along with the HCC in the upcoming annual Medical Response and Surge Exercise. The RTN has committed to participating in this event and look forward to further strengthening relationships and linkages between the RTN and HCC.

Regional Performance Improvement

Indicator 206.1: The RTN generates data reports to evaluate and improve system performance.

Regional Score: (2) (4)

Objective: The Region 3 RPSRO will utilize appropriate data reports to improve regional system performance improvement based on the availability of the data. Examples of potential resources would be MTQIP, State Trauma Registry (image Trend) and biospatial.

Progress: The Region RPSRO utilizes MTQIP reports as well as the RPSRO Inventory to monitor systems performance measures such as ED Dwell Time, average LOS, external injury causes, incidents by designation level as well as ISS compared to state metrics. The RPSRO has worked with local medical control authorities, the state trauma registrar and epidemiologist generating reports from various data sets to link data between the trauma registry and MIEMIS.

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.

Regional Score: (3) (4)

Objective: The Region 3 RPSRO will utilize the RPSRO Inventory as a tool to monitor the performance improvement of the trauma system. The Region 3 RPSRO will present MTQIP data for trauma centers (I-III) to evaluate the function of the trauma system.

Progress: The Region RPSRO utilizes the RPSRO Inventory to monitor various performance measures as well as MTQIP annual report.

Indicator 205.2: Collected data from a variety of sources are used to review the appropriateness of all-inclusive regional trauma performance standards from injury through rehabilitation.

Regional Score: (1) (1)

Objective: The Region 3 RPSRO will work to develop a Performance Improvement Plan to identify the appropriateness of all-inclusive performance standards.

Progress: The Region 3 RPSRO and RTN have adopted a Regional Performance Improvement Plan including a 2-level (primary, secondary) review process. The region has also implemented a Performance Improvement Tracking tool/template. The region will continue to mature this process by including quantifiable performance standards and feedback to system providers.

Indicator 303.4: There is a regional trauma bypass protocol that provides EMS guidance for bypassing a trauma care facility for another more appropriate care facility.

Regional Score: (4) (4)

Objective: The Region 3 Trauma Network will develop a systematic approach using available data technology to evaluate the effectiveness of the Region 3 Trauma Triage and Destination protocol.

Progress: The Region 3 RPSRO and Trauma Triage and Destination Subcommittee has recently formed an ad hoc workgroup to address this objective. The group has met and discussed which data elements from multiple data platforms that will be used to create a report capable of measuring system performance in relation to this objective. The group has been working with staff from biospatial to develop a custom report/template with metrics capable of measuring the effectiveness of the trauma triage and destination criteria. The region understands this to be an important part of monitoring system performance of its current trauma triage and destination criteria/protocol as well as any future modifications such as the recently published ACS field triage guidelines.

Continuum of Care

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

The Regional work plan addresses the integration and participation of rehabilitation services within the continuum of care for trauma patients.

Regional Score: (1) (1)

Objective: The Region 3 Trauma Network will establish a regional rehabilitation subcommittee as the first step to developing a plan for the integration of rehabilitation services into the regional trauma system.

Progress: The Region 3 Trauma Network has formed a trauma rehabilitation subcommittee. The subcommittee has identified and documented the acute trauma rehabilitation facilities within the region. Various trauma content experts such as discharge planners have participated in the state trauma rehabilitation environmental scan. The region will continue to work with the trauma system to better understand the trauma rehabilitation barriers that may exist and work collaboratively to address those barriers identified.

Trauma Education

Indicator 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.

Regional Score: (1) (2)

Objective: The Region 3 Trauma Network will develop a list of recommended standardized training courses for each discipline including EMS, nursing and physicians.

Progress: The Region 3 Trauma Education Subcommittee has created a list of recommend trauma specific training courses for each discipline including EMS, nursing and physicians based upon ACS-COT recommendations.

Indicator 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.

Regional Score: (1) (1)

Objective: The Region 3 Trauma Network will have an approved process to inform or educate personnel on new trauma protocols and or treatment modalities within the region.

Progress: The RTC has discussed possible options to address this objective with the Region 3 Trauma Education Subcommittee including presenting and disseminating any new regional trauma protocol or treatment modality at the annual Region 3 Trauma Symposium.

Regional Summary:

The Region 3 Trauma meetings were held on a virtual meeting platform (TEAMS). Despite some of the challenges of meeting virtually, it has provided an opportunity for those to participate who would otherwise be unable to attend due to competing work schedules and travel times. The Region 3 Trauma Education Subcommittee held its annual Region 3 Trauma Symposium on April 14th. The annual symposium resumed following a 1-year break due to the COVID-19 pandemic. The full day symposium was attended by 280 individuals with 8 different speakers and 7 vendors to inform trauma stakeholders of the current trends related to care of trauma patients. The symposium offered 6 CME and EMS credits. The feedback has been extremely positive, and planning has already begun for next year. The Regional Trauma Network remains focused on supporting partners to share best practices, resources, and solutions to progress the regional trauma system. This will require active and robust participation from all levels of providers and facilities within the region. Throughout the year regional stakeholders were provided with information regarding trauma center verification standards aimed at new trauma program staff and facilities to facilitate a successful site visit. Virtual site visits for both ACS and Non-ACS trauma centers have been largely accepted. The feedback regarding the in-state virtual verification process has been positive citing the additional support provided when meeting with state trauma staff and site reviewers prior to their verification visit.

Regional System Evaluation in accordance with Administrative Rule Requirements:

- × Regional trauma network and committee meetings have taken place as scheduled (quarterly) in accordance with the Open Meetings Act.
- × Schedule and information regarding RTN Board and RTAC posted on the trauma website
- × Annual confirmation that members of the RTAC are currently involved in trauma care completed.
- All MCA's are participating in the RTN (If not what efforts have been made to address)

The attendance and participation vary between the Medical Control Authorities in the region. Quarterly regional meeting invitations as well as a yearly schedule are sent electronically to the MCA medical director and or their designee. A survey has been completed focused on the MCA medical directors to better understand what barriers may be present in limiting their ability to actively contribute to regional trauma care initiatives. The results of this survey were shared at the RTAC meeting. The request for continuing with a virtual meeting option to better accommodate staff will remain for the foreseeable future.

- × Documentation that all hospitals in the trauma network are participating in:
 - ×Regional Injury Prevention
 - ×Regional Performance Improvement
 - ×Submission of registry data to ImageTrend
- × Regional trauma plans completed (attach copy of plan or state "in progress")
 - ×Regional Injury Prevention
 - Regional Trauma Education

There is no formal regional education plan in place. As a first step in this progress the trauma education subcommittee has created a resource document of recommended trauma related education/certifications as it reflects to the ACSCOT guidelines for providers who routinely care for trauma patients.

- × Regional Performance Improvement
- × Regional PI process in place; Inventory data reviewed, and trends (if noted) are being monitored. PI process that includes two levels of review is place (as needed). RPRSO corresponds annually (at a minimum) with RTN regarding PI. Minutes, materials stored by RTC.

RTN Board Chairperson: _____ Date: _____

Regional Trauma Coordinator: _____ Date: _____