

MICHIGAN ANNUAL REGION 8 TRAUMA REPORT-2021

REGION 8

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:

The Upper Peninsula of Michigan is equal to 41% of the Lower Peninsula's landmass yet contains only 3% of the state's population. Tourism and outdoor recreation surge the population, as do a handful of universities and colleges. The COVID-19 pandemic highlighted outdoor recreation for many who may have never experienced it before. Pictured Rocks National Lakeshore, which is a remote tract filled with complex trails and rustic camping sites, attracted over 1 million visitors during 2021. Pictured Rocks themselves is another popular tourist destination in Alger County between Munising (pop. 2539) and Grand Marais (pop. 350). Alger County has one Advanced Life Support agency and one small 17 bed (including emergency department) hospital that utilizes bypass protocols to Marquette, 40-120 minutes to the west to ensure that when needed, trauma patients get those additional resources. Elements that describe Region 8 include rugged terrain, minimal highways, and finite resources of EMS agencies, hospitals, air medical.

There are 14 hospitals across Region 8 and one hospital in St. Ignace that aligns with Region 7 because of their Medical Control Authority's boundaries. The geographic connection to Wisconsin means Menominee County has oversight by a Wisconsin Medical Control Authority and there are no hospitals within that county. There are three health systems in Region 8, six (6) facilities are independently owned. The health systems are Aspirus, headquartered in Wausau, Wisconsin; UP Health System, owned by multi-state LifePoint that is headquartered in Brentwood, Tennessee; and OSF Healthcare headquartered in Peoria, Illinois.

COVID-19 impacts are continuing to be felt, including delays in transfers that result in patients that would normally be immediately transferred held in community hospitals that do not have resources to provide full services. Staffing challenges have contributed to partial and incomplete trauma registry data submissions for 2021 in the region. The region has leveraged partnerships to hold routine update calls conducted by hospital CEOs, a hospital joint information center was established for consistent community messaging, and weekly/biweekly regional healthcare preparedness calls were held. These initiatives are ongoing.

Medical Control Authorities:

MCA Name	Medical Director
Baraga	Jon Neufeld, MD
Delta	Christopher Faber, MD MPH
Dickinson	Ryan Hart, DO
Eastern	Kyle Raycraft, MD MBA
Gogebic Iron Ontonagon	Eric Maki, MD
Keweenaw Houghton	Emily Johnson, MD
Luce	Steven A. Vix, MD
Marquette Alger	Michael Misna, MD
Schoolcraft	David Schoenow, MD

Designation Status of Facilities in Region:

Facility Name	Designated Yes or No	Level of Designation
Aspirus Iron River	Y	IV
Aspirus Ironwood	Y	IV
Aspirus Keweenaw	Y	III
Aspirus Ontonagon	Y	IV
Baraga County Memorial	Y	IV
Dickinson County Health System	N	Provisional IV
Helen Newberry Joy	Y	IV
Munising Memorial	N	Provisional IV
OSF St. Francis	Y	IV
Schoolcraft County Memorial	N	Provisional IV
UP Health System Bell	N	Provisional IV

UP Health System Marquette	Y	II
UP Health System Portage	Y	III
War Memorial	Y	III

Governance:

Regional Trauma Network (RTN) Board

	Name and Title
Chairperson	Pat Hirt, Trauma Program Manager
Vice Chairperson	Shelly Reeves, Trauma Program Coordinator

Regional Trauma Advisory Council (RTAC)

	Name and Title
Chairperson	Shelly Reeves, Trauma Program Coordinator
Vice Chairperson	Jake Smith, Guardian Flight Program Director

Regional Professional Standards Review Organization

	Name and Title
Chairperson	Vacant
Vice Chairperson	Vacant

Governance Activity Report:

- Regional Trauma Network Board (RTN Board): Cancelled all meetings in 2021 except October and November because of lack of quorum. The Board is experiencing turnover in membership.
- Regional Trauma Advisory Council (RTAC): Has met regularly with very good attendance there is significant turnover in trauma program staffing.
- Regional Professional Standards Review Organization (RPSRO): Has not met, but re-engagement is anticipated. Please see the Regional Performance Improvement Section of this report for details.

Work Plan Objective Progress and Highlights

Injury Prevention

Indicator 325.135(2) 306.2: The Regional Trauma Network (RTN) is active within the region in the monitoring and evaluation of regional injury prevention (IP) activities and programs.
Regional Score: 2 in 2017 workplan; 2 in 2020 workplan

Objective: By December 2020, the Regional Trauma Coordinator (RTC) will survey regional injury prevention stakeholders including hospitals, senior provider networks, Medical Control Authorities, and others. The database shall contain program type, audience, locations, and contact persons.

Progress: The injury prevention program list is out of date. COVID-19 has ceased many community programs with no future dates planned as of this writing.

Indicator 325.135(2) 203.5:

The RTN has developed a written injury prevention 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 in 2017 workplan; 2 in 2020 workplan

Objective: By December 2020, the RTN will have communicated to injury prevention stakeholders the Regional Injury Prevention Plan that addresses at a minimum, the trauma registry identified top 3 injuries in the region; program identification, reach, and impact. The RTN will request feedback by March 2021 from the stakeholders regarding overlap and gaps. The plan shall be reviewed annually by the Regional Trauma Advisory Committee (RTAC) and RTN.

Progress: An injury prevention plan is on the R8 Trauma webpage. Work in injury prevention has been mostly at stand-still because of COVID response. In December 2021, the RTN agreed to re-start a snowmobile crash data collection project. The RTC continues to post injury prevention messages on the R8TRAUMA Facebook page and encouraging RTAC members to have their organizations share them or share them on their personal social media accounts.

Indicator N/A 207.4 (New Indicator from Strategic Plan):

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

Regional Score: New indicator. 1 in 2020 workplan

Objective: By December 2023, the region will support the Michigan Trauma Coalition's trauma system messaging campaign currently in development with a focus on the messages applicable throughout the region.

Progress: The RTC attends Michigan Trauma Coalition (MTC) meetings when able and shares applicable initiatives on the R8TRAUMA Facebook page. Of the 14 hospitals in Region 8, three (3) belong to MTC. The RTC continues to suggest hospitals join the MTC for its educational opportunities and networking.

Objective: Region 8 Trauma has collaborated with Region 8 MCA Network (R8MCAN) to have a page on the MCAN website with an anticipated go live date of December 2020. This website will be a publicly accessible location for items approved by the RTN to be placed there and populated by the RTC.

Progress: The R8MCAN offered to have their vendor build a trauma section on the www.R8MCAN.org website. The RTC self-taught on the web design software to populate and keep the website updated.

Communications

Indicator 325.132(3)(c)(ii)(B) 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.

Regional Score: 2 in 2017 workplan; 3 in 2020 workplan

Objective: Ongoing through December 2023, Regional Trauma shall continue to review and support Regional Healthcare Preparedness Communications initiatives when they are brought to the RTAC and RTN. The RTC is to continue throughout this three-year workplan to be a Regional Preparedness board member representing Regional Trauma.

Progress: The RTC provides support to the Regional Healthcare Coalition and Preparedness staff in a variety of ways. The RTN and RTAC supported piloting a pediatric exercise at its RTAC meeting and provided input to the State Pediatric Coordination Center workgroup. The RTAC then conducted another exercise using information from the workgroup. It was discovered through these exercises that stakeholders and dispatch centers in Region 8 are not all aware of the Regional Medical Coordination Center. Preparedness staff was in attendance and the specific findings were outlined in the RTAC minutes for the HCC to reference.

Indicator 325.132(3)(c)(ii)(B) 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 in 2017 workplan; 4 in 2020 workplan

Objective: Regional Healthcare Preparedness utilizes the Regional Trauma survey of hospital communication redundancies and Regional Trauma shall update the survey by January 2021.

Progress: Survey updated and utilized by a hospital within a week of revision.

Indicator N/A 105.7 (New Indicator from Strategic Plan):

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: new indicator 1 in 2020 workplan

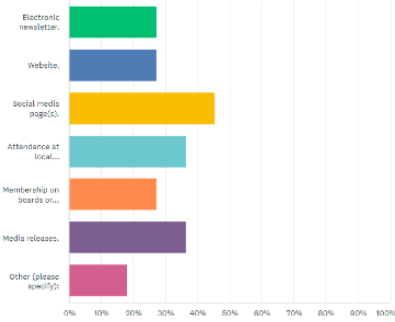
Objective: By January 2021, hospitals and MCAs within Region 8 will be surveyed to determine the following: 1. How they inform the broad medical community about trauma, 2. Who they inform, 3. When they inform, 4. What is inclusionary to the process and what is

disseminated. Survey information will be shared with the RTN. Regional Trauma shall continue to utilize its Facebook page throughout this three-year workplan for topics such as injury prevention initiatives, educational notices, national literature, and publication sharing.

Progress:

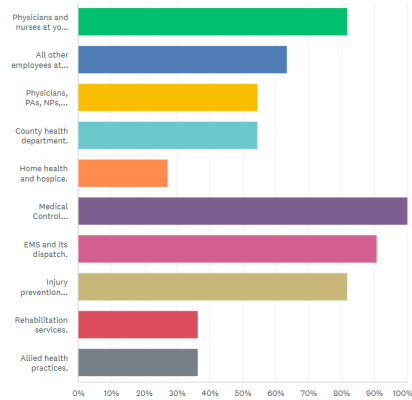
How does your trauma program inform the broad medical community about what you do and why you exist?

Answered: 11 Skipped: 0



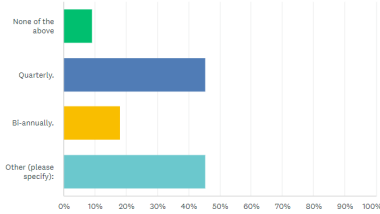
Who do you consider is your broad medical community? (check all that apply)

Answered: 11 Skipped: 0



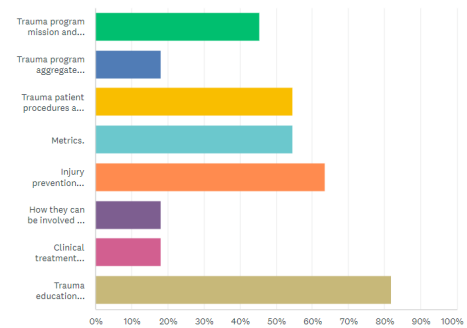
How frequently do you inform and/or remind the broad medical community about your trauma program and its activities?

Answered: 11 Skipped: 0



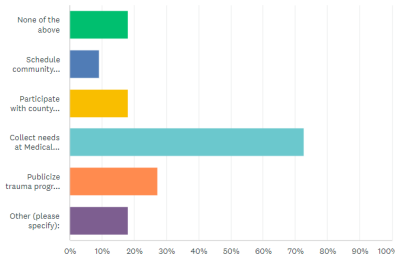
What kind of information are you distributing?

Answered: 11 Skipped: 0



How do you collect what the broad medical community's needs are relative to your trauma program?

Answered: 11 Skipped: 0



Infrastructure

Indicator 325.132(3)(c)(ii)(E) 302.1:

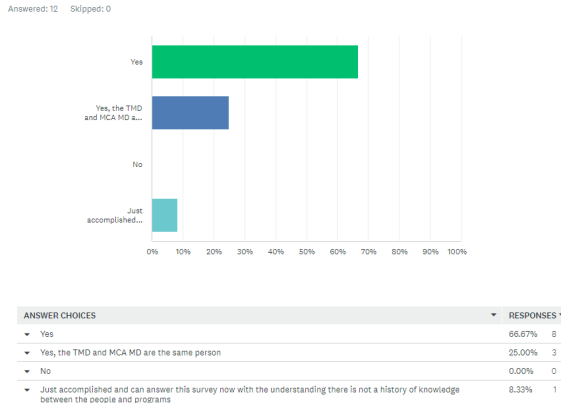
There is well-defined regional trauma system medical oversight integrating the needs of the trauma system with the medical oversight of the overall EMS system.

Regional Score: 1 in 2017 workplan; 2 in 2020 workplan

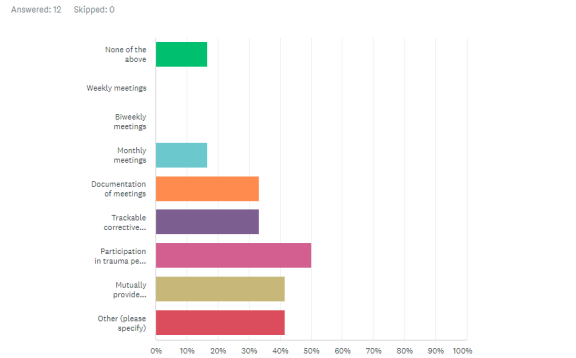
Objective: By January 2021, the TPMs and each MCA shall participate in a survey conducted by the RTC on how they assure medical directors collaborate on EMS trauma protocols.

Progress:

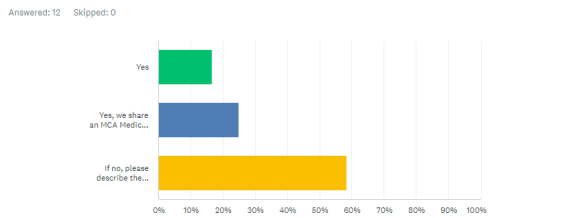
Do your Trauma Medical Director (TMD) and the Medical Control Authority (MCA) Medical Director know one another in addition to awareness of each other's programs?



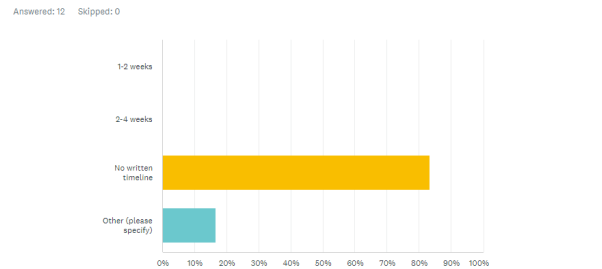
How do your TMD and MCA MD collaborate on trauma medical oversight of EMS providers? (check all that apply)



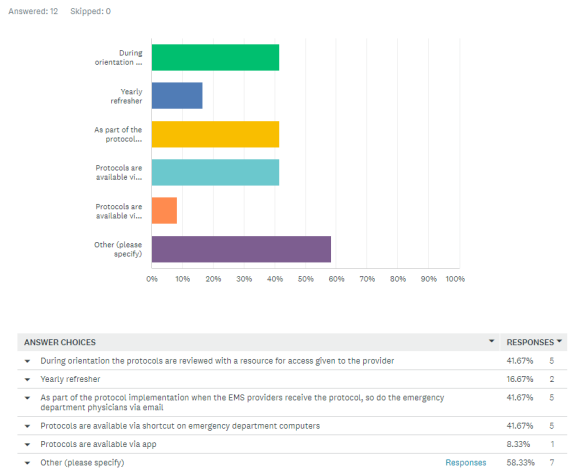
Do you have a written procedure that requires your TMD and MCA MD to collaborate on EMS trauma protocols when the State asks for feedback and before they are distributed to EMS agencies?



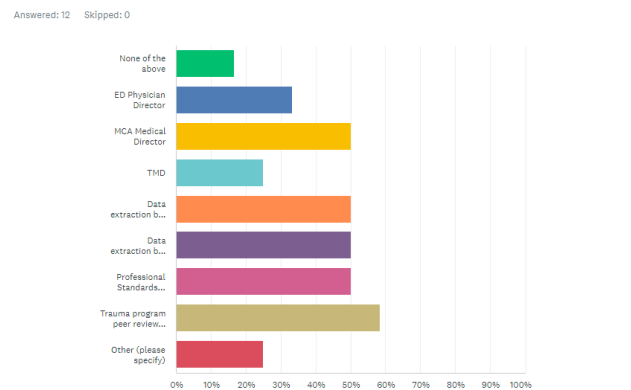
When new EMS trauma protocols are up for statewide review and also when they are issued, what is the required time element for the TMD and MCA MD to meet?



How do the TMD and MCA MD assure that emergency department physicians are informed of the EMS trauma protocols? (check all that apply)



How does online Medical Control receive medical oversight regarding EM protocol adherence? (check all that apply)



Objective: By June 2021, the RTN shall review the survey and author a regional benchmark regarding formal trauma protocol reviews by trauma and MCA medical directors.

Progress: The RTN issued this directive to the RTAC to bring back to all hospital trauma programs and MCAs and the RTAC was informed of this at the December 2021 meeting.

“There must be evidence of protocol review, collaboration and program resolutions between the MCA MDs and the TMDs. Thus, the MCA and Trauma Program meeting minutes shall document all of these actions.” The next step will be for the RTC to receive copies of the MCA meeting minutes and work with each hospital to see evidence of their trauma program documentation.

Indicator 325.132(3)(c)(ii)(E) 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.

Regional Score: 3 in 2017 workplan; 2 in 2020 workplan

Objective: By December 2021, the RTC will survey each hospital trauma program manager and each MCA contact person regarding formal trauma medical director and MCA medical director cooperative relationship including communication, program resolution, and coordination of efforts.

Progress: See previous objective that outlines the current directive and next action steps.

Objective: By June 2022, the RTN shall review the survey results and develop regional benchmarks that define the coordination of efforts (trauma medical director and MCA medical director) more formally.

Progress: Monitoring of RTN directive regarding MCA and Trauma collaboration will start in 2022 with the collection of MCA meeting minutes and communication with hospital trauma program managers.

Indicator 325.135(6) 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: 1 in 2017 workplan; 3 in 2020 workplan

Objective: By June 2021, the RTN shall expand the current 24/7 medical specialties database to include information from each hospital on what facilities they recommend specialty populations (burns, pediatrics, TBI rehabilitation, other specialty rehabilitation) be transferred to, which may be out of state.

Progress: This objective is on hold during COVID-19 response.

Objective: By September 2021, the RTC will share the database with the RMCAN for informing their transfer agencies. Updates to the database will be provided by the hospital trauma program managers to the RTC, as needed. The database shall be shared with new trauma program managers. Triennially, the database will be reviewed and updated.

Progress: This objective is on hold during COVID-19 response.

<p>Indicator 325.135(6)(c) 303.2: The RTN 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.</p>
<p>Regional Score: 1 in 2017 workplan; 1 in 2020 workplan</p>
<p>Objective: By February 2022, hospitals will participate in a survey regarding their written diversion plans and what types of incidents cause diversion, who has the authority enact the plan, what the plan contains regarding who is notified and how it is documented.</p>
<p>Progress: Has not been initiated.</p>
<p>Objective: By August 2022, the RTAC will review the findings and provide recommendation to the RTN of minimum standards to be included in hospital diversion plans.</p>
<p>Progress: Has not been initiated.</p>

<p>Indicator 325.132(3)(c)(ii)(E) 208.2: (New Indicator from Strategic Plan) The incident management and trauma systems have formal established linkages for system integration and operational management. This is directed at the Trauma Network's collaboration with the Regional Healthcare Coalition.</p>
<p>Regional Score: new indicator 2 in 2020 workplan</p>
<p>Objective: Through December 2023, the RTC will be the liaison to preparedness as evidenced by meeting participation and involvement as a Regional Medical Coordination Center member with subsequent updates at each RTAC and RTN meeting, inclusion in mass casualty planning, exercises, and real events.</p>
<p>Progress: Occurring.</p>
<p>Objective: Through December 2023, the Regional Trauma Coordinator will continue in the role of a regional resource by maintaining status as a regional superuser of EMTrack, eICS, and EMResource.</p>
<p>Progress: Occurring.</p>

<p>Indicator 325.136(d) 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.</p>
<p>Regional Score: 2 in 2017 workplan; 1 in 2020 workplan</p>
<p>Objective: By October 2021, the RTC on behalf of the RTN will survey hospital trauma programs on how each facility conducts reviews of interfacility transfers.</p>

Progress: Given the significant turnover in hospital trauma programs and vacancies, we anticipate successfully accomplishing this objective in the 1st quarter of 2022.

Objective: By February 2022, the RTAC will receive the survey findings and recommendations from the RTN based upon information from the RSPRO. The RTAC shall provide a regional interfacility transfer review procedure to the RTN.

Progress: This objective will be achieved in the 4th quarter of 2022.

Indicator 325.135(6)(b) 302.6:

There are mandatory system-wide pre-hospital 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. This indicator is directed at the process for prehospital triage of trauma patients.

Regional Score: 3 in 2017 workplan; 2 in 2020 workplan

Objective: By December 2021, using available reports from Biospatial and the RMCAN, the RTN in collaboration with the Regional MCA Network will pilot a validation project focused on Field Triage, i.e., definitions, educational needs, data interpretation and action steps to address identified gaps with an expected 12-month completion date.

Progress: Has not started.

Regional Performance Improvement

Indicator 325.134(4) 206.1:

The RTN uses data reports to evaluate and improve system performance. This refers to any data reports and the RPSRO Inventory.

Regional Score: 2 in 2017 workplan; 2 in 2020 workplan

Objective: Through December 2023, the RTN and its RPSRO will utilize data reports generated by the State of Michigan, trauma registry, MTQIP, and RPSRO Inventory and individual hospital and EMS agencies to evaluate and improve regional trauma care and system performance.

Progress: Significant turnover and vacancies in trauma programs and their registrars has resulted in an incomplete data set for Region 8. There are some hospitals that have self-imposed corrective action plans to catch up and maintain the quarterly data requirements. The lack of data meant no RSPRO Inventories for 2020 through 2021, in addition to the inability to generate any meaningful systemic reports for the region.

Indicator 325.135(6) 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: 1 in 2020 workplan new indicator
Objective: Through December 2023, the RPSRO, working with the Region 8 MCA Network, will utilize data reports generated by the State of Michigan, trauma registry and Biospatial to provide medical oversight of EMS trauma triage, communications, treatment, and transport of trauma patients.
Progress: This is on hold as the trauma programs attempt to catch up their data entries. The RTAC and R8MCAN has been approached by the RTC on the topic of assuring their EMS agencies are entering the correct destination name, the reason for the destination, and injury marked as yes so, the additional fields applicable to trauma open for population.

Indicator 325.135(6)(d) 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.
Regional Score: 1 in 2017 workplan; 1 in 2020 workplan
Objective: By December 2021, the RPSRO, working with the RTAC will develop a Regional Performance Improvement Plan that includes evaluation on trauma triage criteria and effectiveness, trauma center diversion and provision of care. This plan will be based off suggestions from the State of Michigan, State Trauma Advisory Committee, and American College of Surgeons guidance documents.
Progress: The RTAC and RTN at their December 2021 meetings approved a RPSRO Standard Operating Procedure for case reviews, a flow sheet, and a Regional Performance Improvement Plan that echoes the objectives in the regional workplan. TPMs were instructed to work with their MCAs to determine who from their locations could commit to quarterly RPSRO meetings and that meet the qualifications for the RPSRO. They are to then have their MCA Executive Boards submit those names with contact information and once assembled the RTN will meet to decide who to seat on the RPSRO. That was issued on December 8 and as of December 29, there has been no submissions, which may be because of the holidays.

Indicator 325.136(d) 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.
Regional Score: 2 in 2017 workplan; 1 in 2020 workplan
Objective: By December 2022, the RTN, working with the Region 8 MCA Network will develop a regional bypass protocol that clearly defines the process for bypassing one trauma facility for another trauma center more appropriate for the patient's injuries or specialty needs (pediatrics, burns, obstetric).
Progress: Has not started.

Continuum of Care

<p>Indicator 325.132(3)(c)(ii)(F) 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.</p>
<p>Regional Score: 1 in 2017 workplan; 2 in 2020 workplan</p>
<p>Objective: By December 2020, the RTN shall expand the current 24/7 medical specialties database to include information from each hospital on where they transfer specialty populations.</p>
<p>Progress: In progress with COVID-19 hampering responses and skewing answers.</p>
<p>Objective: By April 2021, the considerations for rehabilitation transfer shall be collected from the trauma program managers within the region for review by the RTAC.</p>
<p>Progress: Not started.</p>
<p>Objective: By February 2022, the RTN will establish a formal communication pathway of regional trauma initiatives to licensed rehabilitation facilities within the region that are utilized for trauma patients.</p>
<p>Progress: Not started.</p>

Trauma Education

<p>Indicator 325.132(3)(C)(ii)(D) 310.3,4,6: The RTN establishes and ensures that appropriate levels of EMS, nursing and physician trauma training courses are provided on a regular basis.</p>
<p>Regional Score: 2 in 2017 workplan; 2 in 2020 workplan</p>
<p>Objective: Throughout 2020, the RTN will encourage hospitals and MCAs to identify their regularly offered trauma education programs. The RTAC will consolidate a master calendar of scheduled trauma education programs by January of 2021 based on information from hospitals, MCAs, and share/exchange lists with region 7. The master calendar will include programs open to out-of-health system employees and may be out-of-region and out-of-state.</p>
<p>Progress: Educational opportunities did not remain constant because of COVID-19 responses. This objective has not been able to be accomplished as written. The RTC does provide updates on the R8TRAUMA Facebook page for any announcements that are shared.</p>

<p>Indicator 325.132(3)(C)(ii)(D) 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.</p>
<p>Regional Score: 1 in 2017 workplan; 2 in 2020 workplan</p>

Objective: The RTN will continue to inform of educational offerings through utilization of its Facebook page through 2023. By December 2020, the RTN will have developed a one-page electronic flyer to disseminate to trauma program managers that can be utilized to encourage their staff to follow the Facebook page.

Progress: In progress.

Regional Summary:

Staffing turnover is significant. Those that remain in hospital trauma programs are commonly pulled into patient care or have been given multiple programs to manage. The RTN has supported the concept of TPM mentoring with the TPMs leading their own peer support on months opposite of RTAC meetings in 2022. The difficulty will be the very few mentors available. The RTC continues to provide orientations and coordinates out-of-region peer support. The RTAC meetings include discussion of items that programs must have in place. Meanwhile, EMS agencies in Region 8 have monthly meetings with the state EMS office to address the lack of staff at all levels, the community misperceptions of it being an essential service, and the inability to manage long distance transfers 24/7. The Medical Control Authorities in the Upper Peninsula are not all staffed entities limiting the time available to meet responsibilities. It is anticipated that RPSRO case reviews in the future will be illustrative of the regional challenges that need attention.

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.

If not completed, please explain: RTN lacked quorum until October and December.

- 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 MCAs are participating in the RTN

If not, what efforts have been made to address:

- Documentation that all hospitals in the trauma network are participating in: Did you mean to
 - Regional Injury Prevention – not all have attended RTAC meetings.
 - Regional Performance Improvement – has not met.
 - Submission of registry data to state trauma registry – not all are meeting quarterly submissions.
- Regional trauma plans completed (attach copy of plan or state “in progress”)
 - Regional Injury Prevention

Regional Trauma Education

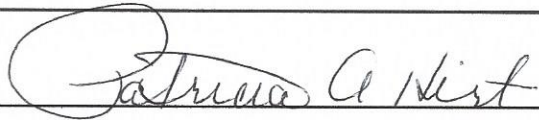
Regional Performance Improvement

If not completed, which plans are missing and why? Regional Trauma Education is not being worked on in Region 8.

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.

If not completed, please explain: Data is not complete. The Region adopted the framework for a PI process in December.

RTN Board Chairperson:



Date:

1-11-22

Regional Trauma Coordinator:

Lyn L. Nelson

Date:

1/11/2022