

MICHIGAN ANNUAL REGION 2S TRAUMA REPORT- 2020

REGION 2 SOUTH

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 2 South (R2S) is the most populous region in the State of Michigan with more than 2.2 million residents. The region is comprised of Monroe, Washtenaw, and Wayne counties, and includes the City of Detroit. The region has two international border crossings with Canada and shares a border with northwestern Ohio.

Region 2 South is served by eighteen acute care hospitals, ninety-two emergency medical service (EMS) agencies, and four medical control authorities (MCAs). The region is home to fourteen American College of Surgeons Committee on Trauma (ACS-COT) verified trauma centers, including five Level I, four Level II, and three Level III, and one Level IV designated by the State of Michigan. The children of Region 2 South are served by two Level I and one Level II pediatric centers. There is one Level IV in the que for Michigan designation in 2020. The region has two Adult ABA Verified Burn Centers and one Pediatric ABA Verified Burn Center.

Medical Control Authorities:

MCA Name	Medical Director
Washtenaw / Livingston County	Dr. Robert Domeier
HEMS	Dr. Howard Klausner
Monroe County	Dr. Daniel Kemple
DEMCA	Dr. Robert Dunne

Designation Status of Facilities in Region:

Facility Name	Designated Yes or No	Level of Designation
Beaumont Grosse Pointe Hospital	Yes	ACS Level III
Beaumont Hospital Dearborn	Yes	ACS Level II
Beaumont Hospital Trenton	Yes	ACS Level II
Beaumont Taylor Hospital	Yes	Michigan Designation Level IV
Beaumont Wayne Hospital	Yes	ACS Level III
C.S. Mott Children's Hospital	Yes	ACS Level I Pediatric
Children's Hospital of Michigan	Yes	ACS Level I Pediatric ABA Verified Pediatric Burn Center
Detroit Receiving Hospital	Yes	ACS Level I ABA Verified Adult Burn Center
Garden City Hospital	No	
Henry Ford Hospital	Yes	ACS Level I
Henry Ford Wyandotte Hospital	Yes	ACS Level III
ProMedica Monroe Regional Hospital	Yes	Michigan Designation Level III
Sinai-Grace Hospital	Yes	ACS Level II
St. John Hospital-Ascension Medical Center	Yes	ACS Level I Adult ACS Level II Pediatric
St. Joseph Mercy Hospital	Yes	ACS Level I
St. Joseph Mercy Chelsea Hospital	No	Level IV Provisional
St. Mary's of Michigan Hospital	Yes	ACS Level II
University of Michigan Medical Center	Yes	ACS Level I ABA Verified Adult Burn Center

Governance:

Regional Trauma Network (RTN) Board

	Name and Title
Chairperson	Dr. Robert Domeier, MCA Director of Washtenaw/ Livingston County
Vice Chairperson	Dr. Howard Klausner, MCA Director of HEMS

Regional Trauma Advisory Council (RTAC)

	Name and Title
Chairperson	Dr. Allan Lamb, Trauma Medical Director at Beaumont Trenton
Vice Chairperson	Dr. Howard Klausner, Medical Control Director of HEMS

Regional Professional Standards Review Organization

	Name and Title
Chairperson	Dr. Allan Lamb, Trauma Medical Director at Beaumont Trenton
Vice Chairperson	Dr. Jeff Johnson, Trauma Medical Director at Henry Ford Main

Governance Activity Report:

- Regional Trauma Network Board (RTN Board): The RTN is dedicated and committed to working with the trauma programs in the Region to ensure quality care and improved outcomes for the injured.
- Regional Trauma Advisory Council (RTAC): Region 2 South RTAC has continued to strive to be outstanding in providing trauma care in this area. All trauma committees have continued to address the objectives as presented. Work plan objectives were updated in January 2020 with progression toward completion.
- Regional Professional Standards Review Organization (RPSRO): The RPSRO is tracking tourniquet usage including who applied the tourniquet; if the tourniquet was applied correctly; if the use of the tourniquet was appropriate; and patient outcome. At this time, 111 tourniquets have been applied in Region 2 South. The RPSRO has developed both a “real time” and a retrospective data tracking process to identify and evaluate multiple transfers of patients. The “real time” reporting mechanism will identify patients that may have been initially transported to an inappropriate facility by focusing on the second transfer.

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 / present score 4 after review January 2020
Objective: By March of 2020, the RTN will monitor and evaluate injury prevention programs by using an annual analysis of regional injury pattern data from the trauma registry to develop coordinated and targeted injury prevention offerings. The RTN will perform bi-annual surveys of regional trauma facilities to confirm injury prevention program alignment with regional injury patterns.
Progress: Due to Covid-19, injury prevention programs were unable to provide in-person injury prevention programs. Discussions about ways to provide injury prevention programs have led to several ideas. For example, newsletters, Zoom, and Teams will be able to assist the Region in injury prevention. Many injury prevention specialists have been put on furlough due to programs being put on hold. With the surge of COVID again recently, it is an extremely difficult task to provide injury prevention. The injury prevention chairpersons are reaching out to other regions for collaboration to provide programs.

Indicator 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 / present score 2 after review in January 2020
Objective: By March of 2020, the RTN will develop a written injury prevention and control plan that is aligned with regional injury patterns as determined by an annual evaluation of injury from the trauma registry in order to target injury prevention programs based on the three highest risk injuries. The RTN will bi-annually survey regional trauma facilities to evaluate the injury prevention program coordination among facilities.
Progress: Due to COVID, it has been extremely difficult to evaluate the programs.

Communications

Indicator 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: 4 / present score 5 after review in January 2020
Objective: By March 2018, the RTN will participate in a minimum of one annual multi-jurisdictional emergency response exercise with the Region 2 South Healthcare Coalition in order to evaluate the integration of communications among the region's designated trauma programs and with the regional incident management system. Background: The Regional Healthcare Coalition has a well-defined and exercised communications plan. The Region has participated in one exercise with the coalition. An annual exercise will help integrate the regional trauma program with the regional incident response plans.
Progress: During the first wave of COVID-19, the RTN worked closely with the Healthcare Coalition to support regional incident command and to ensure trauma and COVID patients received appropriate care in a timely manner. Objective has been met.

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: 4 / present score 5 after review in January 2020
Objective: By March of 2020, the RTN will work with the regional healthcare coalition to annually exercise and evaluate the existing communication systems and procedures to improve the effectiveness of the communications system if necessary. Background: Inter-facility transfer procedures are included in the patient transfer protocols of the individual hospitals within the region. The Region 2 South Healthcare Coalition has established redundant communication systems and procedures to address mass casualty incidents and communication failures, and these systems are exercised regularly. All regional hospitals in the RTN also participate in the Healthcare Coalition. The RTN will work with the Coalition to ensure that the hospital trauma programs participate in the emergency management programs of their respective facilities.
Progress: 5- Objective has been met

Infrastructure

Indicator 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: 4 / present score 4 after review in January 2020

Objective: EMS medical directors have adopted trauma transport and destination protocols consistent with CDC guidelines and State protocols. Each MCA provides on-line and off-line medical control consistence with these protocols, but EMS and the regional trauma system are not fully integrated with medical oversight process and effectiveness by collecting data with optimal outcomes.

Progress: EMS medical directors have adopted trauma transport and destination protocols consistent with CDC guidelines and State protocols. Each MCA provides on-line and off-line medical control consistent with these protocols, but EMS and the regional trauma system are not fully integrated with medical oversight processes.

Indicator 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: 5 / present score 5

Objective: To maintain the high level of cooperation within the region, the Region 2 South Steering Committee and RPSRO will continue to meet regularly to coordinate efforts between trauma center medical directors and EMS medical directors.

The Region 2 South Steering Committee/RPSRO has been formally adopted in bylaws as the method/forum for cooperation between EMS medical directors and trauma center medical directors. The groups meet regularly to coordinate the regional trauma system.

Progress: 5 - Objective has been met

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: 5 / present score 5

Objective: By March 2020, as an ongoing activity of regional trauma system planning, the number and levels of trauma facilities are communicated regularly to the medical control authorities, who incorporate this information into the local MCA trauma triage and destination protocols. These local protocols account for trauma facility resources, geography, and transport time. On-line medical control ensures proper destination guidance in the event of trauma diversion. The RPSRO will perform an annual audit of all trauma center diversions to assure the appropriate use of diversion and the accuracy of trauma center resources.

Progress: 5- Objective has been met

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 / present score 5 after review January 2020

Objective: By March 2018, the RTN will regularly audit transport data to trauma, burn, and pediatric centers to ensure that patients are appropriately transported to a specialty center if needed.

Background: The region has adopted trauma triage and destination protocols that identify criteria for appropriate transport to trauma centers and specialty care centers. The RPSRO has developed both a “real time” and a retrospective data tracking process to identify and evaluate multiple transfer of patients.

Progress: 5 - Objective has been met

Regional Performance Improvement

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

Regional Score: By March of 2019, the RTN, Data Subcommittee, and RPSRO will define and generate regular data reports in order to analyze multiple transfer patients, appropriate transport of patients to specialty centers, and submission of EMS run reports.

Background: The RPSRO and Medical Oversight subcommittee have identified the components listed above as the initial projects for regional data analysis and performance improvement efforts.

Objective: 3 / present score is a 3 after review January 2020

Progress: A regional inventory document was presented to the RTN in June 2020. This document will provide regional data analysis and facilitate improved system performance.

Indicator 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.

Regional Score: 3 / present score is a 4 after review January 2020

Objective: By March of 2019, the Data Subcommittee will begin to review appropriate transport of pediatric and burn patients using a trauma registry query of arrival mode via EMS or transfer from another facility. This, in combination with the RPSRO multiple transport data analysis, will provide an initial measurement of pre-hospital triage effectiveness.

Progress: The regional triage criteria are used by all pre-hospital providers. There is a region-wide evaluation of the effectiveness of the triage criteria in identifying trauma patients and ensuring that patients are transported to the appropriate trauma facility.

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

Regional Score: 2 / present score is 4 after review January 2020

Objective: The region has developed an organized system to monitor “multiple transfer” patients to determine whether patients are expeditiously transferred to the appropriate tertiary facility. Beginning in September 2017, the RPSRO will analyze and regularly report any inter-facility transfer to the RTN, with a plan of action for correction. We continue to monitor for system issue or individual facility issue.

Progress: The RPSRO continues to monitor multiple transfers for system issues or education required. There were four multiple transfers noted in 2020.

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 prevention through rehabilitation.

Regional Score: 1 / present score is 1 after review in January 2020

Objective: By March 2020, the RTAC will use a variety of sources to review and revise the written performance standards for each of the following components of trauma care: injury prevention, communications, infrastructure, regional performance improvement, education, and continuum of care.

Progress: The 17 HRSA objectives contained in the trauma plan represent the minimum performance standards as defined in the Administrative Rules. Data collection is needed for all-inclusive regional trauma performance standards which the region has just started to collect with the new state of Michigan registrar.

Indicator 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: 3 / present score is 4 after review in January 2020

Objective: Beginning in March 2018, all instances of bypass of a trauma facility to a more appropriate trauma facility based on the established trauma triage and destination protocols of the respective medical control authorities will be reviewed by the applicable MCA PSRO and reported quarterly to the RTN.

Progress: Region 2 South has no regional trauma bypass protocol. There has been no need for bypass in this region according to all four MCA's.

Indicator 205.3: The RTN data in the state trauma registry is used to identify and evaluate regional trauma care and improve the use of resources.
Regional Score: 2 / present score is a 3 after review in January 2020
Objective: Beginning in March 2018, the Data Subcommittee will begin a one-year project to query the state trauma registry to compile a quarterly report of missing EMS patient care reports.
Progress: A new trauma registrar is currently working with ImageTrend and Biospatial to obtain data for regional trauma care. The inventory document had added current data but needs to be evaluated to identify if beneficial to regional trauma care.

Continuum of Care

Indicator 308.1: The regional work plan addresses the integration and participation of rehabilitation services within the continuum of care for trauma patients.
Regional Score: 1 / present score is a 1 after review in January 2020
Objective: By March 2018, the RTN will establish a list of rehabilitation services used by the regional trauma centers and will invite representatives of those rehabilitation services to participate in the development of a plan to integrate rehabilitation services into the regional trauma system.
Progress: The RTAC has started to establish a list of rehabilitation services used by regional trauma centers. The regional healthcare coalition has a subcommittee of rehabilitation services to integrate into the trauma services for collaboration between services.

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 / present score 2 after review in January 2020
Objective: By March 2018, the Education Subcommittee will determine a single trauma education program for which the RTN can seek funding to support education provision for all appropriate trauma center staff in the Region.
Progress: Currently the RTN has no funding available to provide support for education to appropriate trauma center staff in the Region.

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: 3 / present score is a 4 after review in January 2020

Objective: Beginning in March 2018, the Education Subcommittee will annually survey the Region's trauma centers to evaluate the use and effectiveness of the Region's monthly education newsletter.

Progress: Region 2 South continues to provide a reliable and informative monthly newsletter to the trauma centers created by the TPM or designee of trauma centers. Discussion regarding effectiveness of the newsletters will be addressed at RTAC in 2021.

Regional Summary:

Region 2 South had a very challenging year in 2020. First, COVID-19 hit in March with Region 2 South being ground zero. At the peak of the pandemic in Southeastern Mi and City of Detroit, there were roughly 4,400 hospitalizations. Many hospitals reached out to the trauma physicians to become intensivists as there were minimal trauma patients during COVID-19. One of the hospitals in the Region became a COVID-19 care facility to lessen the burden on the other facilities. Many trauma nurses, injury prevention staff, registrars, and education staff were either reallocated or furloughed as all outpatient, non-emergent surgeries, and elective surgeries were cancelled to allow bed capacity for COVID-19 patients. The TCF in Detroit opened to care for recovering COVID-19 patient that were not ready to go home and needed minimal care.

Once the "Stay-at-Home" order was lifted, there was an undeniable increase in the severity of the trauma patients. In times of stress, all forms of violence are likely to increase, examples are child abuse, sexual assault, alcohol incidents, overdoses, elder abuse, and spousal abuse. Many trauma staff have returned to prior position following Covid-19 surge, but injury prevention programs are still struggling to provide programs. The Injury Prevention Subcommittee is developing new ways to provide injury prevention by newsletters, Zoom, videos and virtual classes.

Tourniquet usage was tracked in the region with the following data provided by the trauma centers:

Tourniquet Used: 111

Who applied: Unknown: 4, Bystander 4, Self 6, EMS 31, ER 21, Fire 2, Police 43

Appropriate Use: 101, Not appropriate 10

Appropriate Application: 101, Not applied correctly 11

Sent directly to OR: 21.

Surgical intervention in ER: 4

Most of the trauma staff have returned to their prior positions following Covid-19 and Region 2 South continues to provide exceptionally high-quality trauma care. The right patient is transported to the right facility in a timely manner. Trauma outcomes exceed expectations because of the highly trained trauma physicians and nurses in the region despite COVID-19.

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:

- 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:

- 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")

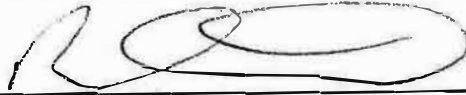
- Regional Injury Prevention
- Regional Trauma Education
- Regional Performance Improvement

If not completed, which plans are missing and why?

- 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:

RTN Board Chairperson:



Date:

1/19/21

Regional Trauma Coordinator:



Date:

1/19/21

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