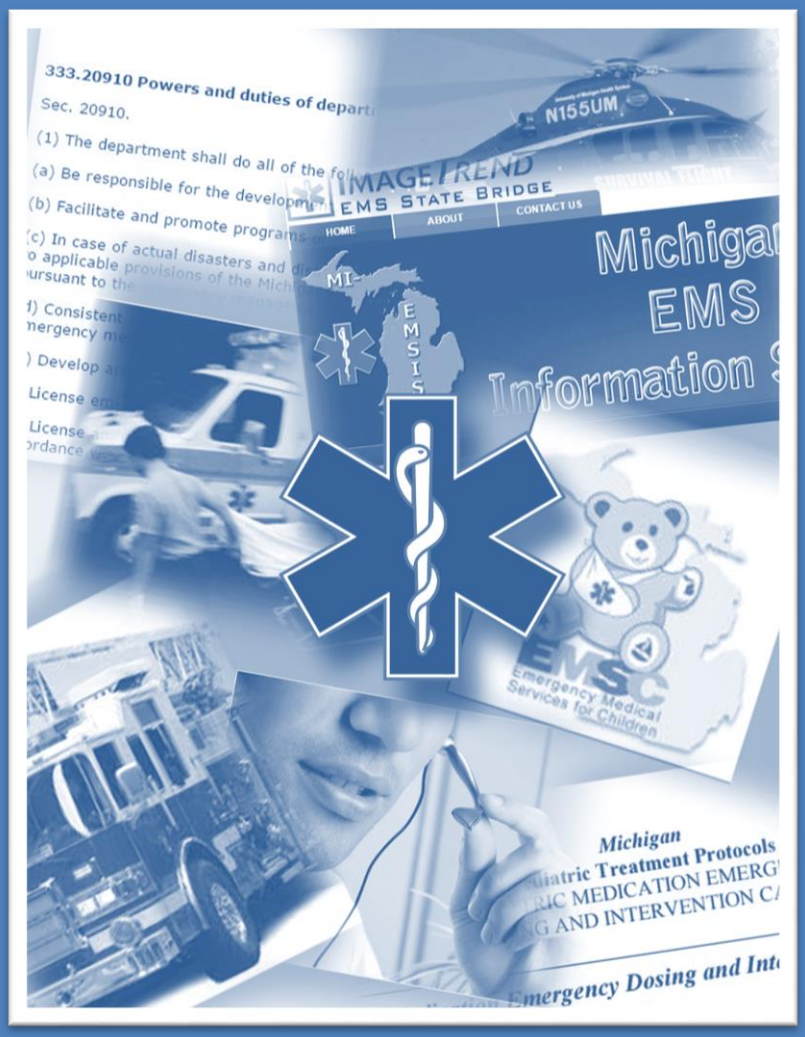
Draft Document

MICHIGAN EMERGENCY MEDICAL SERVICES PLAN



2015-2016

Draft Document

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Introduction

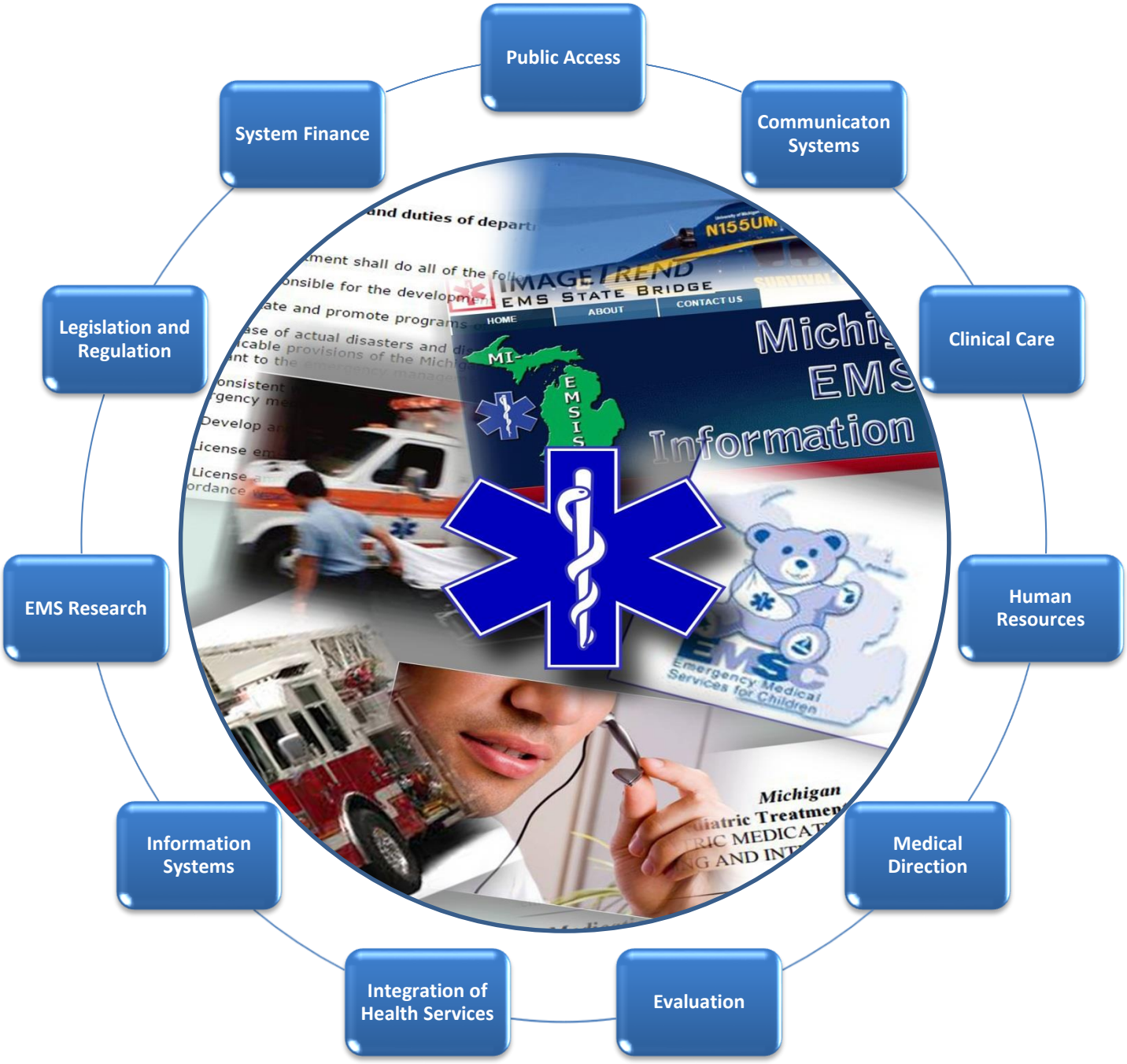
The Michigan Department of Health and Human Services (MDHHS) is charged with development and oversight of a coordinated Emergency Medical Services (EMS) and Trauma system in MI as described in the Michigan Public Health Code, Public Act 368 of 1978 as amended. The National Highway Traffic Safety System (NHTSA) describes EMS systems as complex systems that consist of several essential components that must be carefully coordinated to ensure a "seamless system of integrated emergency medical care." (National Highway Traffic Safety Administration [NHTSA], n.d.) Trauma systems focus on providing an integrated, full range of care to injured patients across the continuum of care including a focus on injury prevention (National Highway Traffic Safety Administration, n.d.). System success requires a collaborative environment where stakeholders, providers, administrators, and public officials are equal components in the driving force that will move our EMS and Trauma System into the future. The essential components to an integrated EMS System include:

- Diverse partnerships with agencies and organizations (both private and public)
- Communications and transportation networks
- A systems of care approach that includes, hospitals, trauma centers, specialty care centers and rehabilitation facilities
- Information technology to support information sharing and data for quality and performance improvement and research
- Highly trained professionals
    - Volunteer and career prehospital personnel
    - Physicians, nurses, and therapists
    - Administrators and government officials
- An informed public that knows what to do in emergencies and how to prevent injuries
- Financial support
- Public policy support

In June 2015, as a result of the merger between the Michigan Department of Community Health and the Michigan Department of Human Services into the Michigan Department of Health and Human Services, the Bureau of EMS Trauma and Preparedness (BETP) was created within the Population Health and Community Services Administration (PHCSA). The BETP consists of two divisions: Emergency Preparedness and Response and EMS and Trauma. The new structure is consistent with the NHTSA stance that EMS is an essential component of healthcare, public health, and public safety.

The MI EMS system has evolved since its inception in the 1970s. However, many gaps remain that must be mitigated in order to keep pace with the ever evolving healthcare system, technology, and evidence based practice. This plan will describe how the Division of EMS and Trauma will implement previous NHTSA MI EMS System recommendations and incorporate strategies identified in the *EMS Agenda for the Future* to continue development of robust, integrated, evidence based EMS systems in MI.

Michigan EMS System



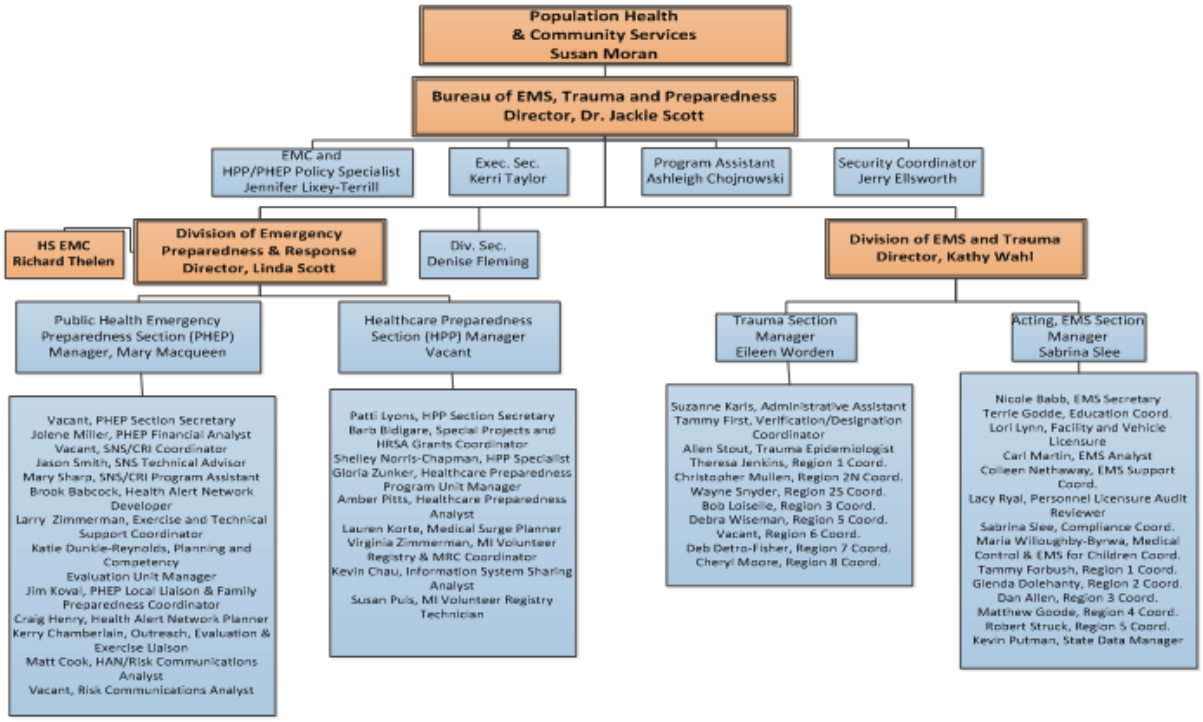
Assumptions

- The public views EMS as a valuable community resource and expects that it will continue into the future.
- MI EMS is diverse at the local Medical Control Authority level based on available resources, needs, and geographical challenges. These differences may influence local jurisdictions' ability to meet some statewide benchmarks, thus requiring some flexibility at the local level.
- EMS is a component of healthcare systems. MI citizens may participate in managed care plans that require them to seek care from a particular healthcare system or provider groups as a means to control costs which can in turn affect EMS logistical considerations when developing MCA systems protocols.
- EMS will continue to evolve and can be integrated into community healthcare system endeavors such as community paramedicine.
- EMS is integral to public health initiatives including development of systems of care that will reduce targeted morbidity and mortality rates for trauma, stroke, and myocardial infarction
- There is a gap in information regarding the MI EMS information system (MI EMSIS) and patient outcomes. Time, additional resources, and collaboration are necessary to analyze the valuable data in the MI EMSIS databank. Information exchange must occur between local, regional, and State EMS entities to assess effectiveness of patient care and the MI EMS and Trauma system as a whole.
- The media influences public perceptions of EMS and should be engaged as valuable partners in injury and disease prevention, and EMS provider recruitment efforts.
- Financial support of MI EMS and Trauma systems is critical.
- Public policy makers must be informed about current EMS issues.

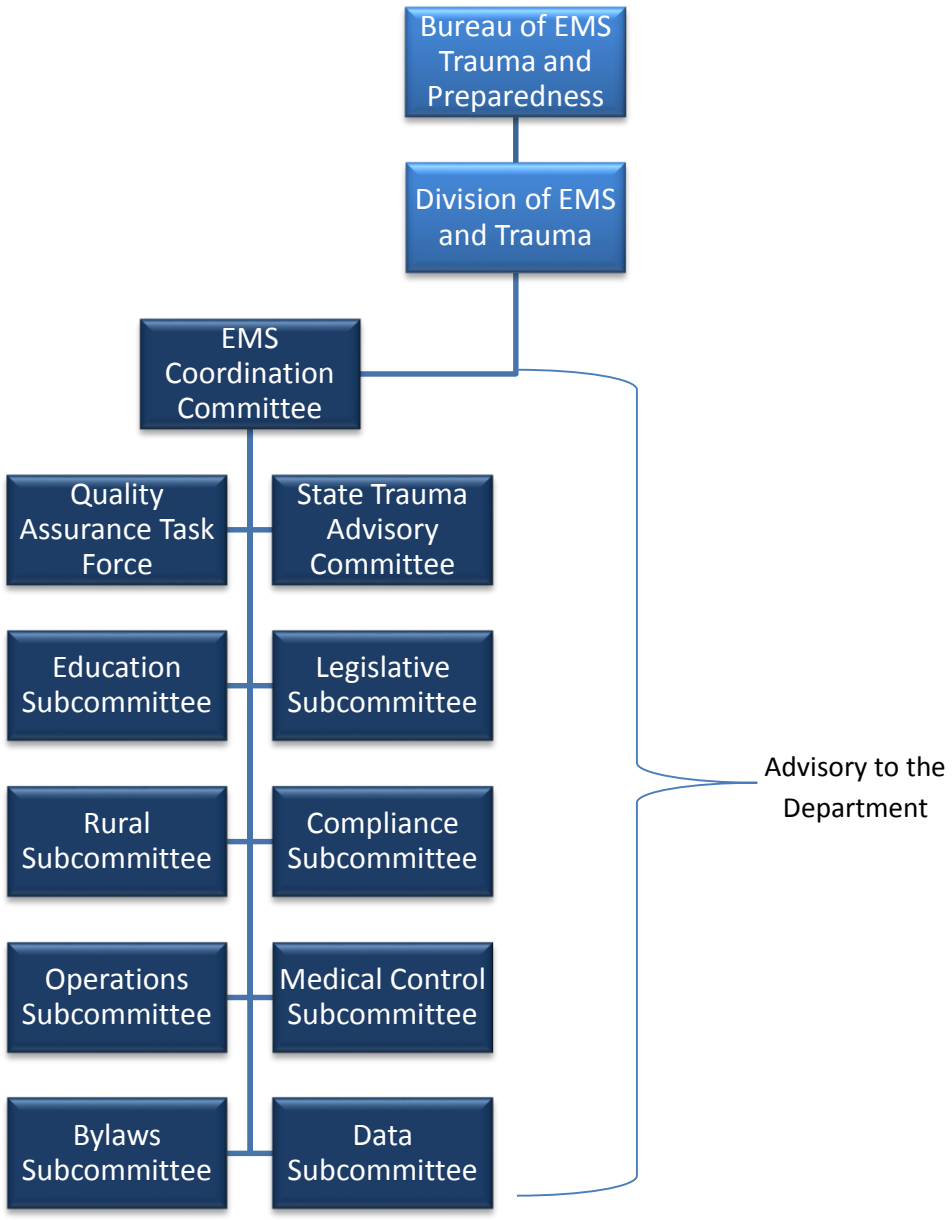
Current Snapshot of MI EMS System

Mission

Protect and improve the health and well-being of Michigan citizens requiring emergency medical services.



EMS Advisory Structure



EMS Coordination Committee

The EMS Coordination Committee (EMSCC) was created through statute to serve as a multi-agency stakeholder advisory body to the Department. The EMSCC responsibilities include all of the following:

- Provide the coordination and exchange of information on emergency medical services programs and services.
- Act as a liaison between organizations and individuals involved in the emergency medical services section.
- Make recommendations to the department in the development of a comprehensive statewide emergency medical services program.
- Advise the legislature and the department on matters concerning emergency medical services throughout the state.
- Provide the department with advisory recommendations on appeals of local medical control decisions.
- Participate in educational activities, special studies, and the evaluation of emergency medical services as requested by the director.
- Advise the department concerning vehicle standards for ambulances.
- Advise the department concerning minimum patient care equipment lists.

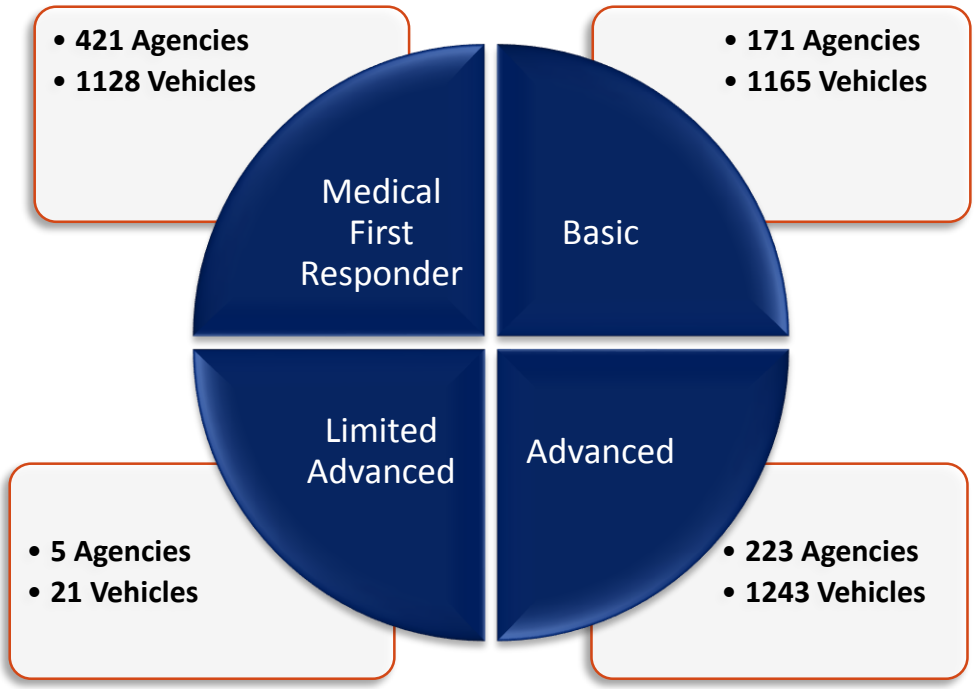
EMSCC members are appointed by the Director of the Department and include:

- Four representatives from the Michigan Hospital Association (MHA), at least 1 of whom is from a hospital located in a county with a population of not more than 100,000.
- Four representatives from the Michigan chapter of the American College of Emergency Physicians (MCEP), at least 1 of whom practices medicine in a county with a population of not more than 100,000.
- Three representatives from the Michigan Association of Ambulances Services, at least 1 of whom operates an ambulance services in a county with a population of not more than 100,000.
- Three representatives from the Michigan Fire Chiefs Association, at least 1 of whom is from a fire department located in a county with a population of not more than 100,000.
- Two representatives from the Society of Michigan Emergency Medical Services Technician Instructor Coordinators, at least 1 of whom works in a county with a population of not more than 100,000.
- Two representatives from the Michigan Association of Emergency Medical Technicians, at least 1 of whom practices in a county with a population of not more than 100,000.
- One representative from the Michigan Association of Air Medical Services.
- One representative from the Michigan Association of Emergency Medical Services y
- Systems.
- Three representatives from the statewide organization representing labor that deals with Emergency Medical Services, at least 1 of whom represents emergency medical services personnel in a county with a population of not more than 100,000.

- Two consumers, at least 1 of whom resides in a county with a population of not more than 100,000.

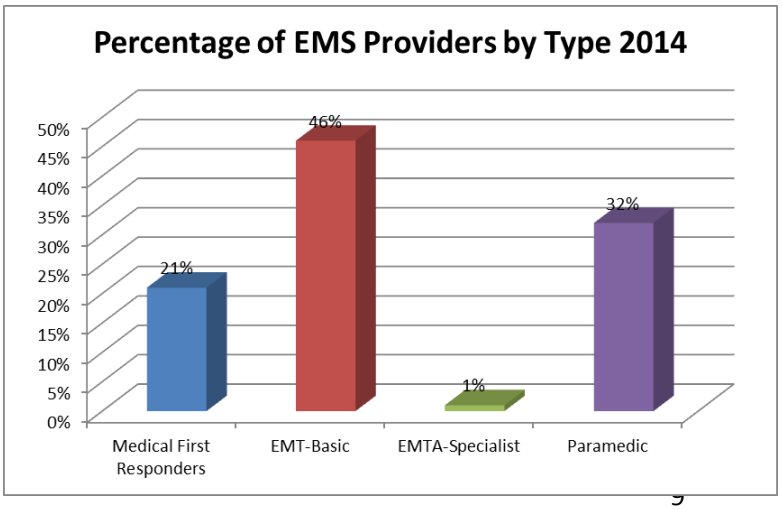
Life Support Agencies and Vehicles Licensure

Life support agencies are categorized as ambulance operations (ground and rotary, non-transport pre-hospital life support, aircraft transport operations (fixed wing), and medical first response). Annual inspections are required for each licensed basic, limited-advanced, and advanced life support agency in the state in addition to random annual vehicle inspections and inspections of all new or replacement vehicles to ensure consistent quality of EMS care throughout the state. The figure below depicts the number of licensed life support agencies and vehicles in Michigan for 2014.



Licensed EMS Providers

In 2014 there were 28,936 licensed EMS Providers in Michigan with the largest number of providers being at the basic EMT level. The web based license renewal process which was implemented in 2012 has been successful with more than 6,000 successful renewals in 2014.



Medical Control Authorities

In 2014 there were 62 Medical Control Authorities (MCAs) in MI. Each MCA is designated by the State. MCAs are responsible for the ongoing planning and development of activities and protocols for providing prehospital services. The MCAs are administered by the participating hospitals within the assigned jurisdiction and consist of an advisory body that includes, at a minimum, a representative of each type of life support agency and each type of emergency medical services personnel functioning within the MCA. Each MCA also appoints a physician medical director who is board certified in emergency medicine by a national organization approved by the department or who practices emergency medicine and is certified in both Advanced Cardiac Life Support (ACLS) and Advanced Trauma Life Support (ATLS). The medical director is responsible for medical control for the emergency medical services system in that jurisdiction (PA 368 of 1978 §333.20918).

Medical Control Authority Regional Networks

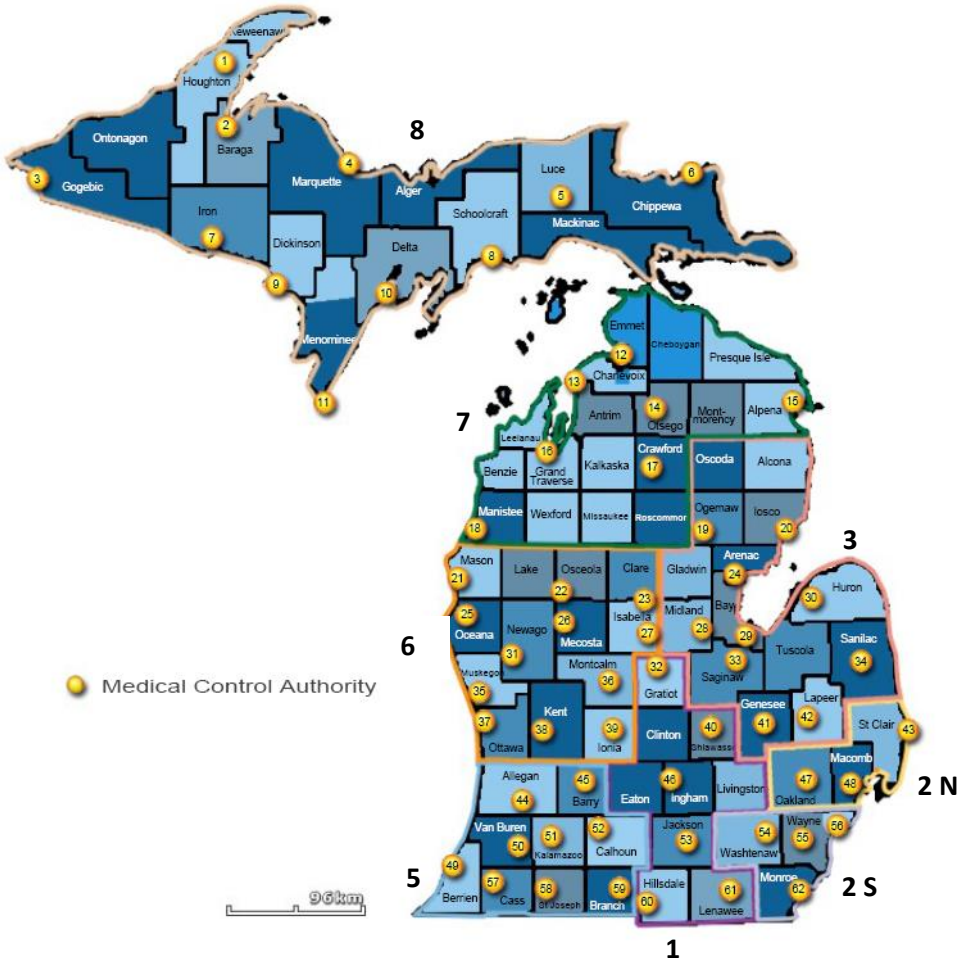
In 2014, an announcement was made that the MCAs would be consolidating down to eight or ten MCAs. This resulted in much confusion, and push back from the local MCAs. Some hospitals reportedly were going to withdraw their support of the local MCAs. Based on feedback received from these stakeholders it became clear that it is important for the MCAs to continue to have the autonomy to address local EMS issues while still working collaboratively for tasks or functions that could benefit from cooperative, regional activity such as protocols. The BETP shifted the focus of regionalization from consolidation to development of an MCA support network.

Much collaboration, coordination, planning, and relationship building has already been accomplished in each of the eight well established emergency preparedness and trauma regions. The MCA Regional Network (MCARN) leverages the coordination between MCAs in each region and enables local MCAs to maintain local control, and still work together on larger communication issues, protocols, data management, quality initiatives, and strategic planning at the regional level. The networks are viewed as “hubs of planning”. The networks will also support MCAs that may be experiencing some difficulties.

The format for the MCARN is to develop a planning board or use an existing planning board that consists of a representative from each MCA in the region. The 8 regions frame the boundaries but do not restrict them. If an MCA is active in more than one region, for example, the MCA could participate in more than one support network. Bylaws are being established and each MCA represented will have a vote. In addition there will be a seat on each planning board for a representative of the regional trauma network, such as the regional trauma coordinator and an emergency preparedness Healthcare Coalition leadership representative. An MCA in each region will serve as the fiduciary agent to disperse the one-time state funding as agreed upon by the planning board. An MCA will volunteer to host the meetings (this can be rotational) and does not necessarily have to be the fiduciary MCA.

Continued communication and collaboration is critical to building strong and effective support networks. Local MCA participation is critical for both local and regional problem solving.

Medical Control Authorities by Region

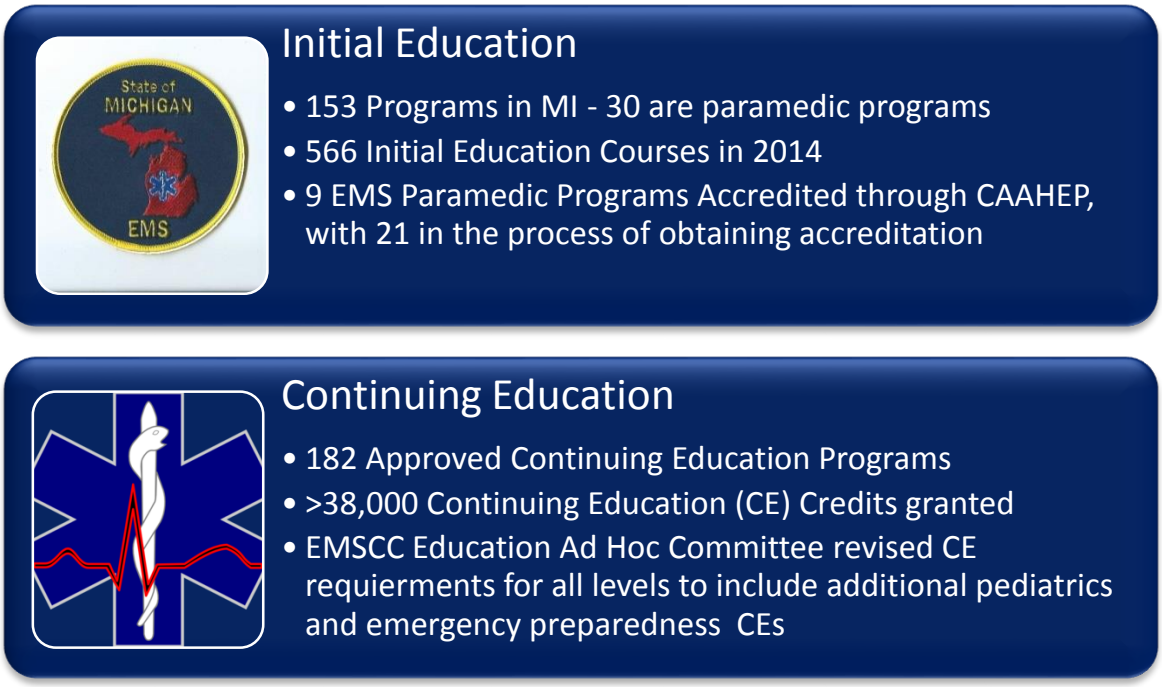


1 Keweenaw MCA
2 Baraga County MCA
3 Gogebic/Ontonagon MCA
4 Marquette-Alger MCA
5 Luce County MCA
6 Eastern UP MCA
7 Iron County MCA
8 Schoolcraft County MCA
9 Dickinson County MCA
10 Delta County MCA
11 Bay Area MCA
12 Northern Michigan MCA
13 Charlevoix County MCA
14 Otsego County MCA
15 Northeast Michigan MCA
16 Northwest Regional MCA
17 North Central MCA
18 Manistee County MCA
19 Ogemaw County MCA
20 Iosco County (aka Huron MCA)
21 Mason County MCA
22 Lakola MCA
23 Clare County MCA
24 Arenac County MCA
25 Oceana County MCA
26 Mecosta County MCA
27 Isabella County MCA
28 Midland-Gladwin County MCA
29 Bay County MCA
30 Huron County MCA
31 Newaygo County MCA
32 Gratiot County MCA
33 Saginaw Valley MCA
34 Sanilac County MCA
35 Muskegon County MCA
36 Montcalm County MCA
37 Ottawa County MCA
38 Kent County MCA
39 Ionia County MCA
40 Shiawassee County MCA
41 Genesee County MCA
42 Lapeer County MCA
43 St. Clair County MCA
44 Allegan County MCA
45 Barry County MCA
46 Tri-County MCA
47 Oakland County MCA
48 Macomb County MCA
49 Berrien County MCA
50 VanBuren County MCA
51 Kalamazoo County MCA
52 Calhoun County MCA
53 Jackson County MCA
54 Washtenaw/Livingston MCA
55 Wayne County MCA
56 Detroit East MCA
57 Cass County MCA
58 St. Joseph County MCA
59 Branch County MCA
60 Hillsdale County MCA
61 Lenawee County MCA
62 Monroe County MCA

Education

In order to ensure that appropriate educational requirements are met for EMS provider licensure and re-licensure, a system is in place to review all initial and continuing education programs. There are currently nine paramedic programs that have achieved accreditation from the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

The figure below depicts the educational activities for which the Division of EMS and Trauma had oversight in 2014.



EMS for Children Program

The EMSC is a federally funded program designed to promote EMS and trauma system development at local, state, regional, and national levels to adequately prepare for emergency care of children. The work is accomplished through activities that improve, refine, and integrate pediatric care within the state EMS system. All EMSC state partnership grantees are required to collect and report data for ten performance measures, which align with the Healthy People 2020 initiative.

Objectives for the current grant period through 2016 include:

- Collaborate with the National EMSC Data Analysis Resource Center (NEDARC)
- Conduct audits and needs assessments for the purpose of data collection and analysis
- Establish awareness to enlist partnerships
- Utilize the expertise of the advisory committee members
- Focus on children with special health care needs (CSHCN)

Trauma System

In Michigan, crash related deaths alone cost $1.04 billion per year. The overall goal of a trauma system is to reduce the incidence and severity of injury as well as to improve health outcomes for those who are injured.

Michigan has been engaged in formal trauma system development since 2000. The vision for Michigan is a regionalized, coordinated, and accountable system of emergency care that ensures the right patient gets to the right place at the right time.

"The concept of inclusive trauma care systems promotes regionalization of trauma care, so that all areas of the country receive the best possible care. Equally important, an inclusive trauma care system must identify high-risk behaviors in each community and the population groups at risk for injury so that the system can provide an integrated approach to care that is responsive and appropriate to local needs."
Trauma System Agenda for the Future (2004)

The Statewide Trauma System Administrative Rules (R3225.125-R325.138) describe the components of the trauma system. This includes eight regional trauma networks comprised of the local Medical Control Authorities within the region which integrates into existing regional preparedness. They are responsible for the oversight of the trauma care provided in each region of the state.

Hospital Trauma Level Verification and Designation

A major component of trauma system development is the verification and designation of trauma facilities. This process allows all stakeholders and partners involved in the system to quickly match the injured patient to the correct resource in the right amount of time. Verification is the process where a recognized entity provides an objective, external review of institutional capability and performance. The American College of Surgeons Committee on Trauma (ACS-COT) provides verification for Level I, Level II, and Level III trauma facilities in Michigan and across the country. The Michigan Department of Health and Human Services (MDHHS) can provide verification of Level III or Level IV facilities who request it in an in-state process. Designation is a status that is conferred by the Michigan Department of Health and Human Services on trauma facilities that have been verified by either the American College of Surgeons Committee on Trauma or by the State of Michigan.

Designation	Adult	Pediatric
Level I	8	3
Level II	19	4
Level III	5	0
Level IV	0	0

Currently there are 35 designated trauma Centers in MI. Four of the designated trauma centers have dual designation for pediatric and adult trauma. Three are designated for pediatrics only. See Attachment A for details.

Strengths Weaknesses Opportunities and Threats

EMS and Trauma System SWOT Analysis

Strengths	Weaknesses
• Structure is in place • Partnerships • Trauma System is moving forward with all Level I and II facilities already designated • Training has taken place for Trauma Level Designation Teams • Trauma system staff all in place • Rules and Regulations in place to support EMS and Trauma • Commitment of EMSCC and Subcommittee members • Medical Director has been hired • Statewide protocols serve as the minimum standards • Long term partner with the Health Resource Services Administration (HRSA) EMSC Grant	• Cumbersome, paper laden processes • Information Technology • MI EMSIS • Protocol processes including approval and tracking • Staffing-EMS Section • Education-Pass rates for NREMT on 3rd try (43rd in the nation) • No formal EMS plan since 1976 • Data sharing for best practices and benchmarking at the regional and statewide levels is non-existent • Some MCAs struggling due to a variety of factors • NHTSA Recommendations from previous assessments in 1991 and 2007 were not fully implemented • Lack of identified and agreed upon Quality Indicators to assess at the Regional and State level
Opportunities	**Threats**
• Regional Medical Control Authority Networks • New EMS and Trauma Medical Director • Improve support of MCAs • Coordinated Injury Prevention Program • Data analysis and sharing data to improve patient outcomes and system performance for EMS and Trauma • Expand time dependent Systems of Pre-hospital care to include Stroke and STEMI • Implement more efficient, user friendly electronic processes for licensure and re-licensure of personnel and agencies • Improve pass rates for NREMT • Gather and analyze additional data to support MCAs, recruitment and retention of EMS personnel • Grow the EMS for Children program • Seek additional funding streams • NHTSA Assessment in 2016	• Funding-General Funds inadequate • Crime Victim Funds sunset in 2018, potential loss of 50% of funding stream • Unfunded legislative mandates • Potential shortage of EMS providers, particularly in rural areas of the state

Plan for 2015-2016

Implementation of NHTSA Recommendations from the 2007 EMS Assessment

The following section will delineate the recommendations provided in the 2007 NHTSA MI EMS Assessment and the progress to date, along with further activities that will be undertaken by September 30, 2016.

Standard

A. **Regulation and Policy:** …agency has the authority to plan and implement an effective EMS System, and to promulgate appropriate rules and regulations for each recognized component of the EMS System (authority for statewide coordination; standardized treatment, transport, communication and evaluation, including licensure of out-of-hospital services and establishment of medical control; designation of specialty care centers; PIER programs). There is a consistent, established funding source to adequately support the activities of the lead agency and other essential resources, which are necessary to carry out the legislative mandate. The lead agency operates under a single, clear management structure for planning and policy setting, but strives to achieve consensus among EMS constituency groups in formulating public policy, procedures and protocols…Supportive management elements for planning and developing effective statewide EMS Systems include the presence of a formal state EMS Medical Director, a Medical Advisory Committee for review of EMS medical care issues and state EMS Advisory Committee…

2007 Regulation and Policy Recommendations:

Obtain dedicated funding to support the Michigan EMS office and the continued development of the State Trauma system.

Current Status:

Funding for the EMS and Trauma System is supported through the general fund, with additional funding provided by the Victims of Crime Act, Emergency Preparedness Cooperative Agreement, and grant funding from the Health Resources Services Administration (HRSA) of the U.S. Department of Health and Human Services EMS for Children program. The funding has been sufficient to support further Trauma System development. However, the amount of funding provided for EMS remains a challenge. There have been missed opportunities for grants reportedly due to lack of EMS office staff to manage them. The new bureau of EMS Trauma and Preparedness will provide a more solid infrastructure for grant applications and management.

Plan:

Sustainability of the gains in system development will require on-going funding sources to support the hospital designation program, staff training, prevention activities and further development and implementation of systems of care for stroke and ST elevation myocardial infarction (STEMI). Collaboration with other governmental and private entities in the form of grants will be necessary to supplement general fund allocations targeted to EMS and trauma systems. A number of opportunities to increase funding are being investigated

Increase staffing in the EMS office to allow for the office to meet the legislative requirements of ensuring a quality, effective system of emergency medical services, and to centralize the EMS functions of the EMS Office.

Current Status:

Since the 2007 NHTSA assessment was completed, additional staff level positions were added to the Trauma section including: eight Regional Trauma Coordinators, a Designation Coordinator, a section program assistant, and a Trauma Epidemiologist. The EMS section has continued to have staffing challenges. In 2014, the EMS Trauma and Crime Victims Director retired and was not replaced, which created an additional gap in overall cohesiveness of the programs and EMS system development. When the BETP was created, the leadership gap was mitigated. However additional gaps remain. Each of the EMS section staff has a specific function related to licensing and regulatory compliance, education, or data, and the EMS for Children (EMSC) staff member also coordinated the burdensome MCA Protocol process. Regional Coordinators are responsible for very large geographical areas of the state to conduct life support agency and vehicle inspections, in addition to reviewing every application for new EMS programs, including site reviews and curriculum reviews, along with requests for continuing education programs. More than 30,000 lesson plans are reviewed for approval by 5 regional coordinators annually.

Plan

Development of the BETP has mitigated the gap left after the retirement of the previous Director of EMS and Trauma. Additionally, the BETP director provides support for the Division of EMS and Trauma at the executive level. A part time EMS and Trauma Medical Director began in October, 2015. However, it is still vitally important to evaluate present staffing including: position descriptions, workload assignments and accountability, required reporting, and plans for back-up coverage for unexpected and planned absences; evaluate processes utilized and implement work flow process improvement as needed; move towards an electronic system to decrease the time and expense associated with managing a large paper load; fill vacant positions in a timely manner; leverage additional subject matter expertise of other BETP staff as available; request additional staffing to address identified needs as appropriate and supported by the budget allocations or grants.

Develop an evaluation process of the Medical Control Authorities to ensure statutory compliance and greater uniformity across the State.

Current Status:

In 2012 the EMS office conducted a survey of the MCAs. The survey results indicated that the MCAs were in statutory compliance. However, a gap in knowledge remains regarding best structure and practices for MCAs and how those practices facilitate improved patient outcomes. Further information is necessary to take this next step.

Plan:

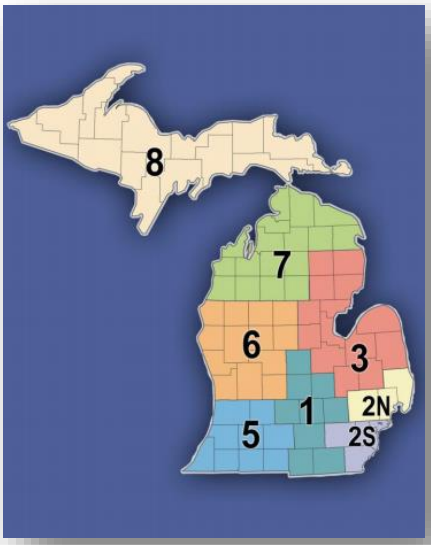
The BETP will partner with the University of Michigan to conduct a mixed methods study of data in MI EMSIS and focus groups to identify best practices for MCA structure and function including quality measures to achieve optimal patient outcomes. The study will begin in November 2015 with results reported to the BETP by December, 2016.

Evaluate the feasibility of integrating MCAs into the 8 Regional planning districts that are consistent with the proposed Regional Trauma Networks.

Current Status:

In January 2015, MDHHS was considering the option of MCA consolidation into 8 or 10 regions. However after further exploration and data gathering, a collective decision was made in April 2015 that creating MCA Regional Networks would better meet local jurisdictional needs. The MCA Regional Networks (MCARNs) were developed to mirror the emergency management and healthcare coalition and trauma regions. The networks will be based on collaboration and partnerships to:

- Promote coordination between local MCAs
- Foster innovative approaches to meet MCA, hospital and EMS community needs
- Promote standardization in protocols to improve patient outcomes
- Enhance data collection and reporting to improve systems and patient care outcomes



A one-time funding opportunity is being provided to each of the MCARNs to support priorities established by the planning boards. The funding can be expended over a two year period.

A team led by the Director of BETP has met with MCAs and various stakeholders in each of the eight regions to identify the fiduciary MCAs. A work plan with deliverables has been established and submitted to each of the MCARNs.

Plan:

Each of the MCARNs will provide a representative to attend quarterly meetings with the BETP beginning in January 2016 to advise the State regarding current issues and activities, and to facilitate information sharing regarding challenges and best practices with their regional counterparts across the state. An annual report will be submitted to the BETP by each of the MCARNs highlighting their activities and accomplishments. Information gained from this initiative will drive potential future initiatives the BETP can implement to support the MCAs.

Introduce legislation to give authority to the state EMS Office to direct dispatch, pre-arrival instructions with medical oversight. This should include ground and air units.

Current Status:

There has been no movement on this recommendation.

Plan:

Create a workgroup by September 30, 2016 to evaluate current practices, existing legislation, and develop recommendations for changes required to implement the NHTSA suggestion.

Evaluate the feasibility to reinstate a "certificate of need" (CON) program or other form of evaluation to include ground and air units as written in the 1991 recommendations.

Current Status:

There is currently a CON program for rotary air EMS in MI. However, this program is coming up for review and the State CON office is in favor of eliminating the CON process for EMS Rotary Air agencies. An ad hoc committee consisting of the previous EMS Section Manager and representatives from EMS Rotary Air agencies met and has created a proposal for a statewide air MCA.

Plan:

The BETP will evaluate the recommendations made by the workgroup and collaborate with the Michigan Department of Licensing and Regulatory Affairs (LARA) and the EMSCC to make a determination on implementation of the recommendations by June 30, 2016.

Standard

B. **Resource Management:** …A comprehensive State EMS plan exists which is based on a statewide resource assessment and updated as necessary to guide activities. A central statewide data collection (or management information) system is in place that can properly monitor the utilization of EMS resources; data is available for timely determination of the exact quantity, quality, distribution and utilization of resources. The lead agency is adequately staffed to carry out central coordination activities and technical assistance. There is a program to support recruitment and retention of EMS personnel, including volunteers.

Resource Management Recommendations:

Staff the EMS Office with sufficient state employees to implement the provisions of P.A 378, Part 209 and the administrative regulations. Staffing should include a full complement of administrative personnel and a State EMS/Trauma Medical Director.

Current Status:

Between the time of the 2007 NHTSA Assessment and the creation of the BETP in June 2015, progress has been made staffing the Trauma Section. However, there has been little progress in EMS section staffing. A State EMS/Trauma Medical Director was hired and in place effective October 1, 2015.

Plan:

Conduct an intensive assessment of staffing roles and responsibilities. Address identified gaps by January 1, 2016.

State employees must carry out all the statutory functions of the State EMS Office.

Current Status:

As was the case in 2007, the Division of EMS and Trauma continues to contract with private third party vendors to carry out many of the administrative duties of the office including but not limited to: the inspection of ambulance agencies and vehicles, testing student candidates for certification and licensure, oversight of EMS education, management of the statewide EMS data system, and EMS for Children.

Plan:

Evaluate current staffing plan and the assigned roles and responsibilities and position descriptions to ensure adequate staffing and cross training to to carry out all of the statutory functions of the Division of EMS and Trauma. Based on the staffing plan assessment, make revisions to the plan as needed and financially feasible.

Develop and implement a process to review and update the State EMS plan at least once every five years.

Current Status:

No State EMS Plan was in place at the time of the creation of the BETP. This plan is the first formal EMS plan since 1976.

Plan:

This plan will serve as the initial State EMS Plan for the BETP. It will be used to guide EMS and Trauma Systems of care into the future. It will be reviewed annually and revised as necessary based on the ever evolving environment of healthcare and State needs.

Develop and implement a comprehensive study/survey, which will identify the overall needs of the EMS System, a demographic study of the individuals providing services, and utilization of the resources including personnel and equipment, as well as track the effectiveness of protocol based procedures utilized in the field.

Current Status:

In 2007 the recommendation was made that, "a comprehensive study/survey must be undertaken to identify the overall needs of the EMS System, basic demographics of licensed and certified personnel, and the utilization of resources within the system. This information may best be collected through the institution of a data collection system, which links patient care report (PCR) reporting with licensure and certification data in the office..." (NHTSA, 2007). In 2009, MI implemented the EMS Information System (MI EMSIS) which is linked to the National EMSIS. All EMS Agencies were required by Administrative Rule to begin submitting data to MI EMSIS. This component has not been linked to the licensure or certification components of EMS.

Implementation of additional applications of the Image Trend System, the platform for the MI EMSIS System, began in early 2015. However, each of the applications requires staff time to actually build the dictionaries, business rules, and processes to meet the unique needs of the MI EMS System. Staff members were assigned to take on this responsibility in addition to their day to day required activities. Minimal training was provided and the staff became overwhelmed. Consequently the project was floundering. A project manager has been assigned, a project implementation timeline created, and additional support from the BETP Division of Emergency Preparedness and Response (DEPR) has been obtained. Personnel and agency licensure data has been imported, and testing is in progress. This project has also required changes in the accounts receivable process for personnel and agency licensing to support acceptance of electronic payments which has required collaboration with the Michigan Department of Treasury.

Plan:

A plan for roll out of this system is in development. It is anticipated that full implementation will be complete by January 1, 2016.

Develop a plan for the recruitment and retention of EMS personnel.

Current Status:

No formal plan has been developed

Plan:

A MI stakeholder task force will be convened to address recruitment and retention. An assessment of the current demographics and regional needs will be conducted. National and other states' recruitment and retention efforts will be examined, and a plan will be developed to address the unique needs of MI by 3/31/16

Establish guidelines which encourage the regionalization of protocols and resources within local MCAs and established regions and enfold the current 65 MCA structure into eight MCA regions

Current Status:

As noted above on pages 6-7.

Plan:

As noted above on pages 6-7.

Standard

C. **Human Resources and Training:** …establish a comprehensive plan for stable and consistent EMS training programs with effective local and regional support. At a minimum, all transporting out-of-hospital emergency medical care personnel are trained to the EMT-Basic level, and out-of-hospital training programs utilize a standardized curriculum for each level of EMS personnel (including EMS dispatchers). EMS training programs and instructors are routinely monitored, instructors meet certain requirements, the curriculum is standardized throughout the State, and valid and reliable testing procedures are utilized. In addition, the State lead agency has standardized, consistent policies and procedures for certification (and re-certification) of personnel, including standards for basic and advanced level providers, as well as instructor certification. The lead agency ensures that EMS personnel have access to specialty courses such as ACLS, PALS, BTLS, PHTLS, ATLS, etc., and a system of critical incident stress management has been implemented.

Human Resources and Training Recommendations

Immediately increase staffing in the EMS Office to centralize the EMS education function, including verification of education sponsors.

Current Status:

The EMS Section has employed a contractual state employee to provide oversight of EMS education in the State. The Regional Coordinators verify educational sponsors for initial programs and continuing education. However, the Regional Coordinators are also responsible for agency and vehicle inspections in addition to EMS educational program verification which as stated on page 19 involves review of approximately 20,000 lesson plans between 5 individuals annually.

MI currently has one of the lowest National Registry pass rates in the country, ranking 43rd for paramedics passing the National Registry exam by the third attempt.

Plan:

The current system and processes that are in place for oversight of EMS education requires re-evaluation. The EMS Education components will be thoroughly assessed and a plan developed to improve EMS education in MI by September 30, 2016.

Develop a fee schedule for the State EMS Office to process verification of education sponsor's applications and courses.

Current Status:

This has not been implemented.

Plan:

Evaluate the feasibility of implementing this recommendation by September 30, 2016.

The EMSCC state model protocols should be the standard for all MCAs to ensure uniformity of care throughout Michigan and to allow for movement and reciprocity between MCA's for EMS providers.

Current Status:

State protocols are developed and are considered the minimum standard for all MCAs throughout MI. MCAs may amend the protocols to adapt to their unique jurisdictional needs through a pre-defined process that includes review and recommendations by the Quality Assurance Task Force (QATF) a subcommittee of the EMSCC. The RMCANs will be addressing protocols on a regional level.

Plan:

Continue to utilize evidence based State protocols as the minimum requirement for all MCAs and support local and regional adaptations of the State protocols to meet unique local and jurisdictional needs. Develop and implement a less cumbersome, paper laden process for MCA protocol approval and tracking by January 1, 2016.

Conduct criminal background checks for all individuals before licensure and re-licensure.

Current Status:

This recommendation has not been implemented. Currently the State only conducts criminal background checks if information is received that an individual has committed a crime.

Plan:

Develop and implement a plan to conduct criminal background checks for all licensure and re-licensure applicants beginning with the Michigan Internet Criminal History Access Tool (ICHAT), by October 31, 2015. Explore implementation of a system currently in use by the Michigan Department of Licensing and Regulatory Affairs for the Nurse Aide Registry that will alert the licensing agency if a licensee has a criminal conviction real time.

The EMS Office should validate licensure of any provider listed on Life Support Agency Rosters before licensing or re-licensing the agency.

Current Status:

This is not in place.

Plan:

Develop a process to implement this recommendation through the Image Trend platform by January 1, 2016.

Evaluate the feasibility of linking data between patient care records, agency and provider licensure, and provider continuing education sponsors.

Current Status:

Not implemented.

Plan:

Not feasible during the 2015-2016 plan.

Conduct a comprehensive education survey to review the needs of the individuals and the agencies, to ensure the providers have the skills and knowledge required.

Current Status:

A gap was identified in pediatrics. The EMSCC developed a plan to require all levels of EMS providers to have a minimum of four pediatric Continuing Education credits per three year licensure period. Paramedics and Advanced EMTs will require five CE credits. An additional pediatric medication administration CE credit is required. This will become effective December 31, 2016.

A pediatric medication administration training module and pediatric medication dosing cards have been developed and distributed to all EMS agencies and hospitals in MI.

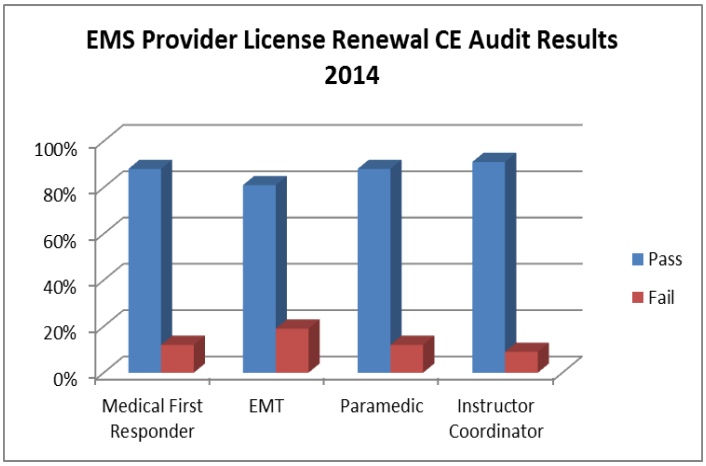
Plan:

Implement CEs as indicated above. The medication dosing cards will be revised by March 31, 2016.

Include data concerning non-compliance with education requirements of EMS providers in the comprehensive education survey.

Current Status:

10% of license renewal applications are randomly selected and evaluated for CE compliance. In 2014, there were 828 audits conducted. Results are depicted in this graph.



Plan:

Continue tracking and working with individuals who have not supplied the required CE documentation for re-licensure. Implementation of the Image Trend System will ultimately provide a more accurate and efficient user friendly interface for EMS education instructor coordinators to log their programs and attendance rosters. This automation will make it easier for licensees to keep track of their CEs and will flag the files that do not have the required documentation, thus eliminating some of the time consuming manual tracking processes. Implementation of this Image Trend application will be in place by September 30, 2016.

Basic practical testing for state licensure should be completed by the education program sponsors. Evaluators at test sites will be certified through a State evaluator's training program.

Current Status:

MFR and Basic EMT programs are mandated to conduct National Registry Psychomotor (practical) exams at the conclusion of the course. Evaluators are contracted by the program Instructor Coordinators.

Plan:

Revise the exam evaluator training module to reflect updates to the National Registry Psychomotor Exams requirements for paramedic practical by 1/31/16

Update State EMS website to provide information on testing sites, dates, and other pertinent information.

Current Status:

The EMS website does provide information on licensure and testing. However, the website is very outdated and contains old information. It is in need of a complete re-design. Unfortunately, the EMS section has not had sufficient human resources to effectively maintain the EMS section website. The Trauma section website is up to date.

Currently most IC exams are conducted in Lansing. Some are conducted in the UP depending on need. This is a paper laden process and requires staff proctoring and grading of all exams.

Plan:

Pursue feasibility of getting the IC exam on line through a certified vendor by 9/30/16

Work with BETP staff members who have the time and expertise to bring the website up to date and maintain the information in a current manner by 1/31/16.

Standard

D. **Transportation:** Safe, reliable ambulance transportation is a critical component of an effective EMS System. The transportation component of the State EMS plan includes provisions for uniform coverage, including a protocol for air medical dispatch and a mutual aid plan. This plan is based on a current, formal needs assessment of transportation resources, including the placement and deployment of all out-of-hospital emergency medical care transport services. There is an identified ambulance placement or response unit strategy, based on patient need and optimal response times. The lead agency has a mechanism for routine evaluation of transport services and the need for modifications, upgrades or improvements based on changes in the environment (i.e., population density). Statewide, uniform standards exist for inspection and licensure of all modes of transport (ground, air, water) as well as minimum care levels for all transport services (minimum staffing and credentialing). All out-of-hospital emergency medical care transport services are subject to routine, standardized inspections, as well as spot checks to maintain a constant state of readiness throughout the State. There is a program for the training and certification of emergency vehicle operators.

Transportation Recommendations

Pursue legislation, which will require a new transporting ambulance service to demonstrate a need for the service in the area proposed which mirrors the current CON process utilized to place air medical services.

Current Status:

Not implemented

Plan:

This is not feasible and will not be implemented. The CON process for air medical services is currently undergoing re-evaluation.

Within the transportation section of the State EMS Plan the EMS office must consider the utilization of fixed wing services in the Upper Peninsula.

Current Status:

Fixed wing and rotary air EMS transport is available in the UP as well as all areas of the state.

Plan:

Nothing further required.

Standard

E. **Facilities:** It is imperative that the seriously ill patient be delivered in a timely manner to the closest appropriate facility. The lead agency has a system for categorizing the functional capabilities of all individual health care facilities that receive patients from the out-of-hospital emergency medical care setting. This determination should be free of political considerations, is updated on an annual basis and encompasses both stabilization and definitive care. There is a process for verification of the categorizations (i.e., on-site review). This information is disseminated to EMS providers so that the capabilities of the facilities are known in advance and appropriate primary and secondary transport decisions can be made. The lead agency also develops and implements out-of-hospital emergency medical care triage and destination policies, as well as protocols for specialty care patients (such as severe trauma, burns, spinal cord injuries and pediatric emergencies) based on the functional assessment of facilities. Criteria are identified to guide interfacility transport of specialty care patients to the appropriate facilities. Diversion policies are developed and utilized to match system resources with patient needs; standards are clearly identified for placing a facility on bypass or diverting an ambulance to another facility. The lead agency has a method for monitoring if patients are directed to appropriate facilities.

Facilities Recommendations

Inventory all medical care facilities in the state as to:

- **Provision of Emergency Department Services**
- **Emergency Department staffing**
- **Clinical Capabilities**
- **Trauma Center Verification Status**

Current Status:

There are a total of 181 licensed health care facilities throughout the 83 counties. According to the Certificate of Need Facility Survey, 132 are licensed for Emergency Department and in-patient care. There are 36 facilities licensed as Critical Access Hospitals (See Attachment C). The health care facilities are widely dispersed in the rural Upper Peninsula and Upper Lower Peninsula and more closely distributed in the southern areas of the state, particularly in the densely populated southeast.

All facilities are offered the opportunity to participate in the administrative support of their respective MCA, and most of the facilities have opted to do so. Through their involvement in the MCA Board, the facilities are involved in selecting the MCA Medical Director, coordination of EMS services in the region, and in the development of triage, transport, and destination protocols.

Plan:

The Trauma section has developed designation criteria for level I-IV Trauma Centers and verification criteria for level III and IV centers. An implementation plan has been developed to designate the remaining 91 hospitals with EDs based on the identified criteria.

Assure that all EMS services and MCAs are aware of the capabilities of the facilities in their service area, and this information will also be provided to the Office of Public Health Preparedness.

Current Status:

Each MCA has developed systems protocols that identify hospital capabilities within the MCA along with triage and destination protocols. MCAs are developing provisional status protocols for hospitals that have not yet received official trauma center level designation. The creation of the BETP through the merger of the Office of Public Health Preparedness and the EMS and Trauma Section as well as maintaining a Division of EMS and Trauma presence in the Community Health Emergency Coordination Center (CHECC) ensures appropriate information sharing. The EMS and Trauma personnel work collaboratively with the Division of Emergency Preparedness and Response staff for medical and burn surge planning.

Plan:

Continue the excellent collaboration and communication that has occurred between the Division of Emergency Preparedness and Response and the Division of EMS and Trauma. Ensure that MCAs have protocols in place that define hospital capabilities and trauma level status.

Standard

F. **Communications:** A reliable communications system is an essential component of an overall EMS System. The lead agency is responsible for central coordination of EMS communications (or works closely with another single agency that performs this function) and the state EMS plan contains a component for comprehensive EMS communications. The public can access the EMS System with a single, universal emergency phone number, such as 9-1-1 (or preferably Enhanced 9-1-1), and the communications system provides for prioritized dispatch. There is a common, statewide radio system that allows for direct communication between all providers (dispatch to ambulance communication, ambulance to ambulance, ambulance to hospital, and hospital to hospital communications) to ensure that receiving facilities are ready and able to accept patients. Minimum standards for dispatch centers are established, including protocols to ensure uniform dispatch and standards for dispatcher training and certification. There is an established mechanism for monitoring the quality of the communication system, including the age and reliability of equipment.

Communications Recommendations

Modify the 9-1-1 legislation so the MCAs have the authority for direct medical oversight for EMS dispatching.

• Establish administrative rules, to support mandatory and uniform emergency medical dispatcher certification and education for all EMS dispatch centers.

• Establish administrative rules, which require dispatch centers to utilize medical priority dispatch systems with pre-arrival instructions, which have been reviewed and approved by the State.

• Continue to pursue and support interoperability communications plans and capabilities between EMS providers, law enforcement and fire response at the county and regional levels.

• Develop and encourage linkages between dispatch data systems and the pre-hospital data collection system.

Current Status:

In 2007, the state had enhanced 9-1-1 available in all but one county. Currently all counties in MI have access to 9-1-1 services. However, Emergency Medial Dispatch continues to be locally controlled with no State governance. In addition, there continues to be a conflict between the state EMS statute and the 9-

1-1 legislation. Medical Control Authorities have the responsibility "to assure the appropriate dispatching of life support agencies." The 9-1-1 legislation duplicates this responsibility to each 9-1-1 center bypassing medical oversight by the MCAs. Several communications issues remain since the 2007 NHTSA assessment.

Plan:

Explore options to insure that the legislation between EMS statute and the 9-1-1 legislation are congruent. As this is an extremely complex issue and involves significant collaboration and legislation, this will be a longer range goal. The BETP will provide ongoing participation in MPSCS committees and workgroups to ensure that MI EMS is considered in all public safety communications plans under consideration. On-going

The Director of BETP or a designee will participate on the MPSCS Interoperability Workgroup to insure that EMS is considered in all components of MPSCS planning. (On-going)

A Communications Workgroup will be convened to review and recommend any necessary revisions to the MEDCOM Plan by June 30, 2016.

Standard

G. **Public Information, Education and Prevention:** To effectively serve the public, each State must develop and implement an EMS public information, education and prevention (PIEP) program. The PIEP component of the State EMS plan ensures that consistent, structured PI&E programs are in place that enhance the public's knowledge of the EMS System, support appropriate EMS System access, demonstrate essential self-help and appropriate bystander care actions, and encourage injury prevention. The PIEP plan is based on a needs assessment of the population to be served and an identification of actual or potential problem areas (i.e., demographics and health status variable, public perceptions and knowledge of EMS, type and scope of existing PIEP programs). There is an established mechanism for the provision of appropriate and timely release of information on EMS-related events, issues and public relations (damage control). The lead agency dedicates staffing and funding for these programs, which are directed at both the general public and EMS providers. The lead agency enlists the cooperation of other public service agencies in the development and distribution of these programs, and serves as an advocate for legislation that potentially results in injury/illness prevention.

Public Information, Education and Prevention Recommendations

Update and implement an EMS public information and education program component to the State EMS plan, which is a comprehensive and aggressive public information and education program. Also, ensure the program component outlines the use of public service announcements, injury prevention activities and promotes public access to EMS.

Current Status:

There is no formal comprehensive Public Information, Education, and Prevention plan in place for EMS in general. However the EMS Section participates in several programs with other Bureaus and Community Agencies to promote injury prevention and public safety.

Plan:

Continue collaboration with a variety of injury/illness prevention initiatives such as: Safe Kids, Office of Highway Safety Planning Summer of Safety and Go Slow on Ice and Snow campaigns, Toward Zero Deaths, motorcycle and bicycle safety programs; Direct On- Scene Education (D.O.S.E.) an EMS safe sleep education program; Division of Emergency Preparedness and Response for winter safety and other personal and family preparedness initiatives; Matter of Balance and other injury prevention programs with trauma facilities; and the Bureau of Disease Control, Prevention and Epidemiology for additional safety programs. (On-going)

Seek funding to implement a bystander care training program

Current Status:

The EMS section received a grant from the Health Resources Services Administration (HRSA) to place Automated Eternal Defibrillators in rural areas of the state. The Michigan Center for Rural Health is coordinating the Rural AED Grant. The goal of the Michigan Rural AED Grant Program is to place AEDs in the most appropriate and useful locations as determined by the local Medical Control Authority (MCA) and the local EMS systems. The Michigan Center for Rural Health (MCRH) received this 3 year grant to purchase approximately 130 AEDs. By strategically placing AEDs, notifying members of the community of the placement of the AEDs, and training appropriate personnel on the AEDs, the ultimate goal is to save lives in the rural areas. Currently, 108 AEDs have been distributed to various rural areas of Michigan. Each region within the state can receive a maximum of 5 AEDs. Agencies that receive a grant for AEDs provide status reports to the Michigan Center for Rural Health. According to the Center for Rural Health, there have been two lives saved through this program.

Plan:

On-going support.

Encourage coordination of EMS providers and hospitals with the implementation of injury prevention initiatives.

Current Status:

In addition to the Regional Trauma Network activities delineated below, Michigan has adopted the National EMS Education curriculum which includes training in injury prevention and health and wellness of the EMS provider for all levels of EMS education.

Plan:

Continue to ensure that this topic is included in all EMS initial education programs. Ongoing

Increase public awareness of EMS Week activities and recognition of EMS personnel.

Current Status:

This has not been a priority at the state level due to funding and staff resources.

Plan:

A plan will be developed in collaboration with the EMSCC to promote EMS during National EMS Week in May. The plan will be developed by March 31, 2016.

When established, use the pre-hospital and trauma data to assess potential problem areas for the development of focused IP initiatives.

Current Status:

The Regional Trauma Networks, in cooperation with other agencies and organizations, use analytical tools to monitor the performance of population-based (regional) injury prevention programs.
For example: All ACS verified facilities in the Region 1 shared their current trauma related injury prevention plans with the RTN. These plans were used to inform the development of a region specific injury prevention plan. The framework for the regional plan includes specific strategies to address the regionally identified issues of Motor Vehicle Crash/Child Passenger safety and Falls/Drivers, and safety in the elderly population.

The RTAC created a subcommittee, tasked with developing a strategic plan to address region wide injury prevention initiatives. The subcommittee developed and disseminated a survey that queried the injury prevention programs in the Region 1 facilities. The information from this survey was then used to create a Region 1 Injury Prevention resource guide, which identifies the programs offered by each facility and the injury prevention contact.

Plan:

The eight Regional Trauma Networks will take the lead for injury prevention programs in 2015.

Conduct a survey to assess current injury prevention activities of local EMS agencies and hospitals to avoid duplication, improve coordination and inform providers of the availability of these programs for use within their communities.

Current Status:
As noted above

Plan:
As noted above

Standard

H. **Medical Direction:** EMS is a medical care system that involves medical practice as delegated by physicians to non-physician providers who manage patient care outside the traditional confines of office or hospital. As befits this delegation of authority, the system ensures that physicians are involved in all aspects of the patient care system. The role of the State EMS Medical Director is clearly defined, with legislative authority and responsibility for EMS System standards, protocols and evaluation of patient care. A comprehensive system of medical direction for all out-of-hospital emergency medical care providers (including BLS) is utilized to evaluate the provision of medical care as it relates to patient outcome, appropriateness of training programs and medical direction. There are standards for the training and monitoring of direct medical control physicians, and statewide, standardized treatment protocols. There is a mechanism for concurrent and retrospective review of out-of-hospital emergency medical care, including indicators for optimal system performance. Physicians are consistently involved and provide leadership at all levels of quality improvement programs (local, regional, state).

Medical Direction Recommendations

The State should create and fund the position of State EMS/Trauma Medical Director. This position would provide medical oversight to the office. In addition, the EMS MD would provide oversight guidance, including QI priorities directly to the MCAs. The MCAs should be accountable to the State EMS/Trauma Medical Director.

Current Status:
A plan has been developed to hire an EMS/Trauma Medical Director. The EMS/Trauma Medical Director was in place 10/1/15.

Plan:
The EMS/Trauma Medical Director will provide medical oversight guidance. (On-going)

The State Office should be funded to evaluate the individual MCAs, in order to determine their level of compliance with statutory responsibilities.

Current Status:

In 2012 a survey was conducted to determine statutory compliance of the MCAs. The survey results indicated that the MCAs were compliant with required rules and regulations. However, a gap in the survey instrument existed. The survey did not provide information regarding best practices for successful MCA structure and function as correlated to positive patient outcomes.

In July 2015 the University of MI proposed a study that would meet the gap identified in the 2012 assessment.

Plan:

The study will be implemented in November 2015, with final results reported to MDHHS BETP in December 2016.

The State should institute education and standards regarding the provision of on-line medical control.

Current Status:

All state protocols require direction for circumstances requiring on-line medical direction prior to implementing treatments or medications. All levels of licensure are included in the protocols and education is provided by local MCAs.

Plan:

Continue to require all protocols to indicate circumstances in which EMS must contact medical control prior to an action. On-going

Air medical transport agency protocols should also be approved by the State. Due the specialty nature of air medical transport, adherence to the State Model Protocols is not recommended. Consideration should be given to a single, statewide Air Medical MCA.

Current Status:

An ad hoc committee of the EMSCC was convened in early 2015 to begin exploration of this recommendation. The committee consisted of representation by all air medical EMS services in MI. They met several times and developed a proposal.

Plan:

The proposal will be evaluated and a decision made regarding implementation by June 30, 2016

The State should adopt the National Scope of Practice Model and add skills to each level as required.

Current Status:

Michigan has adopted the National Scope of Practice Model for paramedic and advanced EMT (specialist) level. However MI has a higher scope of practice for MFR and EMT. Michigan has not yet adopted the National title changes for MFRs and Specialists.

Plan:

Develop MI specific scope of practice for MFRs and EMTs by March 31, 2016.

Legislation should address the persistent problems regarding pediatric Do Not Resuscitate orders in the prehospital setting.

Current Status:

This has not been addressed

Plan:

This is not planned for implementation in 2016.

A Board Certified Pediatric Emergency Physician position should be added to the EMSCC

Current Status:

This has not been implemented

Plan:

Identify a Board Certified Pediatric Emergency Physician, who is willing to serve on the EMSCC and make the recommendation to the MDHHS Director for the addition of this position to the EMSCC by January 31, 2016.

Standard

I. **Trauma Systems:** To provide a quality, effective system of trauma care, each State must have in place a fully functional EMS System; trauma care components must be clearly integrated with the overall EMS System. Enabling legislation should be in place for the development and implementation of the trauma care component of the EMS System. This should include trauma center designation (using ACS-COT, ACEP, APSA-COT and/or other national standards as guidelines), triage and transfer guidelines for trauma patients, data collection and trauma registry definitions and mechanisms, mandatory autopsies and quality improvement for trauma patients. Information and trends from the trauma registry should be reflected in PIER and injury prevention programs. Rehabilitation is an essential component of any statewide trauma system and hence these services should also be considered as part of the designation process. The statewide trauma system (or trauma system plan) reflects the essential elements of the Model Trauma Care System Plan.

Trauma Systems Recommendations

Finalize dedicated funding for support of the Trauma System.

Current Status:

Trauma System Activities are funded through the Victims of Crime fees. This funding source is legislated to sunset in 2018 with a potential loss of 50%. This would have a significant negative impact on the strides that have been made in developing a functional trauma system in MI.

Plan:

Explore additional sources to ensure stable, sustained funding of the trauma and other time dependent emergency systems of care. On-going

Additional Activities

Community Paramedics Program

According to HRSA, (U.S. Department of Health and Human Services, Health Resources and Services Administration, Office of Rural Health Policy, 2012) paramedicine is a newly developed model of providing community health services to underserved populations. The concept has been successfully instituted in several states including Minnesota. Community Paramedicine (CP) expands the role of the paramedics depending on individual community needs and available resources.

A Community Paramedic workgroup was formed on September 24, 2013 to assist the department in the vision of what a community paramedicine program should look like in Michigan. During 2014, the workgroup met three times and determined that the department should evaluate the feasibility and effectiveness of community paramedics. A special study application was developed to assist MCAs and agencies prepare their written proposals. The proposal review process requires the QATF to review each proposal and then make a recommendation to the EMS Coordinating Committee, which in turn makes the formal recommendation to the department to allow the proposal to be implemented. In 2014 the department received, reviewed, and approved eight Community Paramedic Special Study Proposals. The programs vary in focus. Activities include integration of EMS and home health care, telemedicine, community health, chronic disease management, primary care follow up, resource referrals to reduce hospital readmissions, and supporting continuing care plans.

Plan

The special studies for community paramedics will extend for a three year period to identify best practices that may be adopted into a statewide program. The workgroup will develop a set of standard indicators and data required for evaluation of program effectiveness by January 31, 2016. Program progress reports will be submitted to the QATF on a quarterly basis to facilitate evidence based decision making regarding scope of practice, education and training, protocols and continuation of CP programs in MI.

2015-2016 EMS Plan Goals Summary

Standard	Plan Goal	Date
Regulation and Policy	Explore additional funding sources to support EMS and Trauma	On-going
Regulation and Policy; Resource Management	Complete a thorough evaluation of EMS Section staff roles, and work flow including plans for back-up coverage	12/31/2015
Regulation and Policy	Leverage additional subject matter expertise of BETP staff as available from the DEPR and Trauma Sections	On-going
Regulation and Policy	Fill staff vacancies to meet identified needs as appropriate	On-going
Regulation and Policy, Medical Direction	MCA Mixed Methods Assessment-U of M	12/1/2015
Regulation and Policy	Regional Medical Control Authority Network Full Implementation	12/1/2015
Regulation and Policy	Quarterly Meetings Start 1/1/16	On-going
Regulation and Policy	Convene a workgroup to evaluate and make recommendations regarding dispatch and pre-arrival medical instructions	9/30/2016
Regulation and Policy, Medical Direction	Make Recommendations to EMSCC regarding statewide Air MCA	6/30/2016
Resource Management, Medical Direction	Employ EMS/Trauma Medical Director	10/1/2015
Resource Management	Adoption of EMS Plan 2015-2016	11/30/2015
Resource Management	Multi-year Statewide Strategic EMS and Trauma Plan	12/31/2016
Resource Management	Implement Licensing Module for Personnel (Image Trend)	1/1/2016
Resource Management	Implement Licensing Module for Agencies (Image Trend)	1/1/2016
Resource Management	Convene Recruitment and Retention Stakeholder Task Force to develop a plan for R & R of EMS Personnel	3/31/2016
Human Resources & Training	Plan to improve EMS education	9/30/2016
Human Resources & Training	Evaluate feasibility of implementing a fee schedule for processing education sponsor applications and courses	9/30/2016
Human Resources & Training	Develop new effective and efficient process for MCA Protocol adoption and tracking	1/1/2016
Human Resources & Training	Implement ICHAT Criminal Background Checks for licensure and re-licensure of all applicants	10/31/2016
Human Resources & Training	Develop a process to validate licensure of any provider listed on LSA Rosters before licensing or re-licensing the agency	1/1/2016
Human Resources & Training	Revise MI MEDIC Dosing Cards	3/31/2016
Human Resources & Training	Implement CE Tracking Process in Image Trend	9/30/2016
Human Resources & Training	Revise exam evaluator training module to reflect updates the National Registry Psychomotor Exams requirements for paramedics	1/1/2016
Human Resources & Training	Evaluate feasibility of IC exam on-ling through a certified vendor	9/30/2016
Human Resources & Training	Update BETP Website	1/31/2016
Facilities	Begin designating Level III & IV Trauma Centers	On-going
Facilities	Ensure that MCAs have protocols in place that define hospital capabilities and trauma level status	On-going
Communications	Review and Revise MEDCOM Plan-	6/30/2016

Communications	Explore options to ensure that the legislation between EMS statute and 9-1-1 legislation are congruent	On-going
Public Information, Education and Prevention	Continue collaboration on injury prevention programs with multiple partners and stakeholders	On-going
Public Information, Education and Prevention	Develop a plan to promote EMS during EMS Week	3/31/2016
Medical Direction	Continue to require all protocols to indicate circumstances in which EMS must contact medical contro prior to an action	On-going
Medical Direction	Michigan specific Scope of Practice MFRs and EMTs	3/31/2016
Medical Direction	Addition of a Board Certified Pediatric ED Physician to EMSCC	1/31/2016
Trauma Systems	Explore additional sources of funding	On-going
Additional Activities	Convene CP Studies Task Force to develop standard indicators	1/31/2016

Attachment A

Michigan Designated Trauma Facilities
As of March 2, 2015

Trauma Facility Name	Location	Adult	Pediatric	Expiration Date
Beaumont Hospital – Grosse Pointe	Grosse Pointe	Level III		3/4/16
Beaumont Hospital – Royal Oak	Royal Oak	Level I	Level II	2/18/17
Borgess Medical Center	Kalamazoo	Level II		5/11/16
Botsford Hospital	Farmington Hills	Level II		1/26/16
Bronson Methodist Hospital	Kalamazoo	Level I		10/10/17
Children's Hospital of Michigan	Detroit		Level I	10/16/16
Covenant Hospital	Saginaw	Level II	Level II	12/16/15
C.S. Mott Children's Hospital	Ann Arbor		Level I	2/2/15
Detroit Receiving Hospital	Detroit	Level I		3/26/17
Genesys Regional Medical Center	Grand Blanc	Level II		6/30/15
Helen DeVos Children's Hospital	Grand Rapids		Level I	3/6/15
Henry Ford Hospital	Detroit	Level I		4/30/16
Henry Ford Macomb Hospital	Clinton Township	Level II		2/27/16
Henry Ford Wyandotte Hospital	Wyandotte	Level III		12/2/17
Hurley Medical Center	Flint	Level I	Level II	4/3/15
McLaren Flint	Flint	Level III		6/24/17
McLaren Lapeer Region	Lapeer	Level II		6/5/16
McLaren Macomb Hospital	Mount Clemens	Level II		4/12/16
McLaren Oakland	Pontiac	Level II		9/25/15
Mercy Health Saint Mary's	Grand Rapids	Level II		10/29/16
MidMichigan Medical Center	Midland	Level II		2/6/17
Munson Medical Center	Traverse City	Level II		5/12/15
Oakwood Hospital – Dearborn	Dearborn	Level II		1/25/16
Oakwood Hospital – Southshore	Trenton	Level II		12/13/16
Oakwood Hospital – Wayne	Wayne	Level III		4/17/15
Sinai-Grace Hospital	Detroit	Level II		11/5/17
Sparrow Hospital	Lansing	Level I		4/26/15
Spectrum Health Butterworth	Grand Rapids	Level I		3/6/15
St. John Hospital & Medical Center	Detroit	Level II	Level II	10/23/15
St. Joseph Mercy Hospital	Ann Arbor	Level II		6/19/16
St. Joseph Mercy Oakland	Pontiac	Level II		12/6/15
St. Mary's of Michigan	Saginaw	Level II		8/26/17
University of Michigan Health System	Ann Arbor	Level I		9/28/14
UP Health System – Marquette	Marquette	Level II		8/10/15
UP Health System – Portage	Hancock	Level III		12/11/15

Attachment B

Michigan Criteria for Trauma Facility Designation

The Michigan Trauma Administrative Rules acknowledges that certain criteria are integral to the establishment and continued development of a regionalized, coordinated and accountable trauma system in the state. Data, performance improvement and injury prevention are considered fundamental trauma facility functions. These same criteria are also fundamental to establishing and maintaining a trauma system as is the need to provide support to community trauma facilities (Level III) and trauma support facilities (Level IV) so that an integrated all inclusive trauma system can be maintained. These criteria have been identified as critical in nature and the failure of the healthcare facility to meet these criteria is considered a Michigan critical deficiency (MI-CD). A Michigan critical deficiency shall result in the healthcare facility not being recommended for designation and recommendations will be made for remediation.

The Michigan Administrative Rule 325.130 Rule (6) a-d states "The department shall designate the existing trauma resources of all participating healthcare facilities in the state based on the following categories:

- Comply with data submission requirements in R 325.133 and R 325.134
- Develop and submit a performance improvement plan based on standards that are incorporated by reference in these rules, pursuant to R 325.133 and R 325.134
- Participate in coordinating and implementing regional injury prevention plans
- Level I and Level II only: Provide staff assistance to the department in the designation and verification process of community trauma facilities (Level III) and trauma support facilities (Level IV).

I. Data Collection and Submission

Collection and submission of trauma patient data into the State Trauma Registry is a foundational component of all local, regional, and statewide trauma systems performance improvement and patient safety initiatives.

A. All healthcare facilities with an emergency center shall participate in data submission. Administrative Rule 325.133

MI-CD 1-1: Failure of the healthcare facility to participate in the submission of data on patients who meet trauma inclusion criteria as defined in this section shall be considered a critical deficiency.

B. Data is collected on all trauma patients who meet inclusion criteria as defined in the most current version of the American College of Surgeons National Trauma Data Bank "National Trauma Data Standard: Data Dictionary". This document may be found online at: http://www.ntdsdictionary.org/dataElements/datasetDictionary.html.

C. All data which meets inclusion criteria as described above is submitted electronically into the State Trauma Registry (ImageTrend®). Ref: Administrative Rule 325.134 (2) (a).

ImageTrend® is the State sponsored software program approved for use as the statewide trauma registry. Other nationally recognized trauma software registries may be used by the healthcare facility for data warehousing. However, all trauma data must be uploaded to the State Trauma Registry (ImageTrend®). This process is outlined in the document "State Trauma Registry (ImageTrend®) Access" found on the MDCH Trauma Section website.

1) Twelve (12) months of data must be submitted into the State Trauma Registry prior to applying for designation as a Michigan trauma facility for the first time. The healthcare facility may determine the twelve (12) month time frame but it must start no earlier than fifteen (15) months from the date of application for ACS verified facilities or scheduled site review for facilities seeking in-state verification.

MI-CD 1-2: Failure of the healthcare facility to submit data into the State Trauma Registry as described in C.1. above shall be considered a critical deficiency.

2) To maintain designation as a Michigan trauma facility, data is to be submitted electronically into the State Trauma Registry (ImageTrend®) quarterly by the following dates: January 15, April 15, July 15, and October 15.

MI-CD 1-3: Failure of the healthcare facility to continue to submit data into the State Trauma Registry on a regular basis after submission of the initial twelve (12) months of data shall be considered a critical deficiency.

D. Each healthcare facility is required to designate a person responsible for trauma registry activities. This person should have the minimal training necessary to maintain the registry. This need not be a dedicated position.

MI-CD 1-4: Failure of the healthcare facility to designate a person responsible for trauma registry activities shall be considered a critical deficiency.

II. Performance Improvement Plan

Performance improvement is integral in ensuring a highly functioning trauma program and a statewide trauma system. The Michigan Administrative Rules reflect this emphasis on continually evaluating performance as does the American College of Surgeons Committee on Trauma (ACS-COT). Healthcare facilities seeking designation as a Michigan trauma facility must do so in accordance with the following expectations:

A. Demonstrate participation in the regional trauma network performance improvement as described in the Regional Trauma Network work plan. Minimally, this includes demonstrating that the healthcare facility is participating in regional data collection (audit filters), analysis and sharing. A brief description of planned or ongoing

participation in the Regional Trauma Network performance improvement initiatives must be submitted with the designation application.

B. **Healthcare facilities seeking in-state verification as a Level III trauma facility** must meet performance improvement criteria for Level III referenced by Rule 325.135 and outlined in the American College of Surgeons Committee on Trauma "Resources for the Optimal Care of the Injured Patient 2014" in a written plan.

C. **Healthcare facilities seeking in-state verification as a Level IV trauma facility** shall develop and submit a performance improvement plan based on standards that are incorporated by reference to Rule 325.135 and the American College of Surgeons Committee on Trauma "Resources for the Optimal Care of the Injured Patient 2014". The standards include:

1) A written performance improvement plan, which addresses the following:

   a. A process of event identification and levels of review which result in the development of corrective action plans, methods of monitoring, re-evaluation, risk stratified benchmarking must be present and this process must be reviewed and updated annually.

   b. Problem resolution, outcome improvements and assurance of safety (loop closure) must be readily identifiable through methods of monitoring, re-evaluation, benchmarking and documentation.

   c. All criteria for trauma team activation have been determined by the trauma program and evaluated on an ongoing basis in the PI process.

   d. Audit Filters - the PI program identifies and reviews documents, findings, and corrective action on the following five (5) audit filters which must be addressed in the PRQ:
      - Any system and process issues
      - Trauma deaths in house or in emergency department
      - Any clinical care issues, including identifying and treatment of immediate life threatening injuries
      - Any issues regarding transfer decision
      - Trauma team activation times to trauma activation

2) A policy in place to review issues that revolve predominately around (1) system and process issues such as documentation and communication; (2) clinical care including identification and treatment of immediate life threatening injuries (ATLS); and (3) transfer decisions.

MI-CD 2-1: Failure to participate in the Regional Trauma Networks performance improvement work plan and initiatives outlined in the brief description submitted with the designation application shall be considered a critical deficiency.

MI-CD 2-2: Failure of a facility requesting Level III in-state verification to provide a written performance improvement plan which meets performance improvement criteria from the state of Michigan and the American College of Surgeons shall be considered a critical deficiency.

MI-CD 2-3: Failure of a facility requesting Level IV in-state verification to provide a written performance improvement plan which meets state of Michigan and American College of Surgeons criteria as outlined in section C shall be considered a critical deficiency.

III. Injury Prevention

All healthcare facilities seeking designation by the State of Michigan as a trauma facility are expected to demonstrate the following:

A. Participate in coordinating and implementing Regional Trauma Network injury prevention work plans and initiatives.

MI-CD 3-1: Failure of the healthcare facility to participate in the Regional Trauma Network Injury Prevention work plan and initiatives outlined in the brief description submitted in the designation application is considered a critical deficiency.

IV. Staff Support

This section applies to ACS verified Level I and Level II trauma facilities only.

A. Provide staff assistance to the Department in the designation and verification process of community trauma facilities and trauma support facilities contingent upon sufficient funding being appropriated. To meet this expectation the ACS verified Level I and II must:

1) Submit the names of two staff members from their facility to the in-state review team pool. Candidates must be practicing in trauma and/or emergency care at an ACS verified Level I or Level II trauma facility. They are currently involved in trauma facility performance improvement activities. Candidates have successfully completed Advanced Trauma Life Support or Advanced Trauma Care for Nurses and participated in a site review by ACS. Candidates are willing to attend an MDHHS site reviewer orientation.

2) Hospitals must submit (at least) one (1) physician, either a surgeon or an emergency physician and (at least) one (1) trauma nurse manager/coordinator, or

one (1) trauma quality improvement RN, or one (1) mid-level provider (physician assistant, nurse practitioner, advanced practice nurse with trauma experience.

3) Candidates chosen from the pool commit to one review cycle (3 year) and each candidate agrees to train as a verification site reviewer and commit to one visit per year.

MI-CD 4-1: Failure of the healthcare facility to provide candidates as described in this section for the purpose of serving as site reviewers shall be considered a critical deficiency.

Level	Criterion	Type
Data – Rule 325.133 and 325.134		
I, II, III, IV	Submit data on patients who meet trauma inclusion criteria as defined in the most current version of the American College of Surgeons National Trauma Data Bank, "National Trauma Data Standard: Data Dictionary" (http://www.ntdsdictionary.org/dataElements/datasetDictionary.html). (MI-CD 1-1)	I
I, II, III, IV	Submit twelve (12) months of data into the State Trauma Registry prior to applying for designation as a Michigan trauma facility. The healthcare facility may determine the twelve (12) month time frame, but it must start no earlier than fifteen (15) months from the date of application. (MI-CD 1-2)	I
I, II, III, IV	Continue to submit data into the State Trauma Registry after submission of the initial twelve (12) months of data. Data should be submitted quarterly by the following dates: January 15, April 15, July 15, and October 15. (MI-CD 1-3)	I
I, II, III, IV	Identify a trained staff member responsible for data collection. (MI-CD 1-4)	I
Performance Improvement – Rule 325.135		
I, II, III, IV	All Michigan trauma facilities must participate in regional performance improvement as described in the Regional Trauma Networks work plan (www.michigan.gov/traumasystem) (MI-CD 2-1)	I
III	In-state verified Level III trauma facilities must meet performance improvement criteria outlined by the state of Michigan and ACS. (MI-CD 2-2)	I
IV	Have a written Performance Improvement plan. (MI-CD 2-3)	
IV	The process of event identification and levels of review must result in the development of corrective action plans, and methods of monitoring, re-evaluation, and risk stratified benchmarking must be present this process must be reviewed and updated annually. (MI-CD 2-3)	I
IV	Problem resolution, outcome improvements and assurance of safety (loop closure) must be readily identifiable through methods of monitoring, re-evaluation benchmarking and documentation. (MI-CD 2-3)	I
IV	A policy in place to review issues that revolve predominately around (1) system and process issues such as documentation and communication; (2) clinical care including identification and treatment of immediate life threatening injuries (ATLS); and (3) transfer decisions. (MI-CD 2-3)	I
IV	All criteria for trauma team activation have been determined by the trauma program and evaluated on an ongoing basis in the PI process. (MI-CD 2-3)	I
IV	The PI program identifies, reviews and documents findings and corrective action on the following audit filters: (MI-CD 2-3) • Any system and process issues • Trauma deaths in house or in emergency department • Any clinical care issues, including identifying and treatment of immediate life threatening injuries • Any issues regarding transfer decisions • Trauma team activation times to trauma activation	I
Injury Prevention – Rule 325.130		
I, II, III, IV	Provide a brief description on how the facility is participating in the Regional Trauma Network injury prevention work plan (www.michigan.gov/traumasystem) (MI-CD 3-1)	I
Staff Assistance – Rule 325.130		

I, II	Submit the name of (at least) one (1) physician, either a surgeon or an emergency physician and (at least) one (1) trauma nurse manager/coordinator, or one (1) trauma quality improvement RN, or (1) mid-level provider (physician assistant, nurse practitioner, advanced practice nurse) with trauma experience to serve as site reviewers for potential Michigan Level III or Level IV trauma facilities. A minimum of two (2) candidates must be submitted. The commitment time period will span a three (3) year cycle with one (1) site visit per year. (MI-CD 4-1)	I

Michigan Criteria

Frequently Asked Questions

DATA:

1.) How do I submit data into the state trauma registry? Access www.michigan.gov/traumasystem; search under Trauma Registry to find instructions for data imports from either NTDB or a facilities program. All Image Trend users must be assigned user names, password and privileges before this can occur. Contact MDHHS to obtain this information.

2.) Where can I find information on the National Trauma Data Bank Data? Access this information at http://www.ntdsdictionary.org/dataElements/datasetDictionary.html

3.) Can I use another software system to collect trauma data? Yes, other software systems can be used, however all data must be entered into Image Trend quarterly for designation.

4.) Should only complete cases be entered into the registry? The ACS requires that trauma registries for Level I, II, and III facilities be concurrent, at a minimum, 80 percent of cases must be entered within 60 days of discharge. Cases not complete from the prior quarter may be entered at the next quarter.

5.) Do Level IV facilities need to have a dedicated trauma data entry person? No it is expected that with limited resources this is not always feasible. However every effort must be made to ensure someone in every facility is trained to ensure trauma data is entered into the registry in an accurate, timely fashion.

6.) While I am waiting for designation, do I need to continue to submit data? Yes, you should submit data quarterly after the initial 12 month data submission on the following dates January 15, April 15, July 15, and October 15.

7.) How do I know which patients to add to the registry?
See http://www.ntdsdictionary.org/dataElements/documents/2014NTDSDataDictionary.pdf; flow sheet on page 10.

PERFORMANCE IMPROVEMENT:

1.) How do I demonstrate participation in Regional Trauma Network performance improvement work plan and initiatives? Some examples of participation include: accessing the Regional Trauma Network work plan at www.michigan.gov/traumasystem under Regional Trauma Network and volunteering to work on the SMART objectives each region is developing to address region specific performance improvement. Participating in training or education designed to address a regional performance improvement initiative, participation in the Regional Professional Standards Review Organization, actively engaged in the collection of quality regional data, benchmarking, and report writing. Implementing initiatives in your facility that address system performance for example; expedited transfers, limited ED stays, and others.

2.) If I'm already an ACS verified facility do I have to send in a written PI plan? No, only In-State verified trauma facilities need to submit written PI plans to MDHHS.
3.) I'm planning to become a Level IV facility and I don't have all the elements of a PI program will I not be designated? You must have a written PI plan that covers all the elements listed on the Michigan Criteria Quick Reference Guide to be considered for verification and designation.

INJURY PREVENTION:

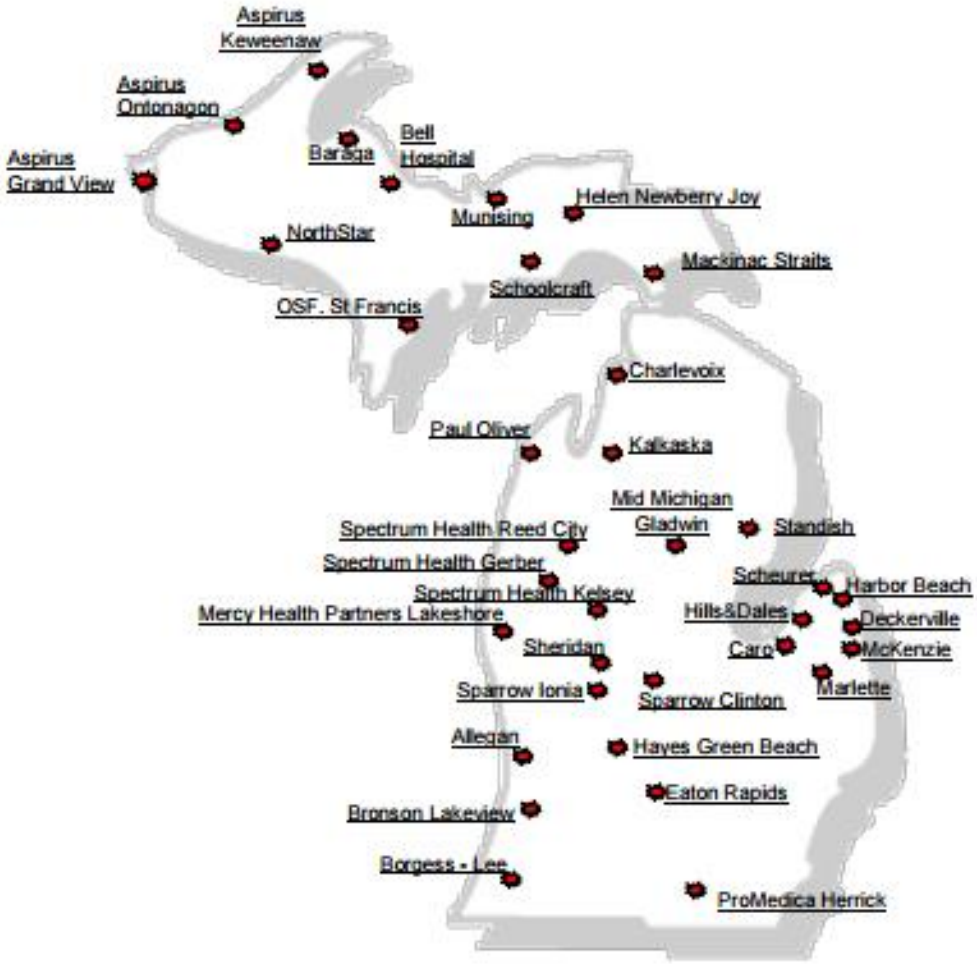
1.) How do I demonstrate participation in Regional Trauma injury prevention? Some examples of regional injury prevention participation include: accessing the Regional Trauma Network work plan at www.michigan.gov/traumasystem under Regional Trauma Network and volunteering to work on the SMART objectives each region is developing to address region specific injury prevention, collaborating with regional partners on injury prevention initiatives, using regional injury data to prioritize injury initiatives and evaluate project outcomes.
2.) The application for designation says to send in a brief description of injury prevention initiatives how long is brief? Brief is considered 250 characters or less.

STAFF SUPPORT:

1.) Does my facility have to submit two names and what if they are the same credential level i.e. two physician assistants? Yes, two names must be submitted and the candidates should include one physician, either a surgeon or an emergency physician and at least one trauma nurse manager/coordinator, or one trauma quality improvement RN, or one mid-level provider (physician assistant, nurse practitioner, advanced practice nurse) with trauma experience. The Administrative Rules are clear about supporting the verification and designation of Level III and Level IV facilities. An effective review team should have a well-rounded skill set and the ability to review, guide and direct the facility under review so that they understand the gaps strengths and needs of their program. It is acknowledged that this program is new and once executed the team composition will be reviewed.
2.) Is there any support for this process? MDHHS is developing those resources.
3.) What role do I have as a possible Level III or Level IV facility in this process? Just like the ACS process you are responsible for program development, data collection and submission and completing the PRQ. In addition, ensure staff is actively engaged in the site review process.

Attachment C

Michigan Critical Access Hospitals



Source: http://www.mcrh.msu.edu/documents/cah/NewCAHMapOct2014.pdf