



# **Genesee County Medical Control Authority (GCMCA)**

2018 Annual Report

March 1, 2019



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## GCMCA Background

In 1990 P.A. 368 of 1978 as amended, the responsibility of oversight for emergency medical services (EMS) is placed on the hospitals within a community through entities known as medical control authorities (MCAs). Since its implementation the GCMCA has served Genesee County as the statutory body established to meet the expectations of the state law.

Through a protocol driven process the GCMCA provides direction on the dispatch, triage, treatment, transport, and system operation of the EMS system. This is done with an open, inclusive, and transparent process that includes all sectors of the pre-hospital patient care structure.

## Mission Statement

The Genesee County Medical Control Authority (GCMCA) will strive towards an integrated, cooperative, and quality-based pre-hospital system designed to provide timely and professional services to the communities in which it serves.

## Funders

The GCMCA is exceedingly grateful for the financial support of our operational budget from the following organizations:

*County of Genesee  
Genesys Regional Medical Center  
Hurley Medical Center  
McLaren-Flint*



## EMS Agencies Currently Serving Genesee County

We are grateful to have many high-quality EMS agencies serving Genesee County. Many of these organizations serve the entire county and some of them specific local jurisdictions. At the time of the printing of this document we have twelve (12) MFR agencies, seven (7) ALS transporting agencies, and one (1) ALS first response agency. The following are the EMS agencies currently serving our community:

### **Medical First Response Agencies:**

Argentine Township Fire and Rescue  
 Atlas Township Fire Department  
 Bishop Airport Fire and Rescue  
 Davison Richfield Fire Department  
 Fenton City Fire Department  
 Fenton Township Fire Department  
 Flint Fire Department  
 Forest Township Fire Department  
 Gaines Township Fire Department  
 Linden City Fire Department  
 Montrose Township Fire Department  
 Mundy Township Fire Department

### **ALS Transporting Agencies:**

Elite EMS  
 Medstar Ambulance  
 Mobile Medical Response  
 Patriot Ambulance  
 STAT EMS  
 Swartz Ambulance Service  
 Twin Township Ambulance

### **ALS First Response Agency:**

Genesee County Sheriff's Office Paramedic Division

## GCMCA Board and Committee Membership

### **Board**

Jennifer Carpenter  
 Ray Rudoni, MD  
 John Stewart  
 Chris Swanson  
 Jim Williams

### **Protocol**

Ed Blight  
 Alex Boros  
 Austin Burgess, MD  
 Sara Dubey  
 Steve Henson  
 Tim Jones  
 Joe Karlichek  
 Harold McNew  
 Joshua Newblatt, DO  
 Ray Rudoni, MD  
 Casey Tafoya

### **Education**

Ron Andersen  
 David Benn  
 Alex Boros  
 Austin Burgess, MD  
 John Chalcraft  
 Joe Hyrman  
 Harold McNew  
 Joshua Newblatt, DO  
 Chris Patrello  
 Ray Rudoni, MD  
 Todd Witthuhn

### **PSRO**

Amy Benko  
 Alex Boros  
 Austin Burgess, MD  
 Sara Dubey  
 Tim Jones  
 Joe Karlichek  
 Jason MacDonald  
 Joshua Newblatt, DO  
 Ray Rudoni, MD  
 Casey Tafoya  
 Marta Wright

### **Advisory**

#### **Committee**

Alex Boros  
 Austin Burgess, MD  
 Bob Cairnduff  
 Jennifer Carpenter, RN  
 Sara Dubey  
 Carrie Edwards  
 Tim Jones  
 Joe Karlichek  
 Mike McCartney, RN  
 Joshua Newblatt, DO  
 David Rapacz  
 Ray Rudoni, MD  
 Casey Tafoya



### **Appeals Review**

Garrett Fairchild  
 Patrick Hawley, MD  
 Joe Hyrman  
 Gina Murphy  
 Kieth Rumbold

# System Demographics – 2018

The following provides some basic information regarding the EMS system in Genesee County.

## Dispatch Data

Total 911 EMS Calls Dispatched:

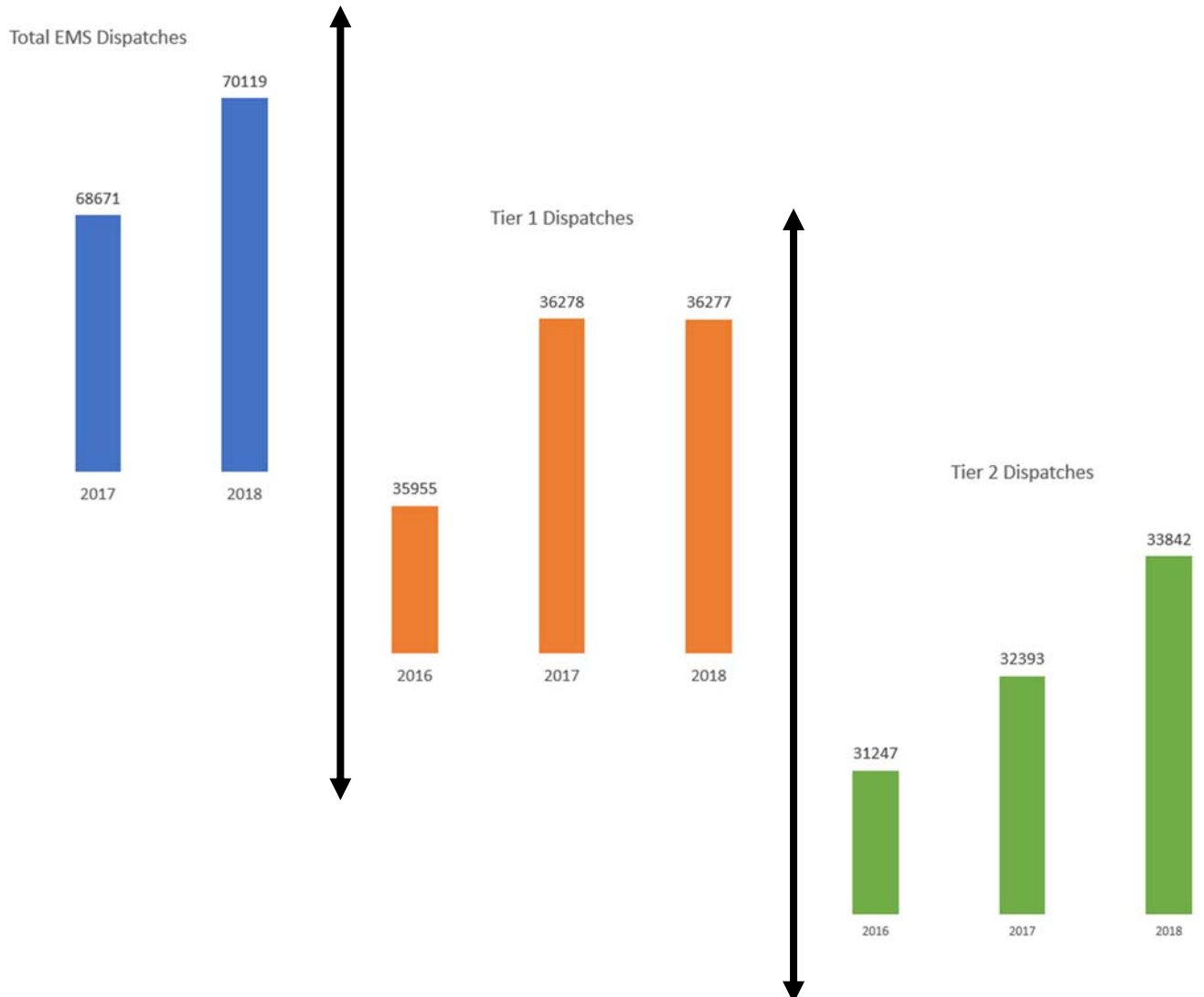
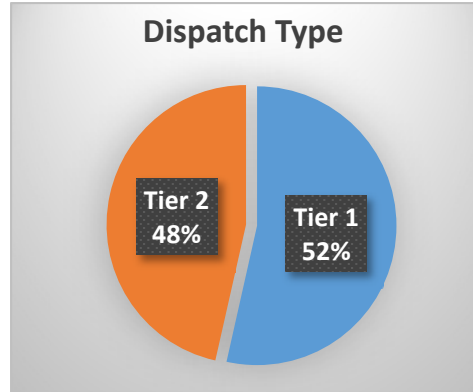
**70,119**

Tier 1 Calls:

**36,277**

Tier 2 Calls:

**33,842**



# Provider Data

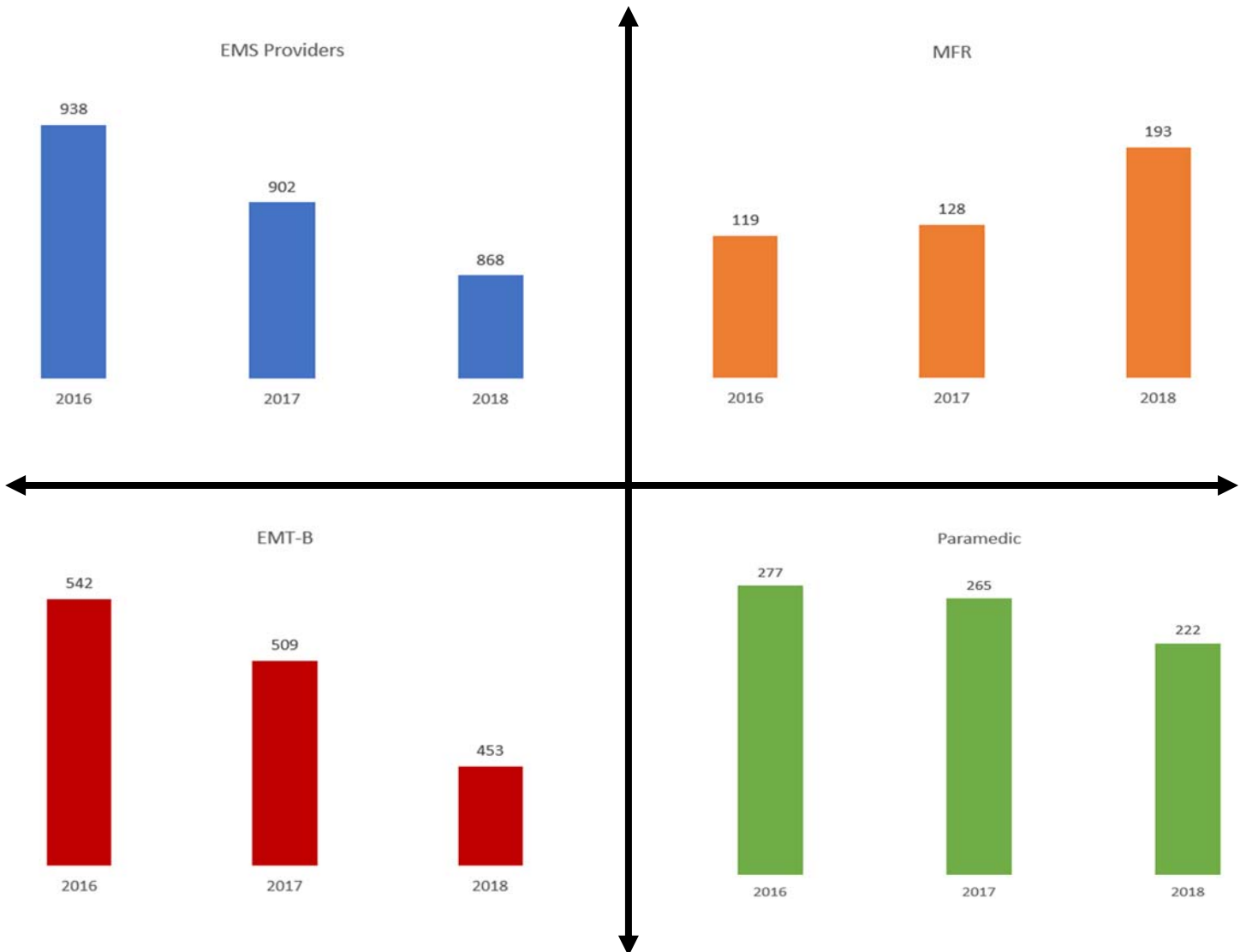
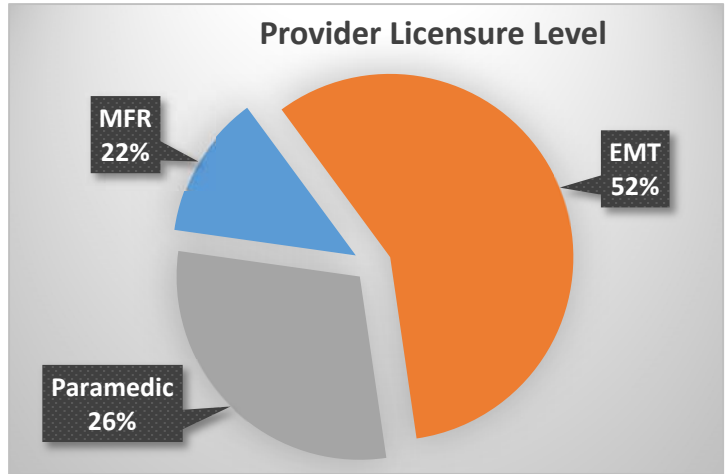
Total Individual EMS Providers:

**868**

MFR  
**193**

EMT  
**453**

Paramedic  
**222**



## Vehicle Data

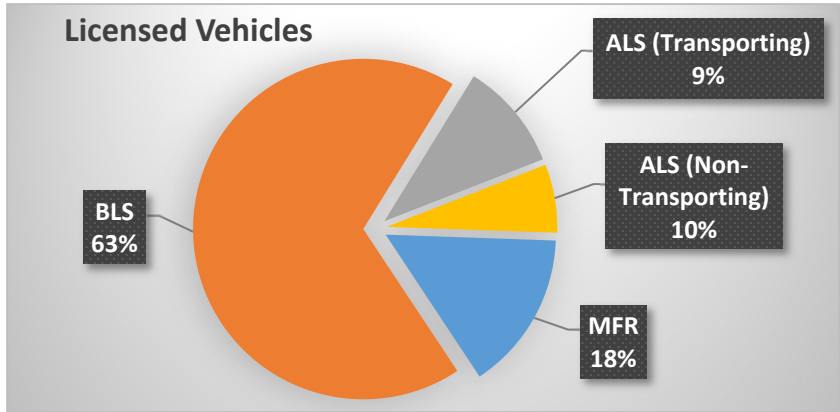
Licensed Vehicles:

Total: **163**

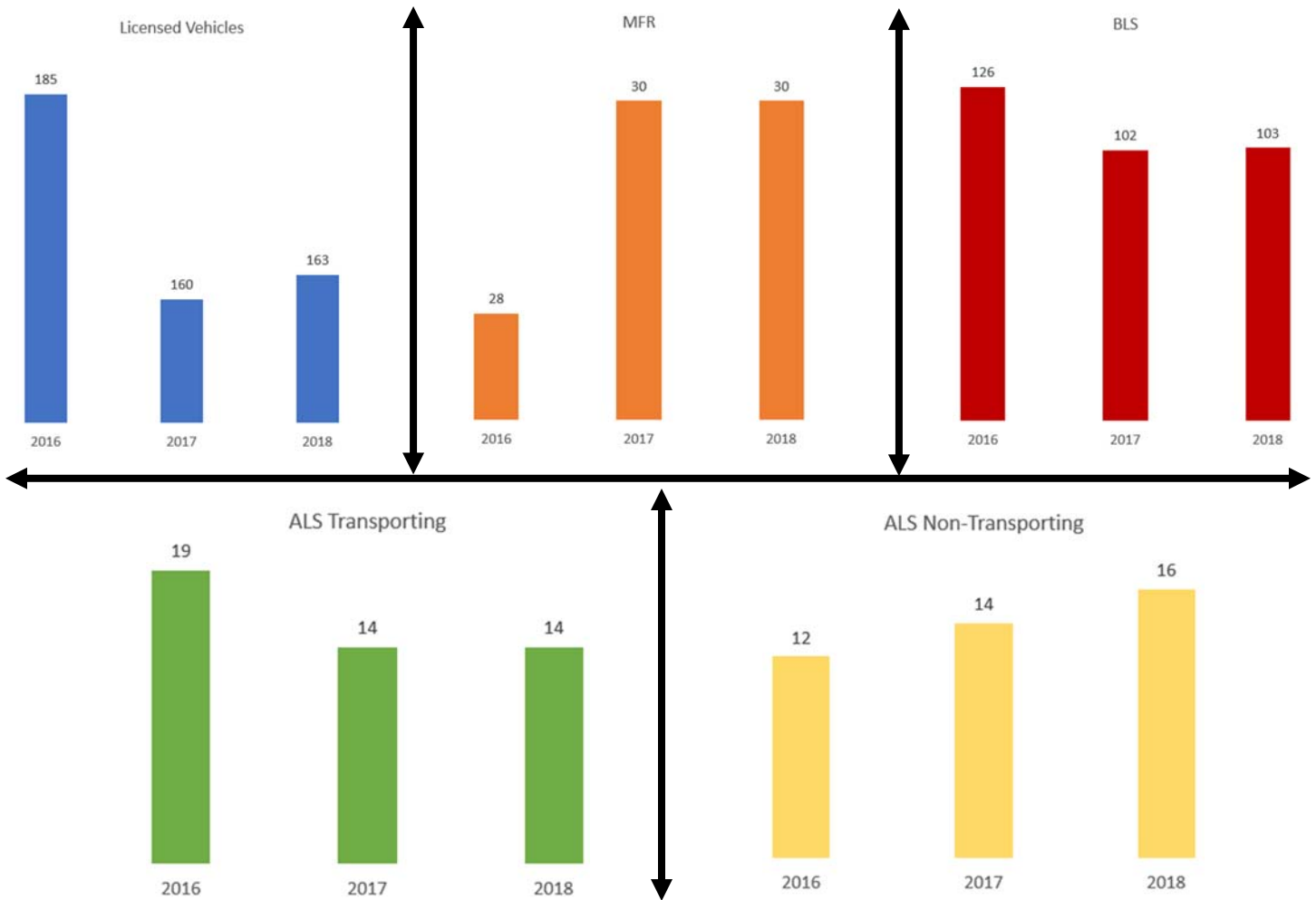
MFR: **30**

BLS: **103**

ALS (Transporting): **14**



ALS (Non-Transporting): **16**



Note that an agency can license a unit as BLS and upgrade them to ALS as personnel are available, so the number of ALS transporting units on the road and available to respond at any given time is much higher than the number licensed

## Protocols

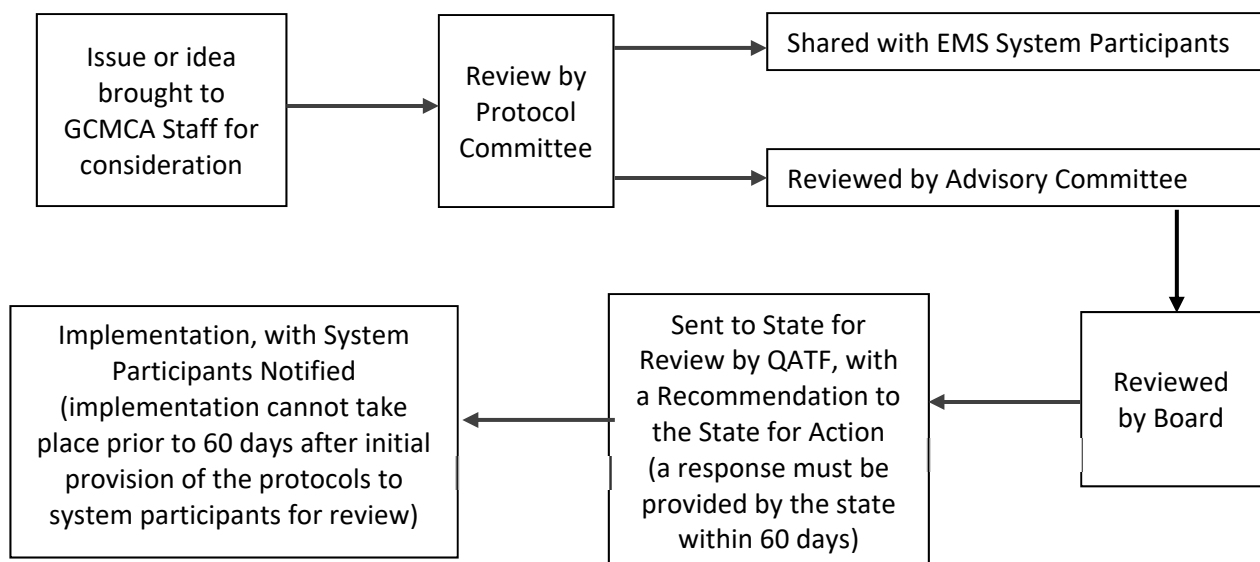
The GCMCA is a protocol-driven organization, with all protocols receiving the approval of the State of Michigan and having the force of law. The protocol adoption process involves reviewing system concerns; researching operational models and new treatment modalities; writing protocol language; having multiple committees review proposed changes; and shepherding the changes through the approval process.

In 2018 the GCMCA completed a full review of all protocols, including input and action on state proposed changes to treatment and system operations protocols. A total of one hundred seventy-five (175) protocols were adopted – both state and locally-developed protocols.



As outlined below, the approval process involves a review by multiple committees, the GCMCA Board, and the state. In addition, all protocols are shared with system participants, which provides an opportunity for input by individuals and agencies that do not serve on one of the GCMCA committees. Once the approval process is completed the protocols are emailed to all system participants and posted to the GCMCA website. EMS agencies are responsible for providing education to EMS providers on protocol changes.

### Protocol Approval Process





## Individual Provider Credentialing

In order to operate as a Medical First Responder (MFR), Emergency Medical Technician (EMT), or Paramedic in Genesee County, additional training, testing, and verification is required. Those working for an MFR agency receive annual core competency training in four categories: airway, trauma, vital signs, and CPR. For those MFRs and EMTs working for an ALS agency they are required to receive AHA CPR certification and obtain additional certifications in approved



pediatric and trauma courses within six months of first beginning employment in the county.

In addition to the above certifications, paramedics in Genesee County are required to be current in AHA ACLS and go through an extensive 12-lead training and testing process focused on recognition of ST-Elevation Myocardial Infarctions (STEMIs), which result in the activation of hospital Cath Labs from paramedic interpretation of the 12-lead.

By participating in this process EMS providers are issued an identification badge that lists their name, GCMCA-approved level of operation, photo, and state license expiration date. These badges are to be renewed when the state license is renewed and failure to do so within sixty days of expiration will result in the suspension of the individual's ability to operate in the county.

In 2018 we had 381 EMS providers complete this process, being issued new or renewed badges. There were nine (9) individuals who did not complete the process in a timely manner and had their privileges to operate suspended.

## Medical Direction

All MCAs are required by state law to have a physician medical director who is board certified in emergency medicine. Our system rotates this responsibility between the three hospitals every two years. Dr. Raymond Rudoni (McLaren-Flint) is the current GCMCA Medical Director with a term expiring on September 30, 2020. We are truly grateful for the commitment and dedication of all our health care professionals, especially the willingness of our physicians to take on this immense responsibility.



In addition to providing routine input on clinical questions from providers, agencies, and staff, the medical director serves as a member of the Board and all committees. On a monthly basis all EMS runs involving patients with STEMIs, pediatric cardiac arrests, cricothyroidotomies, and transfers involving a decline in status are reviewed by the medical director. Detailed data on these cases will be provided under the PSRO section of this report.

## Professional Standards Review Organization (PSRO)

The PSRO is a statutorily-established peer review entity that is responsible for quality improvement efforts of a MCA. All activities of the organization are confidential and protected by law. The GCMCA PSRO is an exceedingly active group addressing a variety of quality issues. On a monthly basis the group looks at complaints submitted by patients, hospitals, EMS agencies, 911, and other system participants; reviews studies of specific operational and treatment topics; meets with agencies and providers to address protocol compliance concerns; and makes recommendations to the Advisory Committee and Board for disciplinary actions if other avenues to address concerns are unsuccessful.

In 2018 the PSRO reviewed the following studies and other systemic issues:

- Annual Data Review
- BLS & MFR Naloxone Cases<sup>1</sup>
- Cath Lab Activation Review
- Chute Time Data Review (2x)<sup>1</sup>
- Committee Attendance Compliance
- Complaint History Review
- End Tidal CO<sub>2</sub> Study<sup>1</sup>
- New State PSRO Protocol Review & Education
- Pharmacy Incident Review
- Physician 12-lead EKG Review
- Potential RSI Case Review
- Run Record Data Field Completion Compliance
- Tier 1 Intercepts for Pain Management<sup>1</sup>
- Vehicle Accident History



<sup>1</sup>Aggregate reports available for public review upon request.

### Specific Routine Run Records Reviewed

The medical director reviewed ten (10) pediatric cardiac arrests in 2018. Of those, 70% were patients less than one year of age and 90% were children less than four years of age. In addition, the following were specific issues reviewed: ninety-eight (98) STEMI patients with hospital Cath Lab activation; ten (10) EMS vehicle accidents requiring a police report while the unit was actively involved in an EMS call; one (1) transfer case where the patient's status declined; and three (3) reported assaults on EMS providers.

## Incidents and Disciplinary Actions

In 2018 the GCMCA PSRO received seventy-eight (78) incidents/complaints regarding potential protocol violations related to various operational and treatment protocols. In order to complete a review of these concerns each was investigated by having the individual or agency involved submit documentation that could include run records, dispatch records, radio recordings, written statements from those involved, or interviews with providers or agency representatives. Once the PSRO has completely reviewed all the documentation they will either find a protocol violation or not. If there is a finding of a protocol violation, those found at fault could receive any number of actions including trending, education/retraining, reprimand, probation, suspension, or recommendation to the state that a license be revoked. Of the 71 incidents/complaints reviewed, 24 (33.8%) were found to be protocols violations.

The goal of the GCMCA and the PSRO is to address quality concerns and protocol non-compliance with education and counseling. However, there are some cases that require probation or suspension. In 2018 the PSRO recommended, and the GCMCA Board approved, suspensions of sixty-three (63) EMS providers. The individual suspensions were for various reasons and are as follows: eight (8) – ID badge renewal; eight (8) – pediatric and/or trauma certification non-compliance; eleven (11) – 12-lead training and testing non-compliance; thirty-five (35) – protocol training and testing; and one (1) MI-Medic training.



## **Education**

The GCMCA has an active Education Committee with dedicated volunteers. The role of the committee is to provide guidance and recommendations for educating providers on protocol changes and new areas of EMS treatment and operations.

The following is a list of issues that the Education Committee provided direct education/information, guidance, objectives, outlines, or assistance for training providers and agencies:

- Direct On Scene Education
- Epinephrine Special Study
- Human Trafficking
- ID Badge Compliance
- Inclement Weather Safety
- Burn Assessment
- New State Treatment Protocols
- Patient Destination
- Scene and Road Safety
- Spinal Precautions
- State CE Requirements
- Stroke and STEMI Alerts
- Tourniquet Usage
- Trauma Communication to Hospitals



The committee was actively involved in the creation of test questions for the new state protocols and implementation into a new testing platform through American CME. All providers were required to take the new test, which included fifty (50) questions specific to the individual's level of licensure.

Other activities of the committee included the review and evaluation of critical care training programs for possible inclusion in our system; assistance with a local, state-run program on pediatric medication administration and new protocols; review of new MI-Medic requirements; guidance on training for newly acquired DuoDote kits; MABEES special study refresher trainings; SALT training; EMS week activities; 12-lead training and testing revisions; education on patients with bed bug infestations; end tidal CO2 education; and much more. Some of these issues are communicated to providers through our email distribution list and Hot Topics newsletter. This GCMCA-produced bi-monthly newsletter focuses on issues in the EMS profession, changes to protocols, important quality study findings, and games and trivia with prizes to the winners.



In some cases, a bad situation can turn to good. In 2018 the technology supporting the GCMCA website died, resulting in a loss of all website material and creating an inability to make changes to our site. As a result, GCMCA staff identified a new hosting platform and completely rewrote the entire website. The site is more interactive and has many features that the old site did not. Not only that but it looks cool! Come visit us at [GCMCA.org](http://GCMCA.org) and share any feedback for changes or improvements. You can also see more images from our agencies.

### Flint Firebirds

In 2018 the GCMCA, and EMS agencies and providers, worked with the Flint Firebirds to host two education and recognition nights. These events, held in February and October, provided the



community with education and awareness of important lifesaving techniques. Topics included: hands-only CPR, Stop-the-Bleed, AED usage, safe sleep recognition, elder abuse, stroke awareness, elder abuse, mass casualty response, and human trafficking. Attendees also had the opportunity to explore the ambulances and other vehicles used in EMS.

The Firebirds used both nights as an opportunity to recognize the important work of our EMS responders. Each participating agency had a representative on the ice for the ceremonial puck drop, and any employee of those agencies was given the opportunity to attend the game free of charge. All other providers could purchase tickets at a reduced cost.

## Local Involvement

In addition to previously mentioned committees and groups that the GCMCA participates with, staff is actively involved with several local organizations to support their work and provide an EMS perspective. The GCMCA Executive Director is a voting member of the Genesee County 911 Consortium's Advisory Committee, serves on the Genesee County Child Death Review Committee, and the University of Michigan's Stroke Readiness Project.



GCMCA staff also speaks to local groups on EMS issues, including EMT initial education classes and local community groups, providing information on the role and function of a MCA in the EMS system. If your organization is interested in learning more about the Genesee County EMS system and would like a GCMCA staff member to attend a meeting, please feel free to contact us.

## Regional Involvement

Regional activity has been an important part of the GCMCA's operation since first being involved in the creation of the Southeast Michigan Regional Protocol Committee and drug box system in the late 1990's. That committee continues to meet regularly making changes to protocols and managing the drug box system.

In recent years the growth of regional organizations has been spurred by efforts at the state level. GCMCA staff has been involved with the Region 3 Trauma Network from its infancy, serving on the Board; Advisory Committee; the Triage, Transport and Destination Subcommittee; and the Application and Work Plan Subcommittee.



In 2015 the state established Regional MCA Networks (RMCAN), which included state funding to support regionalization projects. As Genesee County has interests in two different regions, GCMCA staff has been an active participant in both the RMCANs of Region 2 North and 3. These groups have afforded us the opportunity to strengthen previously established relationships with our counterparts in these regions and provided funding for projects that will improve and benefit our county's EMS system. We want to thank the Regions and

the State of Michigan for the provision of a one-time grant to support the infrastructure of the GCMCA. With the funds we were in part able to obtain a new copy machine; ID badge machine; training materials and equipment; office furniture; and more!

## State Involvement

Having a strong connection to state EMS issues has proven beneficial for both our local MCA and offers support to our colleagues in the state by providing leadership in various areas. The GCMCA Executive Director has served as a member of the state's statutory advisory body for EMS issues since 2004 - the EMS Coordinating Committee (EMS CC). In addition to regularly attending the group's meetings, GCMCA staff serves on several of the EMS CC's committees, and is chairperson of the MCA and Legislative committees.



The GCMCA is also involved with and supportive of other state-wide activities. MCAs around the state can join the Michigan Association of EMS Systems, which is a trade association for MCA staff in the state. This group meets to share ideas, best practices, and provide input on state issues being discussed at the EMS CC, where the association has a voting member. GCMCA staff has previously served in leadership positions with this organization.

## Financial Status

The GCMCA is grateful for the financial support of Genesee County through their county-wide EMS millage as well as the three Genesee County hospitals. The 2017-18 fiscal year operating budget was \$303,480, and we have been able to maintain hospital contributions at the current level since 2004. The organization's fund balance at the end of the fiscal year, which concluded on June 30, 2018, was \$22,481. We would also like to thank the State of Michigan for a grant that provided some needed equipment and infrastructure for our organization.

## Thank You!

Thank you for taking the time to review this report. If you have any questions about any items found here, or if you need anything related to the Genesee County EMS system, please feel free to contact us.

## Contact Information

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