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Georgia Office of EMS and Trauma

EMS MEDICAL DIRECTOR'S COURSE

GEORGIA DEPARTMENT OF PUBLIC HEALTH

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INTRODUCTION

Welcome to the course designed specifically for physicians who are currently serving or planning to serve as medical directors for EMS agencies within the state of Georgia. This comprehensive program aims to equip you with the necessary knowledge to navigate the intricacies of pre-hospital medicine in Georgia, including state-specific variations that significantly impact practice.

Emergency Medical Services (EMS) is a crucial system that coordinates personnel, facilities, and equipment to provide essential care for patients with emergency conditions within defined geographic areas. Understanding the components of an EMS system is pivotal for effective medical direction. These components include regulation and policy, manpower and training, facilities, evaluation, medical direction, resource management, transportation, communication, public information, and education, as well as critical care systems such as trauma, cardiac, and stroke care. Recognizing and comprehending these elements within the context of Georgia's EMS landscape is essential as EMS plays a vital role in the patient care continuum.

In Georgia, the Office of EMS & Trauma (OEMST) within the Department of Public Health (DPH) is responsible for directing how EMS functions statewide. Understanding the structure and organization of EMS within Georgia is critical for medical directors to effectively fulfill their roles.

Georgia is divided into ten EMS regions, each encompassing specific Public Health districts. These regions and districts serve as important administrative units that shape the delivery of EMS services throughout the state. As medical directors, having a comprehensive understanding of these regions and their corresponding Public Health districts is fundamental to effectively navigate the regulatory and operational landscape of EMS in Georgia.

Throughout this course, we will delve into the particulars of Georgia's EMS system, exploring state-specific variations and regulations to provide you with the knowledge and skills necessary to excel as a medical director in this dynamic and vital field.

GEORGIA'S PUBLIC HEALTH REGIONS AND DISTRICTS

The state of Georgia is divided into 10 EMS regions, with each region encompassing a Public Health District.

The Department of Public Health (DPH) website serves as a valuable resource for navigating Georgia's EMS landscape. Here, you'll find an interactive map outlining the ten EMS regions, allowing you to explore the geographical distribution of EMS services across the state. Additionally, the website provides contact information for Regional EMS Offices, enabling direct communication with regional directors and training officers.

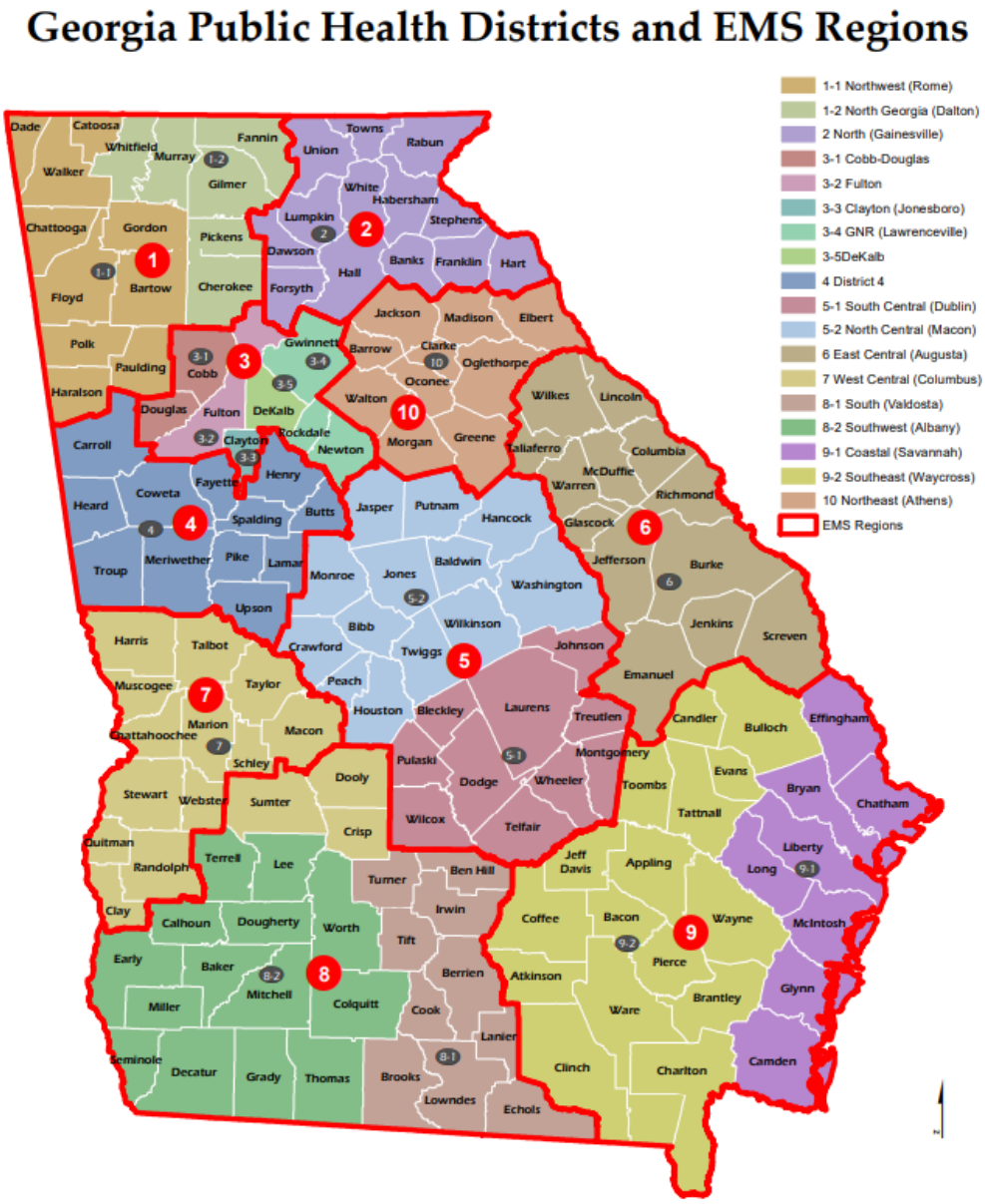
Each of the ten regions is led by a dedicated team consisting of a regional director, regional training officer, and Regional Medical Director. The specific duties and responsibilities of the Regional Medical Director are outlined in the bylaws of each region, providing a clear framework for their role within the EMS system.

Every region hosts a Regional EMS Advisory Council (REMSAC), which convenes quarterly to address regional matters and provide valuable insight to the State Office. Council members represent a diverse array of stakeholders, including EMS agencies, hospitals, public health entities, county officials, and public

safety officers. This collaborative approach ensures that regional decisions are informed by a broad spectrum of perspectives and expertise.

In addition to the Regional EMS Advisory Council, regional activities encompass various initiatives aimed at enhancing EMS services and improving patient outcomes. These include quarterly meetings focused on EMS for Children (EMSC) and the Regional Trauma Advisory Committee (RTAC). Participation in these activities not only benefits the medical director personally and professionally, but also contributes to the advancement of EMS services within the region.

The Office of EMS and Trauma serves as an integral component of the Georgia Department of Public Health, underscoring the state's commitment to ensuring high-quality emergency medical care for all its residents. For further information and resources, please visit the official website at https://dph.georgia.gov/EMS. Explore the wealth of information available to support your role as a medical director within Georgia's EMS system.



LEVELS OF PRE-HOSPITAL CARE

In the State of Georgia, EMS licensure is structured across various levels, each representing a distinct skill set and level of training. These licensure levels are as follows:

1. Emergency Medical Technician - Responder
2. Emergency Medical Technician
3. Emergency Medical Technician - Intermediate
4. Advanced Emergency Medical Technician
5. Cardiac Technician
6. Paramedic

It is imperative to note that individuals are prohibited from practicing or representing themselves as any of the licensure levels without proper licensing from the Georgia Department of Public Health. Verification of current licensure status can be conveniently performed online through the Georgia EMS Information System (GEMSIS) portal, accessible here .

To ensure compliance and competence, it is essential for EMS professionals to adhere to the scope of practice outlined for their respective licensure levels. The Office of EMS website, under the Georgia Department of Public Health, serves as a comprehensive resource for accessing up-to-date information on protocols and scope of practice for each licensure level. By visiting https://dph.georgia.gov/EMS/protocols-and-scope-practice, EMS practitioners can stay informed about the latest guidelines and standards governing their practice in Georgia.

Maintaining awareness of licensure requirements and adhering to established protocols not only upholds regulatory compliance but also ensures the delivery of safe and effective emergency medical care to patients across the state.

EMERGENCY MEDICAL TECHNICIAN–RESPONDER (EMR)

The Emergency Medical Technician - Responder (EMT-R) is an out-of-hospital healthcare provider, whose primary focus it to initiate immediate lifesaving care and facilitating patient access to the broader EMS system. With foundational skills, they administer lifesaving interventions while awaiting additional EMS response with higher-level medical personnel and public safety agencies.

In remote areas with low population density, EMT-Rs may serve as the sole medical providers for extended durations until higher levels of care arrive. While they can provide frontline assistance in patient care, it's generally recommended that they not be the primary caregiver during ambulance transport.

EMERGENCY MEDICAL TECHNICIAN (EMT)

EMTs are integral health professionals in the EMS system, tasked with responding to, assessing, and triaging emergent, urgent, and non-urgent medical requests. They apply basic knowledge and skills to provide patient care and transportation to or from medical facilities. In some cases, EMTs may be the highest level of care during ambulance transport, often working alongside higher-level personnel in ambulance crews or response teams.

As first responders, EMTs must swiftly assess patient conditions, administer stabilizing measures, and request additional resources as necessary. They fulfill critical roles in managing emergencies until higher levels of care can be accessed, particularly in areas where Advanced EMT or Paramedic response is unavailable.

The majority of EMS personnel are licensed at the EMT level, highlighting their widespread importance in the healthcare system. EMTs advocate for health and safety practices that benefit the public, playing a vital role in reducing harm and promoting well-being within their communities.

ADVANCED EMERGENCY MEDICAL TECHNICIAN (AEMT)

The Advanced Emergency Medical Technician (AEMT) is a healthcare professional trained to respond to, assess, and triage nonurgent, urgent, and emergent medical requests. They possess both basic and focused advanced knowledge and skills to provide patient care and transportation, aiming to facilitate access to higher levels of care when needed. Additional preparation beyond the EMT level equips AEMTs to enhance patient care in common emergency conditions with targeted, evidence-based interventions.

The scope of practice for AEMTs encompasses interventions that may carry greater risk if not performed properly, compared to those authorized for EMRs or EMTs. Their learning objectives and clinical preparation surpass those of EMTs, enabling them to deliver more advanced care.

In areas where Paramedic response is unavailable, the AEMT may serve as the highest level of EMS personnel encountered by patients before reaching a hospital. AEMTs advocate for health and safety practices that contribute to reducing harm within the public sphere.

PARAMEDIC

Paramedics are highly skilled healthcare professionals entrusted with responding to, assessing, and triaging emergent, urgent, and non-urgent medical requests. Their expertise lies in applying both basic and advanced knowledge and skills to evaluate patient physiological, psychological, and psychosocial needs. Paramedics are trained to administer medications, interpret diagnostic findings, and implement complex treatment protocols.

In addition to providing direct patient care, paramedics play a crucial role in educating patients and the public on preventive measures and the management of medical, health, psychological, and safety concerns. They serve as advocates for promoting well-being and empowering individuals to take proactive steps towards their health.

Furthermore, paramedics facilitate referrals and access to higher levels of care when necessary, ensuring that patients receive appropriate treatment and interventions beyond their scope of practice. Their comprehensive skill set and dedication to patient care make them invaluable assets in the healthcare system.

CARDIAC TECHNICIAN(CT) AND EMT-INTERMEDIATE (EMT-I)

Cardiac Technicians and Emergency Medical Technicians - Intermediate historically served roles between the EMT and Paramedic levels within the EMS system. However, it's important to note that these license designations are no longer actively issued, representing historical references within the field. As the EMS landscape evolves, the focus shifts towards aligning licensure with contemporary standards and practices. Therefore, new licenses for Cardiac Technicians and Emergency Medical Technicians - Intermediate are not currently being issued.

EMERGENCY MEDICAL DISPATCHER

Emergency Medical Dispatchers and Communications Officers play a critical role in public safety by receiving, processing, and transmitting emergency information to dispatch medical, law enforcement, firefighting, or emergency management personnel. In addition to coordinating responses, Emergency Medical Dispatchers may provide life-saving pre-arrival instructions to 911 callers.

The responsibilities of Emergency Medical Dispatchers demand a high standard, as they serve as the vital link between the community and public safety responders. While Emergency Medical Dispatchers in Georgia are not licensed through the Department of Public Health, Communications Officers undergo an application process with GA POST (Georgia Peace Officer Standards & Training) before entering the Basic Communications Officer Training Program.

Certification for Emergency Medical Dispatchers is typically pursued through third-party organizations, often being a requirement for the role. Dispatchers may obtain certification from respected organizations, ensuring their competence in handling emergency situations. Additionally, current CPR certification is mandated for Emergency Medical Dispatchers, further emphasizing their preparedness to aid during critical moments.

SCOPE OF PRACTICE

In Georgia, EMS personnel are authorized to perform only the skills and administer only the medications listed under their licensure level. However, they can do so only after being trained, certified as competent, and credentialed by their local EMS Medical Director. Additionally, they must operate under standing, verbal, or written orders from the local EMS Medical Director, transferring physician, or a Medical Control physician.

For each skill or medication, EMS personnel must be educated (trained), certified (demonstrated competence), licensed (legal authority), and credentialed (authorized by the medical director). These requirements ensure that they are adequately prepared and authorized to perform their roles effectively and safely.

The Georgia EMS Scope of Practice document, available on the DPH Office of EMS website, outlines the approved skills and medications for each licensure level. It's crucial for agencies to review this document carefully to ensure compliance with the scope of practice and to maintain the highest standards of patient care and safety.

For further details, please refer to the following link: GA EMS Scope of Practice

POST LICENSURE SKILLS

In Georgia, Paramedics may be permitted to perform certain skills beyond their normal scope of practice, subject to agency approval and specific training. EMS agencies must adhere to a structured process for approval and oversight of these post-licensure skills.

Prior to initial approval and on a bi-annual basis thereafter, EMS agencies must submit an application to the Department, including protocols, standing orders, and documentation of local EMS Medical Director involvement and support. Additionally, initial education and continued competency education for each approved skill must be submitted annually.

Upon initial approval, a roster of Paramedics trained, certified, and credentialed for each post-licensure skill must be submitted before performing these skills. Any changes to protocols, standing orders, or training curriculum must be submitted for approval prior to implementation.

Furthermore, agencies must promptly notify the regional EMS Director of any adverse events resulting from the use of post-licensure skills. For detailed information and guidance on post-licensure skills, please refer to the GA Post-Licensure Skills document available on the DPH Office of EMS website: GA Post-Licensure Skills

Ensure thorough review to ensure agency compliance with post-licensure skill requirements, if performed.

STATE EMS GUIDELINES

While Georgia lacks state EMS guidelines, it is recommended to adhere to the National Association of State EMS Officials (NASEMSO) Model EMS clinical guidelines, particularly in the absence of pre-defined clinical guidelines within your agency. Agency medical directors can utilize these NASEMSO guidelines to draft service-specific clinical guidelines that align with Georgia's scope of practice.

The NASEMSO Model EMS clinical guidelines serve as a comprehensive resource designed to enhance prehospital patient care. They can be adapted for use at the state, regional, or local level to meet specific needs. The project was led by the NASEMSO Medical Directors Council in collaboration with six national EMS physician organizations, including the American College of Emergency Physicians (ACEP), National Association of EMS Physicians (NAEMSP), American Academy of Emergency Medicine (AAEM), American Academy of Pediatrics, Committee on Pediatric Emergency Medicine (AAP-COPEM), American College of Surgeons, Committee on Trauma (ACS-COT), and Air Medical Physician Association (AMPA).

These model protocols are freely available for use by any EMS entity, either in their entirety or in part, to improve the quality of prehospital patient care. For access to the NASEMSO Clinical Guidelines, please follow this link: NASEMSO Clinical Guidelines

EMS DATA

All licensed EMS agencies in Georgia, including ground ambulance services, neonatal transport services, air ambulance services, and medical first responder services, are required to report EMS data using GEMSIS Elite v3.4.0 or any other NEMSIS-approved electronic Patient Care Report (ePCR) vendor software to ensure compliance.

To submit an Open Records Request or a Protected Health Information (PHI) Data Request, agencies should utilize the JUSTFOIA Portal.

For inquiries or assistance, please reach out to the Georgia Department of Public Health (DPH) at gemsis@dph.ga.gov.

DATA VISUALIZATIONS FOR EMS RESPONSE DATA – BIOSPATIAL

The Georgia Office of EMS and Trauma has collaborated with biospatial to offer advanced data visualizations for EMS response data. All EMS agencies can access their own data through biospatial at no charge.

To obtain access to biospatial, please contact Dipti Patel at dipti.patel@dph.ga.gov. Access to biospatial will be granted directly by the Office of EMS and Trauma to the designated Authorized Agent for each agency, who can then provide access to other agency personnel.

For additional resources and information, please visit the following links:

- biospatial Login
- biospatial Homepage

Additionally, biospatial offers training for Medical Directors. Access the recorded training session here, using the password: MtyDYs7u.

EMS RULES AND REGULATIONS

There are two primary sources of regulation governing EMS in Georgia: state law/statute and rules and regulations established by the Department.

State laws, outlined in OCGA Title 31, Chapter 11 (Official Code of Georgia Annotated), are generally more challenging to amend. However, as a medical director, you have the authority to modify department rules and regulations as needed to ensure compliance and effectiveness.

Of particular interest is O.C.G.A. § 31-11-8, which grants civil liability immunity to physicians acting as medical advisers to ambulance services, provided that any damages are not the result of willful and wanton negligence. This immunity applies only to those providing emergency services without remuneration.

For detailed EMS rules and regulations, please refer to the Office of EMS/Trauma's Rules and Regulations, accessible at: EMS Rules and Regulations

EMS ADVISORY COUNCIL (EMSAC)

The statewide Emergency Medical Services Advisory Council (EMSAC) is established to provide essential advice to the Department on matters concerning emergency medical services systems. Here's an overview of EMSAC's structure and responsibilities:

- Liaison and Support: The Director and Deputy Director of the State Office of EMS and Trauma serve as liaisons between EMSAC and the Department of Public Health, providing support, education, and guidance related to EMSAC's roles.
- Advisory Recommendations: EMSAC's recommendations are advisory and not binding on the Department or agencies under its contract.
- Bylaws and Operations: EMSAC adopts bylaws, subject to Department approval, and conducts its business in accordance with Georgia's Open Records and Open Meetings Acts. Bylaws address meeting frequency, minutes recording, membership, committee creation, conflict management, voting, and other relevant issues.
- Membership: EMSAC consists of 25 to 35 members knowledgeable in EMS systems and components, representing various categories.
    - At least one representative from each of the state's ten EMS Regions
    - At least one representative from each of the following systems of care
        - Cardiac
        - Stroke
        - Trauma
        - Pediatrics
        - Perinatal Care/Obstetrics
    - A representative from the statewide Emergency Medical Services
    - Medical Director's Advisory Council
    - A representative of EMS education;(v) A representative from a
    - fire/rescue service
    - A representative from an emergency management agency
    - At least one representative from each of the following EMS agency license types:
    - license types
        - Ground Ambulance
        - Neonatal Ambulance(c) Air Ambulance
        - Medical First Responder
    - At least one representative from each of the following EMS agency ownership types:
        - Government (City, County, or State)
        - Private (Corporation, Limited Liability Company, Sole Proprietorship, or other entity)
        - Hospital
    - Consumers or experts in the field of EMS.
- Appointment and Terms: Members are appointed by the Commissioner or designee for specified terms outlined in EMSAC's bylaws.
- Responsibilities: EMSAC's responsibilities include recommending standards and policies affecting regulated persons, services, or agencies, reviewing legislative proposals, and advocating to enhance Georgia's EMS systems.

EMSAC plays a vital role in shaping and improving Georgia's statewide emergency medical services systems, ensuring comprehensive representation and informed decision-making.

EMS MEDICAL DIRECTOR ADVISORY COUNCIL (EMSMDAC)

The statewide Emergency Medical Services Medical Directors Advisory Council (EMSMDAC) serves as an essential advisory body on medical direction issues within the EMS system. Here's a detailed breakdown of EMSMDAC's structure and responsibilities:

- Liaison and Support: The Director and Deputy Director of the State Office of EMS and Trauma, along with the State EMS Medical Director, act as liaisons between EMSMDAC and the Department of Public Health (DPH). They provide support, education, and guidance related to EMSMDAC's roles.
- Advisory Recommendations: EMSMDAC's recommendations are advisory and not binding on DPH or agencies under its contract.
- Bylaws and Operations: EMSMDAC adopts bylaws, subject to DPH approval, and operates in accordance with Georgia's Open Records and Open Meetings Acts. Bylaws address meeting frequency, minutes recording, membership, committee creation, conflict management, voting, and other relevant issues.
- Membership: EMSMDAC comprises 25 to 30 physician members knowledgeable in EMS systems and components, representing various categories such as EMS Regions, systems of care (e.g., Cardiac, Stroke, Trauma), and physicians with expertise in emergency medical care.
- Appointment and Terms: Members are appointed by the Commissioner or designee for specified terms outlined in EMSMDAC's bylaws. Members serve in a volunteer capacity without remuneration from DPH and are not entitled to expense reimbursement.
- Responsibilities: EMSMDAC's responsibilities include serving as a liaison with the medical community and governmental entities, advising DPH on practice issues, medical direction, training, policies affecting patient care, EMS practice scope, formulation of protocols, and quality improvement in patient care delivered by EMS personnel.

EMSMDAC plays a crucial role in ensuring the delivery of high-quality emergency medical care in Georgia, representing diverse perspectives from within the medical community and EMS programs.

REGIONAL EMS ADVISORY COUNCIL (REMSAC)

Each of the ten (10) EMS regions are represented by a Regional Emergency Medical Services Advisory Council (REMSAC). Each REMSAC provides essential advice to the Department on matters concerning regional emergency medical services systems. Here's an overview of REMSAC's structure and responsibilities:

- Liaison and Support: Each REMSAC serves as a liaison between the Department and the regional EMS systems, is the Local Coordinating Entity (LCE) for Emergency Response Zones (ERZ) within the region, promotes public education and knowledge of Emergency Medical Services, promotes training programs at the local and regional levels, and provides a forum where the concerns of public and private organizations related to the regional EMS system can be voiced.
- Advisory Recommendations: REMSAC's recommendations are advisory and not binding on the Department or agencies under its contract.

- Bylaws and Operations: REMSAC adopts bylaws, subject to Department approval, and conducts its business in accordance with Georgia's Open Records and Open Meetings Acts. Bylaws address meeting frequency, minutes recording, membership, committee creation, conflict management, voting, and other relevant issues.
- Membership: Each REMSAC is representative of the region's demographics, resources, and characteristics. The size of each council is determined by the number of counties and characteristics in the region.
- Appointment and Terms: Members are appointed by county Board of Commissioners. Additional at-large appointments are made by the Commissioner of the Department, if needed. Terms are outlined in the REMSAC bylaws.
- Responsibilities: EMSAC's responsibilities include recommending standards and policies affecting regulated persons, services, or agencies, reviewing legislative proposals, and advocating to enhance Georgia's EMS systems.

REMSAC plays a vital role in shaping and improving Georgia's regional emergency medical services systems, ensuring comprehensive representation and informed decision-making.

EMS EDUCATION CONSORTIUM

The Statewide EMS Education Consortium (Consortium) serves as an essential advisory body on EMS Education within the EMS system. Here's a detailed breakdown of the Consortium's structure and responsibilities:

- Liaison and Support: The Consortium serves as a liaison between the Department and the EMS Education system. It serves as a forum where EMS initial and continuing education topics are discussed at a statewide level, facilitates the improvement of EMS initial and continuing education programs across Georgia, and functions as a workgroup to provide the Department and its stakeholders with resources related to EMS initial and continuing education.
- Advisory Recommendations: The Consortium's recommendations are advisory and not binding on the Department or agencies under its contract.
- Bylaws and Operations: The Consortium adopts bylaws, subject to Department approval, and conducts its business in accordance with Georgia's Open Records and Open Meetings Acts. Bylaws address meeting frequency, minutes recording, membership, committee creation, conflict management, voting, and other relevant issues.
- Membership: The Executive Committee consists of 10 to 15 members knowledgeable in EMS Education and represent the interests of a broad cross-section of the state's EMS Education system.
    - At least one representative from each of the state's ten EMS Regions
    - At least one representative from each of program sponsor types
        - Private (not for profit)
        - Private (for profit)
        - Technical System of Georgia
        - Fire-based
        - Hospital-based
        - Local (City/County) Government
        - University System of Georgia
    - An EMS Initial Education Medical Director from a designated Initial Education Program
    - A representative from an EMS Agency that offers a continuing education program

- Appointment and Terms: Regional executive committee members are appointed by Regional EMS Council. At-large appointments are made by the Commissioner of the Department, if needed, to fill the representation requirements. Terms are outlined in the Consortium's bylaws.
- Responsibilities: The Consortium's responsibilities include promoting public education and knowledge of Emergency Medical Services and EMS education, promoting training programs at the local and regional levels to personnel involved with the delivery of EMS, establishing a forum where concerns related to the regional and statewide EMS education system(s) can be voiced, and establishing a forum where EMS educators can discuss best practices related to EMS initial and continuing education.

The Consortium plays a vital role in shaping and improving Georgia's EMS Education and ensuring comprehensive representation and informed decision-making.

SPECIALTY SYSTEMS OF CARE

STROKE CENTERS

A well-coordinated statewide stroke system of care ensures optimal treatment for acute stroke patients across both hospital and pre-hospital settings. The Georgia Coverdell Acute Stroke Registry (GCASR) supports this effort, with the State Office of EMS (SOEMS) providing guidance for EMS regions to develop regional stroke plans aligned with SOEMS guidelines. These plans are tailored to each region's unique geography and resources, directing acute stroke cases to certified or designated stroke centers whenever feasible.

Stroke Centers, certified by organizations like the Joint Commission or designated by Georgia DPH, play a pivotal role in this system. They encompass various types:

- Comprehensive (certified)
- Thrombectomy-Capable (certified)
- Primary (certified)
- Acute Stroke Ready (certified)
- Remote Treatment (state designated)

EMS education is vital and should incorporate standard stroke symptom screening and a stroke severity assessment tool for efficient triage to the nearest appropriate stroke center. This approach ensures timely and effective care for stroke patients, optimizing outcomes and reducing disability.

CARDIAC CENTERS

Cardiovascular disease stands as the leading cause of death in both men and women in the United States. Out-of-Hospital Cardiac Arrest (OHCA) or Sudden Cardiac Arrest (SCA) ranks as the third leading cause of death nationwide. In Georgia, cardiovascular disease contributes to 22-30% of all deaths. To combat this significant health challenge, Georgia Senate Bill 102, passed in 2016-2017 and effective from July 1, 2017, established the Office of Cardiac Care within the Department of Public Health. The primary objective of this legislation is to curtail cardiovascular mortality rates.

The law delineates three levels of Emergency Cardiac Care (ECC) provided by hospitals in Georgia, each with distinct capabilities and resources:

1. **Level I:** Hospitals at this level maintain onsite cardiac surgery services 24/7/365, possess cardiac catheterization (PCI) capabilities round the clock, and adhere to established protocols for targeted temperature management (TTM). They also implement neurologic protocols to assess functional status at hospital discharge. Additionally, Level I centers have the capacity to place percutaneous left ventricular assist devices (pLVAD) and implantable cardiac defibrillators (ICDs).
2. **Level II:** These hospitals offer cardiac catheterization (PCI) capabilities 24/7/365, along with established TTM protocols and neurologic assessment protocols for discharge. They have written transfer protocols to facilitate transfer to Level I ECC centers for pLVAD placement or cardiac surgery.
3. **Level III:** Hospitals at this level have established protocols for targeted temperature management and transfer protocols to Level I and/or Level II ECC centers for cardiac catheterization (PCI), pLVAD placement, or cardiac surgery.

These tiered levels of Emergency Cardiac Care aim to ensure that patients suffering from cardiovascular emergencies receive timely and appropriate interventions, thereby improving outcomes and reducing mortality rates associated with cardiovascular disease and cardiac arrest.

Table 1. Comparison of Treatment Modalities & Transfer Protocols in ECC Hospitals

	24/7/365 Cardiac Surgery	24/7/365 Cath Lab	Ability to Initiate TTM	Placement of pLVAD	Placement if UCDs	Assessment if Neuro Status for OHCA/SCA	Written transfer protocols to higher level of ECC
Level I	+	+	+	+	+	+	
Level II		+	+	+/-	+/-	+	+
Level III			+				+

The Georgia Office of Emergency Cardiac Care designates hospitals as Emergency Cardiac Care (ECC) Hospitals based on specific criteria, emphasizing expertise in handling ST-segment elevation MI (STEMI), STEMI with cardiogenic shock, and out-of-hospital cardiac arrest (OHCA/SCA) cases. Although participation in this program is voluntary, nearly all Level I eligible hospitals in the state are designated or in the process of being designated into the ECC system of care.

ECC Hospitals play a crucial role in submitting prehospital and inpatient hospital data on patients with cardiac emergencies to the Georgia Cardiac Registry (GCaR). This database serves as the primary clinical data source on the incidence, treatments, and survival rates of patients with cardiac emergencies across Georgia.

Similar to other time-sensitive medical emergencies like stroke, trauma, and sepsis, the "Chain of Survival" in cardiac emergencies begins with prompt recognition followed by timely intervention from Emergency Medical Services (EMS) personnel. EMS, comprising paramedics and emergency medical technicians (EMTs), serves as the initial and pivotal link in ensuring timely treatment and transportation from the field, a factor proven to save lives in cardiac emergencies.

Variability in ECC treatment protocols exists across Georgia, influenced by EMS, regional, and hospital-specific protocols. However, a critical decision faced by EMS personnel in the field is determining the most appropriate hospital destination for each patient. Shorter transfer times to higher levels of care are generally associated with better outcomes for complex cardiac patients.

Level III hospitals play a vital role, particularly in rural areas, where long transfer times necessitate stabilization before air transfer to higher-level ECC centers. Transport decisions are complex and must be individualized for each patient, often involving discussions with Emergency Medical Physicians at ECC hospitals or the nearest facility.

Establishing treatment protocols and algorithms within a System-of-Care for cardiac emergencies is essential. This necessitates collaboration between ECC Hospitals and EMS services, facilitated by ECC Committees comprising various stakeholders involved in the "Chain of Survival."

Regular communication and monthly meetings of ECC Committees enable continuous quality improvement in the care of patients with cardiac emergencies, ultimately providing the best chance of survival for Georgia residents facing these critical conditions.

PERINATAL CARE

Access to appropriate obstetric (OB) care in Georgia, particularly in rural areas, poses significant challenges for patients, with 82 out of 159 counties lacking any OB services and 15 counties having only one OB provider. Over the past 15 years, 38 hospitals offering OB services have closed in the state, predominantly in rural regions, leading to substantial "obstetric deserts." This situation is exacerbated by Georgia's high maternal mortality ratio, indicating limited access to OB care for many patients who may have to travel long distances to receive treatment.

Given these challenges, pregnant patients often rely on Emergency Medical Services (EMS) for transportation to facilities, both in emergencies and for routine care. EMS providers should receive training on basic physiological changes in pregnancy, recognizing maternal warning signs, and managing common OB emergencies such as maternal hypertension and hemorrhage.

To aid providers, including EMS personnel, in directing patients to appropriate facilities, Georgia has implemented Levels of Maternal Care legislation. Hospitals are required to report their obstetric services and the maternal medical conditions they can manage to the Georgia Department of Public Health (DPH). DPH conducts site visits to designate each hospital's level of care, with Level 1 hospitals providing basic obstetric care and Level 3 and 4 hospitals offering the highest level of care.

Additionally, Georgia has established a regionalized system of perinatal care with six regional perinatal centers located strategically across the state. Each center, staffed with Maternal-Fetal Medicine specialists and Neonatologists available for consultation 24/7, facilitates the provision of evidence-based obstetric care to high-risk patients and ensures appropriate levels of care for maternal, fetal, and neonatal needs. These centers also play a crucial role in coordinating the transfer of high-risk OB or neonatal patients within the region and beyond, ensuring timely access to specialized care for pregnant patients with medical complications.

TRAUMA CARE NETWORK

Trauma stands as the foremost cause of death in the United States among individuals aged 1-44, necessitating the growth of injury and violence prevention programs to address this critical public health issue. In tandem, the establishment and advancement of regional and state trauma systems are vital to delivering optimal care for injured patients. Oversight of the Georgia Trauma System rests with the Georgia Trauma Commission and the Georgia Department of Public Health's Office of Emergency Medical Services and Trauma (OEMST), operationalized by the Regional EMS and Trauma Advisory Councils.

Georgia boasts four Level 1, four Level 2, and two Level 3 ACS Verified Trauma Centers, alongside one Level 1 and two Level 2 Pediatric Trauma Centers. Trauma patients receive identification in the pre-hospital setting, utilizing field triage criteria, and are subsequently distributed among the state's verified trauma centers based on factors such as region, injury complexity, anticipated needs, and resource availability. The Georgia Coordinating Center (GCC) plays a pivotal role in overseeing trauma resource supply and demand statewide, facilitating patient distribution across centers and resource management during crises. Each hospital maintains its own disaster plan, integrated into a regional-based system for statewide coordination.

All trauma centers actively contribute to the ACS Trauma Quality Improvement Project (ACS TQIP) database, receiving biannual benchmark quality data that guides process enhancement within each facility. The ACS Verification process occurs triennially, ensuring each center's comprehensive approach to caring for injured patients. Georgia also benefits from an ACS-supported trauma collaborative (ACS GQIP), utilizing aggregate data from across the state to drive statewide initiatives through benchmarked data analysis.

PEDIATRIC CARE

Due to the limited exposure to pediatric patients and the increased risk involved, it's essential for the medical director to prioritize ongoing education for EMS personnel regarding pediatric care. Ensuring that all EMS staff are well-versed in the pediatric equipment required for every licensed ambulance in the state, as well as proper protocols for safe pediatric transport, is imperative.

Continuous education initiatives should also emphasize the use of online medical control whenever there are uncertainties about managing an ill or injured child. While pediatric cases make up a small portion of EMS encounters, they represent a highly vulnerable population. Caregivers may sometimes request EMS assistance for their child to be checked without intending to transport them to a medical facility. This can pose a dilemma for EMS personnel, who must assess the situation carefully to decide whether medical advice or consultation is necessary before determining the next steps.

Conversely, there are instances where families contact EMS for minor transportation issues but may seek medical advice during the process. Therefore, it's crucial for EMS staff to receive training and guidance from the medical director to minimize the risk of making incorrect assessments and potentially leaving a seriously ill or injured child at the scene without transport.

Currently, there are five standalone children's hospitals with dedicated pediatric emergency departments in the state. Additionally, several larger medical centers throughout the state have providers trained in pediatric emergency care available, at least part of the day. These facilities play a critical role in ensuring specialized care for pediatric patients, particularly in regions where access to such resources may be limited.

TELEMEDICINE IN EMS

Prehospital providers have long utilized telehealth in Emergency Medical Services (EMS), primarily through radio and telephone communication to connect with in-hospital or emergency department (ED) clinicians. While this communication has historically been audio-only, some systems have also transmitted electrocardiograms (ECGs) to the receiving ED. However, the use of audiovisual telehealth in the prehospital environment, particularly in rural areas, has been limited.

There is significant potential for audiovisual telehealth to revolutionize the current EMS delivery model. In Georgia, "tele-EMS" initiatives have been established primarily in rural counties to address challenges in accessing timely care, especially for time-sensitive or critical conditions such as stroke, myocardial infarction, trauma, or sepsis. Prehospital evaluation using telehealth extends to triaging patients to alternative destinations like urgent care centers, long-term care facilities, and behavioral health facilities.

The day-to-day utilization of tele-EMS can also be adapted to support local disasters or mass casualty events, such as chemical, biological, radiological, nuclear, and explosive (CBRNE) incidents. The Southern Regional Disaster Response System (SRDRS), relying on the existing tele-EMS framework, can flexibly support these events. For instance, tele-emergency physicians can conduct virtual evaluations and recommend treatment plans at the point of patient contact, optimizing the use of hospital resources. The audiovisual software installed in each ambulance can also provide non-clinical support, such as consulting incident commanders at disaster scenes.

Efforts are underway to expand the tele-EMS network through the SRDRS by engaging new partners, aiming to make this capability available in each of the 14 Georgia Hospital Coordination Centers (HCC) regions. This expansion will enhance disaster response capabilities and improve access to timely care, particularly in rural and underserved areas of the state.

PATIENT DESTINATION

Destination choices for patient transport are outlined in Rules and Regulations:

A. Patients may be transported to the hospital of their choice or that of their family.
B. Hospitals must be within the "usual and customary" transport area, as determined by the agency's EMS medical director.

Additional criteria can be found in Rule 511-9-2-07 (k), available at the provided link.

Agency medical directors are responsible for defining hospitals within a reasonable distance that are capable of meeting patients' needs.

Patients may be transported emergently to the nearest Emergency Department for stabilization in cases of critical clinical needs such as:

A. Airway management
B. Resuscitation of shock
C. Imminent childbirth

COMMUNICATIONS AND MEDICAL CONTROL

The local EMS medical director plays a crucial role in ensuring clear communication between EMS staff and receiving facilities or authorized base stations, as well as understanding the distinctions between offline and online medical control.

When transporting a patient, the EMS unit should establish contact with the receiving facility as soon as possible using radio, phone, or telehealth, depending on patient care activities. It's essential for the EMS medical director to ensure that EMS staff are proficient in appropriate communication methods, as the information conveyed helps the receiving facility prepare for the patient's arrival.

Offline medical control involves protocols established by the service's local EMS medical director within the state's designated scope of practice for the level or provider. It's important to note that the local EMS medical director cannot expand the scope of practice beyond the state guidelines.

On the other hand, online medical control occurs when an EMS provider contacts the receiving facility or designated base station by radio, phone, or telehealth and receives directions from a physician. Simply contacting the receiving facility to provide a patient report does not constitute accessing online medical control. Once contact is made with a physician and patient care directions are received, a patient-physician relationship is established, and offline protocols may no longer be used. Online medical control can override offline protocols if the orders align with the EMS provider's state scope of practice.

PHARMACY

Breakdown of information regarding the Board of Pharmacy:

1. DEA Registration: Every EMS agency must have its own DEA registration, even if you're the medical director for multiple agencies. Your personal DEA registration from a hospital, emergency department, urgent care, or primary care setting cannot be used for EMS agencies. You need separate DEA registrations for each EMS agency you oversee.
2. State Registration: Georgia doesn't require state registration for controlled substances.
3. Reporting Diversion: Any diversion of scheduled drugs must be reported to the State Board of Pharmacy.
4. Regulation of Controlled Substances: The State Board of Pharmacy oversees the acquisition of controlled substances. During drug shortages in 2010 and 2011, the Board changed rules to allow EMS agencies to purchase medications from two vendors, whereas they were previously restricted to a single vendor.

COMMUNITY AND PUBLIC HEALTH RESPONSIBILITIES

Ways for EMS Medical Directors to participate:

1. Regional EMS Advisory Council: Engage with your local council.
2. EMSMDAC: Join the state council for EMS medical directors.
3. EMSAC: Participate in the state council for EMS agencies.
4. EMS-C: Participate in EMS for Children programs, available in each region
5. RTAC: Get involved with Regional Trauma Advisory Councils, present in each region.
6. Georgia EMS Association and National Association of EMS Physicians Georgia Chapter: Participate in these professional organizations.
7. Give Lectures/Training: Offer educational sessions at state and regional meetings or for professional organizations.

8. Attend Meetings: Attend regional and statewide EMS council meetings, which may offer virtual attendance options. The Georgia Department of Public Health maintains an active calendar with meeting links available for virtual attendance. You can find details on their website: Georgia DPH EMS Meetings Calendar

MEDICAL DIRECTION FOR INITIAL EDUCATION

Each EMS Initial Education Program that is designated in Georgia must have a medical director.

The Medical Director plays a critical role in providing comprehensive medical oversight of the program, ensuring educational content aligns with current medical standards, and setting minimum requirements for patient contacts and procedures. They review exams for content and difficulty, monitor student progress, and implement corrective measures when necessary. Additionally, the Medical Director ensures that students are competent across cognitive, psychomotor, and affective domains before attesting to their readiness for the NREMT exam. This includes reviewing key documents such as Terminal Competency forms and Student Minimum Competency (SMC) records, which track lab skills, field, and clinical requirements.

The Medical Director is expected to collaborate closely with the Program Director, often through one-on-one meetings or participation in Advisory Committee meetings. Their involvement extends to the development of curriculum and evaluation of student competencies, particularly before students engage with patients at field or clinical sites, operating under the Medical Director's license. A contract between the education program and clinical sites is required for student participation.

The Medical Director must be a licensed physician in the program's state, board certified or holding equivalent credentials, with experience in out-of-hospital emergency care, medical direction, and quality improvement. They must be knowledgeable in EMS education, legislative issues, and able to advise program leadership on clinical and academic matters.