Essential Trauma System Element #1: Statutory Authority

Statutory authority to enable development and implementation of a trauma system should exist. A lead agency with sufficient authority to implement policy, maintain well defined administrative rules, and allocate trauma system funds, should be established or identified. A multidisciplinary advisory group, consisting of stakeholders representing the full spectrum of trauma care, should guide the lead agency.

	Question	Your Response
1.1	How often are the trauma system regulations reviewed?	**DPH**: As needed or when other portions are reviewed. **GTC:** The GTC does not have regulations.
1.2	What year were the trauma system statutes last revised?	**DPH:** In 2019, Rule 511-9-2-.05: The department structure was changed to systems of care inclusive of cardiac, trauma, stroke, STEMI, and maternal child health. **GTC**: In 2022, O.C.G.A. § 31-11-103: This code was amended to establish Georgia Fund 1, the Georgia Trauma Trust Fund to which all trauma-dedicated funding is allocated. Funding sources include super speeder collections, fines, and a portion of fireworks excise tax revenues per code (55%).
1.3a	Describe how the current statutes and regulations allow the state or region to: a. Develop, plan, and implement the trauma system.	**DPH:** Rules and Regulations of the State of Georgia 511-9-2-.05(1)(b) 1. Any hospital seeking designation or re-designation by the Department of Public Health as a Level I, Level II, Level III, or Level IV trauma center must submit a written application to the Department in a manner and on forms as determined by the Department and shall meet, at a minimum, the requirements defined by the American College of Surgeons Committee on Trauma. 2. Any hospital seeking designation or re-designation by the Department as a burn center must submit a written application to the Department in a manner and on forms as determined by the Department and must hold and maintain current verification as a burn center by the American Burn Association.

		3. The Department may establish additional levels and types of trauma and burn centers based on advancements in medicine and patient care. 4. Each designated trauma center shall submit data to the state trauma registry in a manner and frequency as prescribed by the Department. **GTC:** O.C.G.A. § 31.11.100 – 103 established the Georgia Trauma Commission and provided the authority to develop, plan and implement the trauma system in the following ways: 1. Allows the GTC to apply for, receive and administer funds; 2. Develop and adopt funding formulas to prioritize the distribution of funds; 3. Administer trauma center readiness funding; 4. Administer additional trauma center funding (e.g., trauma registry) not associated with readiness 5. Administer a process for uncompensated care funding; 6. Provide funds for additional centers to participate in the trauma system; 7. Administer a process to provide funding to compensated EMS for readiness and uncompensated care; 8. Appropriate funds for the investment in a trauma patients transportation system, specifically in areas where options are limited; promulgate rules and regulations over such transportation system; create and oversee a philanthropic foundation to raise funds for investment in the trauma transportation system and overall trauma funding; 9. Act as the accountability mechanism for the entire Georgia trauma system overseeing the flow of funds from the Georgia Fund 1 – Trauma trust fund into the trauma system; provide an annual distribution to the DPH OEMST of up to 3% of the total fund for (a) a system for monitoring statewide trauma care, (b) recruitment of trauma system providers; and (c) research for system improvement.

		10. Coordinate its activities with the Georgia Department of Public Health 11. Employ and manage staff and contractors/consultants to fulfill the duties described in the code; 12. Administer a trauma center network to coordinate the best use of existing trauma centers in the state and direct patients to the best available facility for the treatment of traumatic injury; 13. Administer injury prevention programs; 14. Evaluate the provision of trauma care services through coordination and assistance in data collection; 15. Study the provision of trauma care services in Georgia to determine best practices to determine changes needed to improve the provision of trauma care services and report any such proposed changes to the Georgia General Assembly annually; 16. Employ an Executive Director and other staff and establish duties and responsibilities of staff. The GTC accomplished its roles and responsibilities primarily through the work of its eight committees comprised of trauma system stakeholders: trauma center administrators, TMD, budget, EMS, GCTE, trauma system performance, GQIP, level III/level IV rural trauma. Each committee's work ties back to the GTC strategic plan. This committee structure allows each stakeholder group to have input into developing the trauma system. Georgia is fortunate to have a cadre of dedicated leaders to bring this work to fruition. The committee structure serves in an advisory capacity to the GTC. Each committee chair reports quarterly to the GTC. Reports include successes and barriers, as well as requests for motions. Motions may include requests for funding for specific projects or initiatives. Once approved, GTC staff work with the respective committee to operationalize and administer logistics.

1.3b	b. Monitor and enforce rules.	**DPH:** The Department monitors trauma system performance through trauma center quarterly reports, designation visits, re-designation visits, and by direct communication to the center of issues or needs. The quarterly reports include facility trauma program activities and varying data quality assurance (QA) points. For example, record closure rate, surgeon arrival time, non-surgical admission (NSA) rates, Over/Under triage analysis have been reviewed and reported to the facility. Once an issue is identified, the center must submit a corrective action plan to the Department for approval. The center is given an appropriate timeframe to comply before further action is taken. Rules and Regulations of the State of Georgia 511-9-2-.05(1)(c) The Department of Public Health may suspend or revoke a hospital's designation as a trauma or burn center after providing written notice to the hospital if the Department determines that the hospital is not in compliance with the requirements or criteria of these rules or applicable statutes. The Department shall provide an administrative hearing on the action to suspend or revoke a hospital's designation if the hospital makes a written request for a hearing. Such written request must be delivered to and received by the Department no later than twenty days after the hospital receives notice of the action. If a timely request for a hearing is not received, the action will become effective twenty days after the hospital's receipt of the notice. In lieu of suspending or revoking a hospital's trauma or burn center designation, the Department may re-designate the hospital at another level and/or type of trauma or burn center if it is determined that the hospital does not meet the criteria for its current level of designation.
1.3c	c. Designate the lead agency.	The Georgia trauma system has a dyad leadership structure, with the Department of Public Health and the Georgia Trauma Commission legislatively tasked with distinct roles. The Department is the regulatory and licensing/designating entity. The Georgia Trauma Commission (GTC) oversees funding, accountability, performance improvement, and trauma system development.

1.3d	d. Collect and protect confidential data.	**DPH:** Rules and Regulations of the State of Georgia 511-9-2-.05(4) Confidentiality. All information reported to any registry as described by this Rule shall be deemed confidential, except that the Department may, at its discretion, release such reports or data in a de-identified form or for research purposes determined by the Department of Public Health to have scientific merit. Under no circumstances may information reported to any registry as described by this Rule be released in such a manner as to lead to the identification of any hospital, institution, or clinic. **GTC:** See the Essential Element #10 Discoverability and Confidentiality section below.
1.3e	e. Protect confidentiality of the quality improvement process.	**DPH:** Rules and Regulations of the State of Georgia 511-9-2-.05(4) Confidentiality. All information reported to any registry as described by this Rule shall be deemed confidential, except that the Department may, at its discretion, release such reports or data in a de-identified form or for research purposes determined by the Department of Public Health to have scientific merit. Under no circumstances may information reported to any registry as described by this Rule be released in such a manner as to lead to the identification of any hospital, institution, or clinic. **GTC:** GTC recently passed a resolution (November 2022) creating a trauma best practice subcommittee allowing for protection under Georgia's peer review statutes. This will enable discussions within GQIP to be protected and free from open record request regulations.
1.4a	Describe the process by which trauma system policies and procedures are developed or updated to manage the system including: a. Adoption of standards of care.	**DPH:** Guidelines are developed as needed and reviewed by DPH for publication based on the standards of care or those outlined by ACS. The Department does not currently have policies or procedures to manage the system. The Georgia Quality Improvement Program (GQIP) work group has developed practice

		management guidelines, including VAP, AKI, and pediatric imaging.
1.4.b	b. Verification and designation of trauma centers	**DPH:** See attachment for the 5.4.a_Designation Process Flow Sheet and the 5.4.a_Trauma Designation Process 2021. **GTC:** The GTC now requires ACS verification to meet eligibility requirements for trauma center funding June 30, 2023 - level I and II trauma centers June 30, 2025 - level III trauma centers
1.4.c	c. Direct patient flow on the basis of designation.	**DPH:** See attachment for the standard 5.3.2b_Field Triage Guidelines 2021
1.4.d	d. Data collection.	**DPH:** The data is downloaded according to a published schedule. The schedule is aligned with GQIP, TQIP, and NTDB schedules. NTDS and additional Georgia data elements are required. See attachment 1.4.d_DPH FY2023 Due Dates for Quarterly Reports and Data 11272022.
1.4.e	e. System evaluation.	**DPH:** From a system-wide evaluation perspective, the TQIP collaborative report generally guides the system evaluations and performance improvement initiatives. The Department evaluates the trauma system performance through trauma center quarterly and annual trauma program report reviews, designation visits, and re-designation visits. The quarterly reports include facility trauma program activities and varying data QA points. For example, record closure rate, surgeon arrival time, Non-surgical Admission (NSA) rates, Over/Under triage analysis have been reviewed and reported to the facility and, in aggregate to the trauma centers. The Department produces an annual epidemiologic review of the statewide demographics and injury types. The DPH Injury Prevention Program uses the trauma registry data for injury prevention studies and data merged with hospital

		discharge data for use by the Crash Outcomes Data Evaluation System (CODES). The Department contracts with Biospatial, a data surveillance platform, for visual analysis of the frequency of injuries and severity statewide. The Trauma Program Directors at the centers have access to the Biospatial site to compare their data to aggregate data and designation levels. The Department is transitioning to a new state trauma registry platform with new trauma registry technology that meets the specifications of the National Trauma Data Standard (NTDS) on the ImageTrend Patient Registry platform. The new trauma registry platform will allow the following: • Data linkage between EMS records and trauma registry records; • A long and short data entry form that meets the needs of the facility based on the level of the designation; • Users to create custom data elements for internal purposes such as improving trauma care, reducing complications, and improving outcomes; • The ability for the Department to create validation rules based on data quality standards; • Improved report writing functionality based on the Department and/or center's needs; • Hospital initiated Performance Improvement (PI) tracking in addition to the standard designation requirements with a loop closure mechanism; • A new Inter-Rater Reliability (IRR) feature for evaluating data quality; • An online training library within the platform; and • An online "User Voice" feature enables users to provide input on enhancements to the system. The ImageTrend Patient Registry platform and the functionality described above are provided to the centers at no cost.

		The required quarterly data submissions have been delayed for centers choosing to continue utilizing ESO DI V5 due to the centers having to install a Specification and Description Language (SDL) file that will allow the import connection of data from ESO DI V5 to the new State Trauma Registry (ImageTrend). The Department transitioned to the new State Trauma Patient Registry on 10/1/2021. The Department monitors whether centers meet or do not meet the data standards through the ImageTrend License Management System and ongoing Trauma Center Performance Evaluation (OTCPE). The OTCPE is submitted to the Department electronically every quarter. The Department will resume validation of data QA in 2023 after data imports have been resumed. The Department and the Georgia Trauma Commission (GTC) Georgia Quality Improvement Program (GQIP) are collaborating to analyze Trauma Registry – time to definitive care analysis and developing a state-level Performance Improvement process. **GTC:** The GTC maintains and oversees several system quality initiatives that enable the evaluation of the trauma system through a variety of mechanisms. The GTC houses GQIP, the quality arm of the GTC. GQIP houses the Georgia statewide TQIP collaborative, which the GTC has provided funds for annual participation since approximately 2013, making it one of the longer-standing TQIP collaboratives in the country. Through the TQIP collaborative, GQIP analyzes contemporary data from the trauma centers to glean information about morbidity, mortality, and process measures, as well as a descriptive analysis of the patient population in Georgia's trauma centers using the collaborative report. In 2016, the trauma center stakeholders agreed to migrate to the V5 trauma registry to

		create consistency within the state trauma registry data set. This migration as a whole state was viewed as a huge win and was a recognized strength of our trauma system. The trauma center stakeholders are encouraging centers to remain on the V5 product to maintain that consistency. The V5 registry is also important to the data collection process that was developed for the ArborMetrix project. The GTC included language in the trauma centers FY23 contracts that centers must maintain the V5 trauma registry for at least 3 years to be eligible for funding. Currently all designated trauma centers are on the ESO v5 registry. All Georgia trauma centers are invited to participate; trauma centers receiving funding through the Georgia Trauma Commission are required to participate in GQIP. GQIP is where the crux of the system PI initiatives occur, and they are described further in ETSE #9 system-wide performance improvement. The GTC contracts with a well-known healthcare economics researcher, Etienne Pracht, to perform a multi-year analysis to characterize access to trauma care in Georgia. That initial study included ten years of data and was presented nationally and published in 2014. The "Pracht report," as it has become known in our trauma system, is a longitudinal analysis of the performance of the Georgia Trauma System using the hospital discharge data set from the state's discharge database. The report considers the location of existing trauma centers and the distribution of injured patients treated across the entire system. The report includes a detailed analysis of survival probability at designated and non-designated trauma centers. It is further stratified by age, Injury Severity Score (ISS), injury type, and EMS Regions. This report elucidates areas where a lack of specialized trauma care necessitates further development. Two such areas were identified in the northeast and southwest areas of Georgia. As a result, the state gained a designated and, subsequently, ACS-verified level II center in the northeast region. A facility in the southwest region is preparing for

		designation and recently underwent an ACS consultative visit in preparation for ACS verification. The replication of this study was delayed due to the transition from ICD-9 to ICD-10, but it was completed in September and is pending the final draft for presentation to the Commission and trauma system stakeholders on March 1, 2023.
1.5	Describe how injury prevention, EMS, public health, rehabilitation, the needs of special populations, and integration of emergency management into the trauma system are enabled by statute and regulation.	Through code as well as rules and regulations described above, and documents provided in ETSE Section 1, the DPH Division of Health Protection oversees EMS (Office of EMS and Trauma), injury prevention (Injury Prevention Program), and emergency management (Office of Emergency Response). There are no existing state statutes or regulations around the integration of rehabilitation or the needs of special populations into the trauma system. See attachment 5.1._Trauma Core Functions in relation to Public Health
	Documentation Requested	**Submitted: Yes or No**
1. a	State statute or municipal code that establishes a trauma system, including legislative findings and intent.	Rules and Regulations of the State of Georgia 511-9-2-.05 - Designation of Specialty Care Centers. Creation of Georgia Trauma Care Network Commission - O.C.G.A. § 31-11-101 – 103 https://dph.georgia.gov/ems-policies-rules-and-regulations
1. b	Statute or code that designates specific lead agency and responsibilities.	There is no specific statute or Georgia code that designates a lead agency. The GTC and the Department have defined responsibilities per O.C.G.A. § 31-11 https://dph.georgia.gov/ems-policies-rules-and-regulations
1. c	Documentation outlining the rule-making process.	**DPH:** The enabling statute that allows the Department to promulgate Rules and Regulations is O.C.G.A § 31-11-5. Rules and Regulations 511-1-4 Administrative Review describes the rule-making process within DPH.

		https://dph.georgia.gov/ems-policies-rules-and-regulations
1.d	Annual trauma system report.	**DPH:** See attachment for the Annual Trauma Report**.** 1.d_Annual Trauma System Report Y2019. **GTC:** The GTC annual report is included in attachment 1.6 GTC FY 2021 Annual Report Final
1.e	Trauma system statutes and/or administrative rules.	See attachment 1.a._OEMST Rules and Regs for the enabling statutes: Trauma O.C.G.A. § 31-11-100 – 103 Statue for Classification of Confidentiality O.C.G.A. § 31-5-5, Rules and Regulations 31-2A-6, Stroke O.C.G.A. 31-11-110 through 31-11-119, Cardiac O.C.G.A. 31-11-130 through 31-11-139 And Rule 511-9-2-.05 Designation of Specialty Care Centers https://rules.sos.ga.gov/GAC/511-9-2 https://dph.georgia.gov/ems-policies-rules-and-regulations
1.f	EMS statutes and regulations.	**DPH:** See the links for the O.C.G.A. § 31-11 Articles 1 – 7 **GTC:** O.C.G.A. § 31.11.102.8 https://rules.sos.ga.gov/GAC/511-9-2 https://dph.georgia.gov/ems-policies-rules-and-regulations
1.g	Any additional trauma system policies, procedures, or guidelines not otherwise listed in the applicable statute or administrative rule.	**DPH:** No additional documents other than what has been provided. **GTC:** Resolution creating trauma best practice subcommittee.

Essential Trauma System Element #2: Funding

The lead agency should establish a sustained funding mechanism for trauma system infrastructure. Funding should include physical and staffing resources for program administration and oversight, data collection, data storage, data analysis, quality improvement activities, education, and support for disaster response and military integration.

	Question	Your Response
2.1	What is the lead agency's budget for the trauma system?	**DPH:** The OEMST total operating budget is $10,033,445.00. See attachment 2.d_OEMST Budget FY 2023. **GTC:** The GTC budget is based on the super speeder fines and collections and the GTC appropriated portion of the fireworks excise tax (55%). The current FY2023 budget is $21,444,840.00. The GTC budget includes four main categories: operations, system development, emergency medical services, and trauma centers. Each budget category is further detailed in attachment 2c_FY 2023 Approved Budget Departmentalized.
2.2	What is the source of funding available to support the development, operations, and management of the trauma system (for example, general funds, dedicated funds)?	**DPH:** General funds and Georgia Trauma Commission (GTC) legislatively direct allocation (up to 3% of the GTC total fiscal year budget). **GTC:** Trauma Fund 1 was established in 2022 as the Georgia Trauma Trust. The trust fund includes revenues from dedicated funding sources, including the Georgia super speeder and the fireworks excise tax.
2.3	How does the lead agency track and analyze internal trauma system finances?	**DPH:** The Department funding supports the Trauma Program Manager, supporting staff, Georgia Trauma Patient Registry, and administration of designation visits through an operating budget only. The Governor's Office of Planning and Budget tracks and analyzes the trauma system finances.

		GTC: The GTC oversees the flow of funds from Georgia Fund 1, the trauma trust fund, supporting the responsibilities outlined in the code. Over the last decade, the GTC has established and refined a readiness cost methodology. The GTC has conducted two trauma readiness cost surveys for levels I and II trauma centers. More recently, it has surveyed level III and IV trauma centers, the first documented attempt at readiness cost analysis for level IIIs and IVs. Results from the trauma readiness costs analysis have been presented nationally and published. In concert with the budget committee leadership, the GTC staff have instituted processes and strategic plan initiatives to foster the highest level of transparency and accountability for the funding of the Georgia trauma system. All contracted trauma centers participate in the performance-based payment (PBP) program whereby a portion of readiness funds are subject to the trauma center's compliance with specific criteria. The PBP program includes three domains: trauma system participation, compliance with ACS "Optimal Resources" document ("Orange/Gray Book"), and GQIP participation. Trauma centers must document the use of readiness funds and the distribution of uncompensated care. The GTC's EMS committee oversees EMS-directed funding with final approval by the GTC. Most EMS funding supports the following three programs: 1. AVLS, 2. Provider education, and 3. 911 zone provider ambulance equipment grants. The AVLS and EMS education programs are governed by contracts with specific deliverables and require quarterly reporting to the EMS committee to monitor utilization and allow for amendments where necessary. The budget committee meets bi-monthly to review the current financial position and metrics and prepare for emerging needs realized after the initial budgeting process. All Commission contractors must submit detailed expense reports. The Governor's budget report, released annually, includes state revenues and the budget for each agency. Each budget has a line item indicating the funding source. Once the annual budget

		is approved, the Commission's budget undergoes a budget approval process. Through established funding formulas, trauma center (readiness, uncompensated care, and registry), system development, and EMS funds are allocated.
2.3a	a. How does the advisory committee participate in the financial review process?	**DPH:** The EMS advisory committee and other state committees do not participate in the financial review process.
2.3b	b. How frequently are trauma system financial reports published?	**DPH:** The Office of Planning and Budget annually provides budget reports to the Governor's office. The Department has an operations budget only. **GTC:** The GTC has a robust financial reporting calendar driven by an established budget timeline. The GTC publishes an annual report that provides financial reporting and highlights select trauma system initiatives. Budget documents are included in each GTC meeting as part of the Budget Committee report to the quarterly GTC meeting, depending on the timeline. Financial documents are available for public access on the GTC website. In addition, the GTC is legislatively required to present annually to the House and Senate Health and Human Services Committees.
2.3c	c. Which financial data are reported (lead agency data, health facility data, or both)?	**DPH:** The GTC manages the facility funds. **GTC:** The financial reports described above in 2.3 – 2.3b primarily focus on tracking the flow and use of trauma system funding for all contracted entities (e.g., trauma centers, EMS, and/or specific trauma system initiatives).
2.4	What financial incentives and disincentives exist for trauma center participation in the trauma system?	Trauma center designation is voluntary, but each hospital provides resources, personnel, necessary equipment, and education that are costly to the facility. Once a facility is state-designated and/or ACS Verified the facility may charge for trauma team activations. The facility determines this fee. Trauma Centers may be eligible for funding through the GTC to assist with trauma center readiness, uncompensated care, and registry support. As additional centers become designated,

		funding from the GTC is not automatic. Despite the increase in funding, the overall pot of money remains limited. All trauma centers receive at least some funding support for readiness and registry. The GTC has been able to pull but the most recently designated level IV centers (three newly designated level IVs over the last 12 months). As part of GTC's commitment to quality and accountability, levels I – III trauma centers must be ACS verified to be eligible for funding. As part of the state process for designation, facilities are encouraged to promote and educate the community on the trauma services and other resources provided. We provide input on utilizing outpatient services to increase revenue and build community confidence in locally available services. (Many facilities are 50 miles or greater from the cities where physicians are. Diagnostics can be performed locally and sent to physicians out of town).
2.5	What system arrangements exist for uncompensated and undercompensated care?	**GTC:** Level I and II trauma centers receive a distribution from the total trauma fund allocated for uncompensated care. The amount of funding is based on available funds for the fiscal year and is distributed per the GTC's funding formulas. Uncompensated care is audited annually by a third-party auditing firm to ensure compliance with claims.
	Documentation Requested	**Submitted: Yes or No**
2.a	Statute or rule that describes trauma system funding.	**GTC:** O.C.G.A. § 31-11-102 See link for O.C.G.A. § 31-11-102 https://dph.georgia.gov/ems-policies-rules-and-regulations
2.b	Letters and/or legislation that document financial or in-kind commitment.	No letters or legislation are utilized to document financial or in-kind commitments.
2.c	Lead agency's budgets, identifying line items directly related to goals and objectives of the trauma plan.	**DPH:** Attachment 2.d_OEMST Budget FY23 mj

		GTC: Attachment 2.c_FY2023 Approved Budget Departmentalized
2.d	Lead agency internal trauma office budget.	**DPH:** Attachment 2.d_OEMST Budget FY23 mj **GTC:** Attachment 2.c_FY2023 Approved Budget Departmentalized
2.e	Documentation of funding utilization from trauma system components (e.g., EMS, trauma centers) reported to the lead agency.	**GTC:** Attachment 2e FY 2022 Use of Readiness Funding Attachment 2e SAMPLE GEMSA Attachment 2e FY 2022 EMS Equipment Attachment 2e Trauma Center FY 2020 Uncompensated Care Audit
2.f	Notice of awards and abstracts (active grants).	**DPH:** None **GTC:** There are currently no active grants.
2.g	A comprehensive organizational chart that identifies the lead agency staff, including contract employees, assigned to the trauma program (full or part-time).	**DPH:** See attachment for the organizational chart 5.6.a_OEMST Org Chart. **GTC**: Attachment 2g GTC Org Chart
2.h	Position descriptions for the trauma system medical director and program manager, including qualifications, duties, and time allocation for these positions.	**DPH:** See attachment 5.2.b for the job description for the EMS Medical Director. There is no job description for a trauma system medical director. Attachment 2.h_Trauma Program Director Job Description. **GTC:** Attachment 2h GTC Executive Director Position Description Attachment 2h GQIP Nurse Director FINAL

Essential Trauma System Element #3: Multidisciplinary Advisory Group

A multidisciplinary advisory group, consisting of stakeholders representing the full spectrum of trauma care, should be established. The role of the advisory group should be to guide the lead agency regarding trauma system development and operations. Representation should be diverse, with respect to geography, population (rural/urban, adult/pediatric, burn), phases of care (prehospital and rehabilitative) and trauma center level designation.

	Question	Your Response
3.1	Does the multidisciplinary advisory group have broad stakeholder involvement and engagement representing the full spectrum of trauma care? Including, for example, rural and urban trauma centers; pediatric, adult, and geriatric trauma care; EMS; rehabilitation; and regional military trauma.	**DPH:** Original Multidisciplinary Advisory group was dissolved after the appointment of the Georgia Trauma Commission. This group is now being reorganized by the Department in collaboration with the Georgia Trauma Commission (GTC) to have a broad constituency.
3.1a	a. Describe the objectives, responsibilities, activities, and composition of the multidisciplinary advisory group.	**DPH:** An initial focus group has been identified to update the state trauma plan. Representation for this initial group will consist of urban and rural facilities, injury prevention, emergency preparedness, pediatrics, EMS, fire service, and coroner.
3.1b	b. Describe the lead agency involvement and leadership in the multidisciplinary advisory group.	**DPH:** The Department will facilitate this group and oversee the revision of the state trauma plan. Other agencies or representatives may be added or consulted based on future planning needs.
3.1c	c. Identify the organizations with whom the multidisciplinary advisory group and the lead agency collaborate.	**DPH:** EMSC, Injury prevention, Rehabilitation, Georgia Hospital Association, Georgia EMS Association, Office of Rural Health, Governor's Office of Highway Safety, Trauma Commission, along with other public and private partnerships.
3.2	How often does the multidisciplinary advisory group meet per year?	**DPH:** The intention is for the multidisciplinary advisory group to meet quarterly.
3.2a	a. Is there an attendance requirement for participants?	**DPH:** Not yet determined.

3.3	Describe how the lead agency and multidisciplinary advisory group are involved in trauma system planning and performance evaluation.	**DPH:** With the redevelopment of this committee, the initial task will be a revision of the statewide trauma plan. A statewide performance evaluation will evolve as the plan's implementation is formalized. Systems evaluation projects are currently being developed in collaboration with the Trauma Commission.
3.4	Describe how the multidisciplinary advisory group assists the lead agency to inform and educate the public and legislators to foster trauma system enhancement.	**DPH:** Once the trauma plan revision is complete, the multidisciplinary group will be able to inform and educate the public and legislators to foster trauma system enhancement.
3.5	Is there a trauma system coalition?	**DPH:** 15 Healthcare Coalitions within Georgia include acute care hospitals, rehabilitation hospitals, EMS, EMA, LEO, etc. Each region has a Regional Trauma Advisory Committee. The RTAC is established to act as a local resource for input to and support of the Georgia Trauma System. The committee aims to reduce trauma and the cost associated with preventable morbidity and mortality. The RTAC is a committee of the Regional EMS Advisory Council. The RTAC works collaboratively with the Region 5 EMS Council, the Georgia Office of EMS and Trauma (OEMS&T), and the Georgia Trauma Care Network Commission (GTCNC). The Committee membership comprises stakeholders who represent the region's demographics and components of the regional trauma system. See attachments: 3.5_Georgia Health Districts and EMS Regions Map 3.e_GA Coalition Map 2021
3.5a	a. What is the role of the coalition members (constituents and stakeholders) in promoting trauma system development?	**DPH:** The Rural Trauma Advisory Committee (RTAC) and HC Coalitions have active members promoting trauma care. Each one has actively participated in the training and promotion of STOP the Bleed. If there are specific trauma equipment or trauma training needs, the RTACs and HC Coalitions often help with funding through Emergency Preparedness or TC funds.

3.5b	b. What is the method and frequency for communicating with coalition members?	**DPH:** Coalitions meet quarterly in person and virtually. They have consistent representation from EMS and hospitals, including trauma and non-trauma.
3.6	Describe how the lead agency engages with the stakeholder coalition to inform and educate governmental leaders to make them effective partners in policy development for trauma system advancement.	**DPH:** Members of the lead agency will assist the coalitions in disseminating information and direct them to appropriate resources. If issues are identified that will need more legislative input, that will be communicated within DPH and the relevant legislative committees. GTC: The GTC presents annually to the House and Senate Health and Human Services Committees any changes needed to improve the provision of trauma care services it has identified through its various initiatives and studies.
3.7	Describe how the trauma system leadership mobilizes community partners to improve the trauma system through effective communication and collaboration.	**DPH:** DPH, Georgia Committee for Trauma Excellence (GCTE), and Georgia Trauma Commission (GTC) subcommittees work with hospital and community partners to improve trauma care through education and injury prevention.
3.7a	a. How has the community been approached to identify injury control concerns?	**DPH:** Individual hospitals have injury control programs to inform communities and hospital staff of the types of injuries in the region. For example, the Governor's Office of Highway Safety (GOHS) sponsors roadside billboards with information on seat belt and child car seat use, teen drivers, distracted drivers, and DUI prevention.
3.7b	b. What key problems has the community identified?	**DPH:** The trauma community has identified an increase in fall-related injuries and pedestrian injuries.
3.7c	c. How do stakeholders bring system challenges or deficiencies to the attention of the lead agency?	**DPH:** The stakeholders bring system challenges to the attention of the lead agency through the subcommittees and coalitions.
3.8	Describe how the lead agency informs citizens about trauma care and trauma system progress on a recurring basis.	**DPH:** Information for citizens is disseminated most effectively through identified partners and local hospitals. Appropriate education and resources are provided as requested or sent by our community partners.

	Documentation Requested	Submitted: Yes or No
3.a	Statute or rule creating multidisciplinary advisory group.	**DPH:** Rule 511-9-2-.03. Statewide Emergency Medical Services Advisory Councils. See attachment 5.2_StatewideAdvisory Councils 511-9-2-.03 . 1. EMSAC 2. EMSMDAC 3. Future State Trauma Advisory Council
3.b	A list of the multidisciplinary group membership with role identification.	**DPH:** Original Multidisciplinary Advisory group was dissolved after the appointment of the Georgia Trauma Commission. The multidisciplinary group structure is being reorganized in a collaboration between the Department and the GTC. Partners such as non-designated hospitals, law enforcement, regional emergency preparedness partners, medical examiners, coroners, rehabilitation, special needs populations, and governmental entities will be included.
3.c	A representative sample meeting schedule, agenda, and minutes of multidisciplinary advisory group meeting. • Meeting attendance by multidisciplinary advisory group members.	**DPH:** The multidisciplinary advisory group has not met, so no agenda or schedule has been developed.
3.d	A list of organizations represented in trauma system planning or injury control (e.g., multidisciplinary state advisory committee, subcommittees, and other groups supporting trauma system development).	• DPH (including Injury Prevention, Epidemiology, Emergency Preparedness, and Healthcare Preparedness) • Georgia Hospital Association • State Office of Rural Health • GTC (including representation of subcommittees) • Georgia EMS Association (GEMSA) • Georgia Emergency Management (GEMA) • Georgia Governor's Office of Highway Safety (GOHS) • Georgia Department of Transportation • Georgia State Patrol and local law enforcement agencies

3.e	A list of all active coalition members, with specific identification of those representing special populations (e.g., children and people who are elderly, need rehabilitation, or are disabled).	Trauma currently does not have an active “coalition” group. As stated above, we are reorganizing the multidisciplinary state advisory committee. In addition to the GTC committees, the ten Regional Trauma Advisory Committees (RTAC), Emergency Medical Services for Children (EMSC), and Regional Healthcare Coalitions fall under emergency preparedness. Within these groups, special populations are discussed, and plans are developed at the local level. See attachments: 3.e_GA Coalition Map 2021 3.5_Georgia Health Districts and EMS Regions Map
3.f	Examples of communication to constituencies or the trauma system coalition (e.g., notice of planning meetings, newsletter, activity report, coalition updates, or media message).	**DPH:** The Department website contains a publicly accessible calendar for regional and statewide EMS meetings that includes the meetings' physical location and/or virtual information. Email invites are sent to members and interested parties with meeting notes and agendas attached. **GTC**: The GTC event calendar, annual report, committee reports, and meeting reports are posted on the website. https://trauma.georgia.gov/

Essential Trauma System Element #4: Trauma System Plan

An integrated trauma system plan should be created and implemented. This plan should be reviewed annually and updated every three years at a minimum, under the direction of the lead agency and the multidisciplinary advisory group.

	Question	
4.1	Describe the process used by the lead agency and multidisciplinary advisory group for review and update of the trauma system plan.	The 2015 plan was due for revisions in 2020, but the pandemic delayed the revisions. The Department and GTC are working collaboratively to establish the appropriate representation for the multidisciplinary advisory group to prepare for needed trauma system plan revisions. **The answers to the following questions reflect the future state of the plan.** A team will be selected based on the specific entities needed to revise the trauma plan. The advisory group initially reviews the plan, and updates are discussed. The plan is then assigned to specific committees such as EMS, Injury prevention, pediatrics, emergency preparedness, systems of care, and others. A timeline will be given for reporting back on updates, and the final document will be reviewed and edited. Final approval of the trauma plan will be through DPH. Once the trauma system plan is revised, all RTACS will revise regional trauma plans to align with system plan revisions.
4.1a	a. How often is the plan reviewed and updated?	The Trauma System Plan will undergo revisions minimally every four years or as needed upon annual review.
4.2	Describe the cross disciplinary collaboration and integration with EMS, public health, emergency and disaster management, social and mental health services, law enforcement, child and adult	Participation with Public Health sections such as EMS, Injury Prevention, Emergency Preparedness, Emergency Medical Services for Children, and epidemiology are

	protective services, and other community public safety entities within the trauma system development plan.	strong. Public safety partners (EMS, Law Enforcement, and Fire Services) are consistently involved. These groups connect and regularly collaborate on many levels, such as Regional EMS Councils, Regional Trauma Advisory Committees, and EP Coalitions. Social services and mental health resources are not routinely available statewide.
4.3	Describe the process for determining the trauma system plan goals and objectives.	Determining the trauma system plan goals and objectives involves reviewing the previous plan to determine what significant changes need to be addressed. Future issues may include pandemic response, expanded mass casualty response, and transportation and highway design innovations.
4.3a	a. During review of the trauma system plan, are the goals and objectives evaluated and updated using trauma system data?	Yes, it will utilize trauma registry data, crash, EMS, hospital discharge, and other data housed within DPH.
4.4	Describe the ongoing assessment of trauma resources and asset allocation within the system.	The Department and GQIP are designing a statewide performance improvement process. The process will include identifying trauma cases that have the potential to improve care and outcomes for future patients. The process will consider where insufficient trauma resources or assets exist.
4.5	Describe the process used to integrate trauma system standards and policies in the trauma system plan.	Revising the trauma plan will include reviewing current standards and identifying specific policies to enhance the trauma system.
	Documentation Requested	**Submitted: Yes or No**
4.a	Trauma System Plan and other supporting documents.	See attachment 4.a_Trauma Plan 1-22-2016 for the Georgia Trauma Plan.
4.b	A list of trauma system goals and objectives (if not included in the Trauma System Plan).	**GTC:** See attachment 4.b_FY 2023 GTC Strategic Plan FINAL

		DPH: A new concept for data linkage across the continuum of care was introduced in 2019**.** The Governor's Office of Highway Safety (GOHS) funded the EMS Armband Project to deterministically link Crash Records, EMS Records, and Trauma Records. Future written trauma system plans will include the EMS Armband Project details, goals, and objectives. The project is in the trial phase in EMS Region 2 as the community partners (police, fire, EMS, trauma centers, RTACS) agreed to test the armband use together.

Essential Trauma System Element #5: Continuum of Care

The trauma system should address the full continuum of injury from prevention and pre-hospital/interfacility emergency medical services, to acute hospital care (referring and accepting facility) through rehabilitation. The system should address all injured patients with special attention to pediatric, geriatric, and other vulnerable populations.

5.1	**Prevention and Outreach**	
	Question	**Your Response**
5.1.1	Describe how the lead agency is engaged in the development and implementation of community health needs assessments and improvement plans	The public health framework views injury as a disease that can be prevented or managed in a way that reduces the severity. Using a public health approach, the trauma system works to determine areas of concern based on available data, identifiable risks, and protective factors, developing and implementing prevention strategies, then reevaluating subsequent data to assess the effectiveness of programming. In Georgia, community health needs assessments and improvement plans are developed on the local, state, and community levels. The Georgia Department of Public Health (GA DPH) funds and collaborates with 18 separate public health districts throughout the state. Each district comprises one or more of Georgia's 159 counties and county health departments. Additionally, each county has a Board of Health as defined by Title 31-3 of the Official Code of Georgia Annotated. One of the Board of Health's primary functions is to assess the community's needs. Board of Health members have the essential roles of advising the District Health Director on specific community needs and serving as links to local government and community resources. Generally, Community Health Assessments are produced by the health district offices working in collaboration with local boards, community, stakeholders, and members of the public. These assessments help to provide a comprehensive picture of the public health landscape of each county. They are intended to help shape collaborative efforts of the system to improve the health of residents.

		The Georgia Trauma Commission, Georgia Committee on Trauma Excellence, Georgia Trauma Centers, Regional Trauma Advisory Committees, and other System Stakeholders collaborate with our GA DPH partners to review data from multiple sources to describe the burden of traumatic injury. The public health framework views injury as a disease that can be prevented or managed in a way that reduces the severity. Again, using a public health approach, the trauma system works to determine areas of concern based on available data; identify risk and protective factors; develop and implement prevention strategies; then reevaluate subsequent data to assess the effectiveness of programming. Injury data from the trauma registry, EMS trip report data, and other trusted sources are used to characterize the frequency and patterns of injury within a given community, identify high-risk populations, and establish system priorities.
5.1.2	Describe if and how the lead agency is integrated with public health injury control programs for injury surveillance, resource coordination (funding, human resources), and prevention program implementation.	**DPH:** The Department and the DPH Epidemiology Section produce an annual epidemiological review of the demographics and injury types seen statewide. The DPH Injury Prevention Program uses the trauma registry data for injury prevention studies and data merged with the Georgia Hospital Association hospital discharge data set for use by the DPH-supported Crash Outcomes Data Evaluation System (CODES).
5.1.3	List organizations dedicated to injury prevention within the region and the issues they address (e.g., MADD, SADD, SafeKids Worldwide, Injury Free Coalition for Kids, American Trauma Society, violence intervention programs, and university-based injury control programs).	**DPH:** See attachment 5.1.3_Injury Prevention Organization List
5.1.4	List the number and describe the nature of injury prevention activities conducted throughout the trauma system in the past year (e.g., activities directed at which mechanism or type of injury or which patient population, such as children and elderly people).	**DPH:** See attachment 5.1.4 Trauma System Prevention and Outreach Activities 12.06.22 Master KS. The attachment contains a list of injury prevention activities conducted statewide by all Georgia trauma centers. The programming list was prepared by the Chair of the Injury Prevention subcommittee of the GCTE.

5.1.5a	Describe how the lead agency has funded and coordinated system-wide injury prevention or outreach activities. Include the following: a. Which injuries have been identified and prioritized for intervention strategies?	**DPH:** The GTC provides trauma funds to the trauma centers for program management, including injury prevention. Falls, MVC, and firearm or violence-related injuries are the top three injury types in Georgia. The GCTE Injury Prevention subcommittee evaluated the most common injury types and selected developed prevention programs that have demonstrated success.
5.1.5b	b. How are the prevention needs of children, elderly, and other vulnerable populations addressed?	**DPH:** The trauma registry data is used to identify the most common types of injuries treated at the trauma center. Trauma centers focus on the populations that will benefit the most or programs with the most impact to reduce injuries and death. Our pediatric facilities provide prevention education to parents of children up to age 15. The adult facilities promote prevention in senior citizen assisted living communities, city fairs, and high schools.
5.1.5c	c. What dedicated lead agency or other agency staff (full- or part-time) is responsible for injury prevention outreach and coordination for the trauma system?	Department of Public Health, Injury Prevention Program includes 30 federally grant-funded staff through the DPH, for example: 1. GOHS grants held by GA DPH (governor's office of highway Safety - child occupant safety, elderly drivers, CODES-data linkage, EMS data, and Oasis crash data grants). 2. CDC grants held by DPH- PACE D2A (adverse childhood events, data to action), BOLD (bringing public health into the framework of dementia work), Core SIPP (capacity building grant focusing on MVC, TBI, Falls, and ACES), PREVAYL (preventing violence affecting young lives), maternal and child health block grant (bullying, safe infant sleep), expansion of suicide prevention grant, 3. DPH EPI hold the FASTER grant on firearm/lethal means surveillance HHS grant held by DPH - maternal and child health block grant (bullying, safe infant sleep)
5.1.5d	d. What is the source of funding?	DPH: Department of Public Health, Injury Prevention Program includes 30 federally grant-funded staff through the DPH. The GTC provides trauma centers funding to enable them to offer injury prevention activities to their communities.

	Documentation Requested	Submitted: Yes or No
5.1.a	Most recent community health needs assessment report.	There is no DPH, Injury Prevention Program community health assessment. Health assessments are done at the public health district level (aggregated from the community health level) and are required by all public and not-for-profit hospitals. The DPH Injury Prevention Program provided attachments: • 5.1.a_Injury indicator death_2020 IPP • 5.1.a_Injury indicator report 2020 IPP
5.1.b	Most recent annual injury prevention and outreach report.	See attachment 5.1.4_FY2022 OTCPE Statewide Injury Prevention Programs for a list of programs offered by the trauma centers. The DPH Injury Prevention Program provided attachments: • 5.1.c_Occupant ProtectionQuickFacts_CODESReview_11032022 • 5.1.c_Pedestrian and BikeQuick Facts_CODESReview_11032022 • 5.1.c_2020 Non-Motorist Pedestrian and Bicyclist Georgia Traffic Safety Facts • 5.1.c_Brochures GA IP & Outreach Announcements & Resources 12.07.22 • 5.1.c_Drivers Aged 55+ Quick Facts_CODESReview11.03.2022 • 5.1.c_GA 2021 NPRPediatrics Hospital Summary Report • 5.1.c_GA 2021 Pediatric Readiness EMS State Summary Report • 5.1.c_Overview of Motor Vehicle Crashes (2022.10.17) – CODES REVIEW
5.1.c	A representative sample of brochures, pamphlets, fliers, and curricula for educational programs on injury prevention.	See attachment 5.1.c_Brochures GA IP & Outreach Announcements & Resources 12.07.22

5.2	Emergency Medical Services	
	Question	**Your Response**
5.2.1	Describe the role of the EMS system medical director.	The State EMS Medical Director collaborates with the State EMS Director: • And various programs and staff within the Department and DPH in the development, maintenance, review, and revision of system development for systems of care, including but not limited to trauma, stroke, cardiac care, EMSC, and mobile integrated healthcare. • And various programs and staff within the Department in developing, maintaining, reviewing, and revising operational and clinical guidelines affecting patient care. • And the Emergency Medical Services Medical Directors Advisory Council (EMSMDAC) and various programs and staff within the Department in the review and revision of the Georgia EMS Scope of Practice for personnel. • During investigations and other compliance issues related to the provision of clinical care by licensees of the Department. • To assist with site visits and any other activities related to the designation and/or re-designation of specialty care centers, • Represents the Department on the NASEMSO Medical Director's Council and attends all Medical Director's Council meetings. • Represents the Department at various EMS and system of care meetings.
5.2.1a	a. Does the EMS system medical director have statutory authority to develop operational protocols, oversee clinical practice, and establish ongoing quality assessment to ensure optimal provision of prehospital care?	The authority to create operational protocols rests with the local medical director chosen by each service. This individual is also responsible for overseeing clinical practice and quality assessment programs. The Department, in collaboration with the State EMS Medical Director, does dictate the scope of practice for each level of provider and can require a minimum set of operational protocols for licensed services
5.2.1b	b. In a system that does not currently have an EMS system medical director, what are the barriers to creation and/or fulfillment of this role?	The State EMS Medical Director was hired in October 2022 after the position was vacant for over a year.

5.2.2	Describe how EMS leadership participates in all aspects of trauma system design, evaluation, and operation, including policy development, public education, and strategic planning.	Designated Trauma Centers are required to include EMS partners in PIPS, disaster response committees, and training. All EMS Advisory Councils (Regional and Statewide) require systems of care representatives as members of these Councils. The Regional EMS Councils and the Regional Trauma Advisory Committees (as described above) are part of the planning, system evaluation, PIPS, and policy development of the trauma system locally, regionally, and statewide.
5.2.3a	Describe the EMS system to include the following. a. List the number and competencies (that is, ALS or BLS) of ground transporting agencies, non-transporting agencies, and air medical resources.	The Georgia EMS system includes the following: Air Ambulance: 7 agencies Ground Ambulance: 324 agencies Medical First Responder: 109 agencies Neonatal: 10 agencies Georgia does not license EMS agencies by ALS or BLS.
5.2.3b	b. Describe how EMS resources are allocated throughout the region to serve the population.	GA has 177 designated 911 zones for EMS response. Each designated zone has a designated ground ambulance agency responsible for the EMS response in that zone. These designated zone providers are recommended to DPH through the Regional Councils (Local Coordinating Entities) based on economy, efficiency, and the benefit to public welfare. Each region has a Regional Ambulance Zoning Plan. The zoning plan aims to ensure the proper distribution of emergency calls among ambulance providers for the pre-hospital emergency care system and to establish, coordinate, and revise EMS territories, communication activities, and designated ambulance responders for each territory.
5.2.3c	c. Describe the availability of enhanced 911 and wireless E-911 access in your region.	GEMA is the authority for establishing rules and regulations governing the planning and implementation of 911 emergency telephone systems in Georgia. Both basic and enhanced 911 systems are allowed under the state of Georgia's 911 Emergency Telephone Plan. It is highly recommended that local governments contemplating installing new 911 systems give priority consideration to enhanced 911 systems.
5.2.3d	d. Identify any specialty pediatric transporting agencies and aeromedical resources.	Georgia has ten licensed neonatal transport agencies (13 Neonatal ambulances) and 7 Air ambulance Agencies (48 rotor wing aircraft)

5.2.3e	e. Describe the availability of pediatric equipment on all ground and/or air transport units.	All transport vehicles must be inspected and registered before use. The Department has a list of minimum required equipment and supplies, which includes a pediatric transport device and pediatric supplies. Minimum equipment requirements for EMS transport vehicles were developed using Equipment for Ground Ambulances; Joint Policy Statement from AAP, ACEP, ACS COT, EMSC, ENA, NAEMSP, and NASEMSO. See four attachments for equipment lists: 5.2.3e_01.01.2023 Air Ambulance – Vehicle Inspection Form 5.2.3e_01.01.2023 Ground Ambulance – Vehicle Inspection Form 5.2.3e_01.01.2023 Medical First Responder – Vehicle Inspection Form 5.2.3e_01.01.2023 Neonatal Ambulance – Vehicle Inspection Form
5.2.4	Describe the procedures for online and off–line medical direction, including procedures for the pediatric population.	All EMS agencies must have agency protocols that identify what treatments/procedures are standing orders and what treatments/procedures must have online medical direction. If online Medical Direction is required, the medic must contact the receiving facility to give a patient report and request and/or receive orders for the treatment/procedure.
5.2.5a	Describe the prehospital workforce competencies in trauma for: a. Initial training and certification/licensure requirements	Initial EMS Education programs must be designated and approved by the Department. All EMS applicants must graduate from an EMS program that meets or exceeds the National EMS Education Standards; all Paramedic students must graduate from a CAAHEP Accredited Paramedic program. EMS applicants must be National Registry certified to apply for Georgia EMS licensure. (Current Advanced Tactical Paramedic certification is accepted in lieu of National Registry certification for applicants at the Paramedic level)
5.2.5b	b. Continuing education and recertification/license renewal requirements	Medics licensed at the EMT level and above must complete a minimum of 40 hours of EMS continuing education during their license cycle to renew their EMS license. Of the 40 hours, 8 hours must be in pediatric education, 4 hours in trauma education, and 4 hours in cardiac/stroke education.
5.2.5c	c. Pediatric trauma training requirements for recertification	Medics licensed at the EMT level and above must complete a minimum of 40 hours of EMS continuing education during their license cycle to renew their EMS license. Of the 40 hours, 8 hours must be in pediatric education, 4 hours in trauma education, and 4 hours in cardiac/stroke education.

5.2.6	Describe EMS communication policies and systems used.	All EMS agencies must have 2-way communication between each ground ambulance and the location receiving requests for emergency service. Each registered ambulance shall be equipped with a two-way communication system that provides ambulance-to-hospital communications. These communications may be satisfied with radio or cell phone communications.
5.2.7	Describe your process for assessing the adequacy of the workforce resources within the EMS system.	The Department is tracking monthly the number of licensees by level, licensees by age group, and licensees listed on an agency EMS roster and sharing data with EMSAC to identify workforce-related gaps and to develop action plans. In addition, the Department will be conducting an EMS agency survey in 2023 further to determine the actual workforce needs of Georgia EMS agencies.
5.2.7a	a. What human resource deficiencies have been identified, and what corrective actions have been taken?	During COVID-19, the Department promulgated four Emergency Rules that included the ability to (1) issue provisional medic licenses, (2) add temporary EMS workforce personnel, (3) reinstate lapsed medics within the past three years, and (4) staff with Healthcare personnel of higher license level to increase the EMS workforce. The Department promulgated Rule in October 2021 to add a license level of EMT-Responder to GA's EMS workforce. (Applicants must be National Registered at the EMR level.)
	Documentation Requested	**Submitted: Yes or No**
5.2.a	Most recent EMS assessment.	See attachment 5.2.a_ NHTSA Georgia assessment
5.2.b	EMS medical director job description.	See attachment 5.2.b_ EMS Medical Director job description.
5.2.c	Map identifying the location of aeromedical resources in the region.	See attachment 5.2.c_ GA Helicopter Locations
5.2.d	Protocols dictating level of EMS response (ALS or BLS), mode of transport, and disposition of the patient.	**DPH:** Georgia is a Home Rule state and does not have state protocols. Each agency Medical Director dictates local protocols.
5.2.e	Requirements for medical oversight of all levels of EMS agencies, ALS and BLS, transporting and non-transporting.	**DPH:** Each licensed agency is required to have a physician licensed to practice medicine in the state of GA and subject to approval by the Department. Duties of the local Medical Director:

		Rules 511-9-2-.06(e) Rule 511-9-2-.07(h) Rule 511-9-2-.09(f) https://dph.georgia.gov/ems-policies-rules-and-regulations
5.2.f	Prehospital care treatment protocols (ALS and BLS), including pediatric protocols and geriatric protocols if available.	**DPH:** No state prehospital care treatment protocols exist. Each licensed agency is required to have protocols approved by the local Medical Director. Agencies are encouraged to use the NASEMSO Model EMS Clinical Guidelines to create protocols. Each agency is required to have the following protocols that address the following: Cardiac Protocols - STEMI Treatment and Transport - Cardiogenic Shock Treatment and Transport - OHCA Treatment and Transport Stroke Protocols - Stroke Treatment and Transport - Stroke Triage Tool - Stroke Severity Tool Trauma Protocols - General Trauma Treatment and Transport – must reference CDC Field Triage Criteria - Other protocols for the assessment, management, and transport of patients with specific injuries
5.3	**System Triage and Patient Flow**	
	Question	**Your Response**
5.3.1	Describe how the lead agency assesses timely and appropriate triage of the most critically injured patients, as well as timely and appropriate interfacility transfers, through a multidisciplinary PIPS process.	**DPH:** The OEMST and GTCNC GQIP office are collaborating to assess timely and appropriate triage and transfers of trauma patients statewide with an Injury Severity Score (ISS) greater than 9, 15, and 25. The Performance Improvement (PI) process is in the infant stages. Together, the two offices are establishing best practices for case reviews at the state level, ensuring confidential peer review standards are met.

5.3.2	Describe how over and under triage, as well as delayed inter-facility transfers, are addressed.	**DPH:** Trauma centers review cases through their internal PIPS process. The center is to document loop closure on each case. The Performance Improvement (PI) determinations are not shared with the Department. Verification of over and under triage review is verified through the quarterly Ongoing Trauma Center Performance Evaluation (OTCPE) reports and designation site visits. Variances are managed by the facility. The Department and Georgia Trauma Commission (GTC) Georgia Quality Improvement Program (GQIP) are collaborating at the state level to review cases involving over and under triage and transfer delay scenarios. The review process is in the development phase, with formal steps being established. Centers have been provided with a sample data Quality Assurance (QA) report to create in their trauma registry report writer to help the center identify cases that need to be reviewed. A follow-up review form for the transferring facility and receiving facility has been provided to the centers to help the trauma programs review cases internally and document determinations and loop closure.
5.3.2a	a. Define under and over triage for both pediatric and geriatric patients.	**DPH:** The trauma registry report writer is used to identify potential over and under triage cases using the Trauma Team Activation (TTA) and the patient's Injury Severity Score (ISS). The trauma registry report Over and Under Triage Analysis (Initial Activation Level by Arrival Month/Year) is run three times to evaluate the cases for all patients, patients ages <15 and patients ages >=65. For pediatric and geriatric patients, cases with a higher TTA and lower ISS may be considered over triaged. For pediatric and geriatric patients, cases with a lower TTA and higher ISS may be considered under triaged. In the review process, the trauma program will consider the possibility of upgrading or downgrading the TTA based on the patient's condition. Trauma programs also evaluate their Trauma Team Activation guidelines to adjust accordingly and offer education to the staff on the center's new guidelines. In the quarterly OTCPE report to the Department, the trauma program reports compliance with the facility's trauma triage criteria, TTAs, and the quarterly over and under triage rates. The trauma centers also verify the

		trauma program reviews under triaged cases with an ISS>15, and loop closure is documented at the facility.
5.3.2b	b. Describe how pediatric and geriatric patients are triaged from the field to appropriate facilities.	The Department utilizes the standard Field Triage Criteria. RTACs are encouraged to develop criteria to best benefit the needs of the patients in their specific region. The state is limited in the coverage of pediatric centers, so each facility has transfer agreements with the closest pediatric centers. Standards specific to geriatrics are not yet developed statewide. See attachment 5.3.2b_5.3.3_field-triage-guidelines-2021.
5.3.3	Describe the prehospital trauma triage protocols, including consistency with national guidelines.	The Department utilizes the standard Field Triage Criteria. RTACs are encouraged to develop criteria to best benefit the needs of the patients in their specific region, along with the proximity and level of care needed. See attachment 5.3.2b_5.3.3_field-triage-guidelines-2021.
5.3.4	Within the system, describe the criteria that are used to guide the decision to transfer patients to an appropriate facility and the uniformity with which these criteria are applied across all centers.	**DPH:** Based on the level of designation/verification, each facility must determine the appropriate level of care that can be consistently provided based on available resources and as defined in ACS guidelines. Where gaps occur, such as neuro coverage, facilities must have appropriate standards of care outlined and transfer protocols and agreements in place. Transfer criteria do not currently address transfers to a higher level of care, non-trauma centers within health systems. **GTC:** The 2014 transfer decision criteria are under review by the Trauma Medical Directors committee. See attachment 5.3.2b_5.3.3_field-triage-guidelines-2021. See attachment
5.3.4a	a. Describe the criteria that are used to guide the decision to transfer patients across state lines or to non-designated facilities.	EMS scene patients are transported to the most appropriate trauma center per CDC Trauma Triage criteria, regardless of state line boundaries. For many border counties, the closest appropriate facility is across state lines. Example: Northwest GA will transport to Erlanger in TN, and southwest GA will transport to Jacksonville, FL

5.3.5a	Specify whether there are interfacility transfer agreements to address these needs: a. Transfer to an appropriate resource facility	**DPH:** Each facility is responsible for transfer agreements addressing cohorts in questions 5.3.5a – 5.3.5g.
5.3.5b	b. TBI	**DPH:** See 5.3.5a
5.3.5c	c. SCI	**DPH:** See 5.3.5a
5.3.5d	d. Reimplantation	**DPH:** See 5.3.5a
5.3.5e	e. Burns	**DPH:** See 5.3.5a
5.3.5f	f. Children	**DPH:** See 5.3.5a
5.3.5g	g. Repatriation	**DPH:** See 5.3.5a
5.3.6	Specify whether there is a central communications system to coordinate interfacility transfers and describe how this system has access to information regarding resource availability within the region. If not, describe the process for communication and acceptance of interfacility transfers to a higher level of care.	**DPH:** The trauma centers/hospitals call receiving centers statewide to arrange interfacility transfers to a higher level of care. Georgia has an Atlanta-based, area-focused communications system; however, no central communications system exists for statewide use.
	Documentation Requested	**Submitted: Yes or No**
5.3.a	Guidelines for patient care delivery decisions (primary or in-field triage and destination designation guidelines).	**DPH:** See attachment 5.3.2b_5.3.3_field-triage-guidelines-2021. CDC Trauma Triage Criteria is also included as part of the decision-making process for destination of trauma patients. Rule 511-9-2-.07(4)(k) Hospital Destination of Prehospital Patients.

		1. When a patient requires initial transportation to a hospital, the patient shall be transported by the ambulance service to the hospital of their choice provided: (i) The hospital chosen is capable of meeting the patient's immediate needs; (ii) The hospital chosen is within a reasonable distance as determined by the Medic's assessment in collaboration with medical control to not further jeopardize the patient's health or compromise the ability of the EMS system to function in a normal manner; (iii) The hospital chosen is within a usual and customary patient transport or referral area as determined by the local Medical Director; and (iv) The patient does not, in the judgment of the Medical Director or an attending physician, lack sufficient understanding or capacity to make a responsible decision regarding the choice of hospital. 2. If the patient's choice of hospital is not appropriate or if the patient does not, cannot, or will not express a preference, pre-established guidelines will determine the patient's destination. If for any reason, the pre-established guidelines are unclear or not applicable to the specific case, then medical control shall be consulted for a definitive decision. 3. If the patient continues to insist on being transported to the hospital he or she has chosen, and it is within a reasonable distance as determined by the local Medical Director, then the patient shall be transported to that hospital after notifying local medical control of the patient's decision. The choice of hospital for the patient may be selected pursuant to O.C.G.A. § 31-9-2. 4. If the patient does not, cannot, or will not express a choice of hospitals, the Ground Ambulance Service shall transport the patient to the nearest hospital believed capable of meeting the patient's immediate medical needs without regard to other factors, e.g., patient's ability to pay, hospital charges, county or city limits, etc.
5.3.b	Inter-facility transfer policy and criteria.	Interfacility transports are conducted by licensed EMS agencies with registered ambulances through partnership agreements, transport contracts, etc., between hospitals and EMS agencies. Mode of response

	• Policy addressing the mode of transport and type and qualifications of transport personnel used for field transport and inter-facility transfers.	and transport and level of transport personnel are determined between the requesting hospital and the transporting EMS agency.
5.3.c	Representative sample of minutes of meetings documenting ongoing quality improvement of transfer criteria.	No statewide meetings are addressing transfer criteria.
5.3.d	Policies or procedures related to repatriation.	No guidelines, policies, or procedures have been developed for repatriation.
5.4	**Definitive Care Facilities**	
	Question	**Your Response**
5.4.1a	Describe if and how all acute care facilities, both designated and non-designated, participate in the essential activities of a trauma system, including: a. Data submission to state or regional registries	**DPH:** Facilities are encouraged to participate in their perspective Regional EMS Councils and RTAC programs. Many of these regions have a robust PI review of care that includes not only designated but non-designated facilities; however, not all facilities across the state participate. Designated/verified facilities are required to submit data to the state trauma registry. Non-designated facilities seeking designation status utilize the trauma registry and submit data to the Georgia Trauma Patient Registry and GQIP.
5.4.1b	b. Performance improvement	**DPH:** Performance improvement is performed at the hospital level as required by the ACS criteria and State designation. The facilities must also submit quarterly trauma facility program reports (OTCPE). **GTC:** See Essential Element #9 Systemwide Performance Improvement.
5.4.1c	c. Representation on regional trauma advisory committees	**DPH:** Performed at the hospital level as required by the ACS criteria and State designation.
5.4.1d	d. Development of operational agreements to address interfacility transfers	**DPH:** Performed at the hospital level as required by the ACS criteria and State designation.
5.4.2	Describe the availability and roles of specialty centers within the system (e.g., pediatric, burn).	**DPH:** Pediatric and burn specialty care centers are located in EMS regions 3 and 6. All trauma centers must have transfer agreements with the closest appropriate specialty care center.

5.4.3	Describe how facilities providing the highest level of trauma care provide leadership in education, outreach, patient care, and research.	**DPH:** Performed at the hospital level as required by the ACS criteria and State designation. The facilities provide leadership of specific initiatives and advisory committees.
5.4.4	Describe how facilities participate in the design, development, evaluation, and operation of the trauma system.	**DPH:** Facilities participate in the design, development, evaluation, and operation of the trauma system in partnership with the GTC and GCTE subcommittees.
5.4.5	Specify whether the system has a funding source for leadership activities expected of the facilities providing trauma care.	**DPH:** GTC provides funding to the trauma centers for program development and performance. The Trauma Medical Directors and Trauma Administrators are required to participate in collaborative meetings.
5.4.6	Specify system standards used for trauma center verification (including pediatric standards) and the extent to which they are aligned with national standards.	**DPH:** The Department follows the current ACS guidelines. No additional requirements at the State level other than ACS.
5.4.7	Describe the processes for verification and designation.	**DPH:** The processes for verification and designation follow the ACS guidelines.
5.4.7a	a. Briefly outline the extent of authority granted to the lead agency to receive applications and to verify, designate, and de-designate regional trauma centers.	Rule 511-9-2-.05. Designation of Specialty Care Centers (1) Trauma and Burn Centers. (a) Applicability. 1. No hospital shall hold itself out as or advertise to the public that the Department designates it as a trauma or burn center without first meeting the requirements of these rules and obtaining approval from the Department. 2. This section is not intended to prevent any hospital from providing medical care to any trauma or burn patient. (b) Designation of Trauma and Burn Centers. 1. Any hospital seeking designation or re-designation by the Department as a Level I, Level II, Level III, or Level IV trauma center must submit a written application to the Department in a manner and on forms as determined by the Department

		and shall meet, at a minimum, the requirements defined by the American College of Surgeons Committee on Trauma. 2. Any hospital seeking designation or re-designation by the Department as a burn center must submit a written application to the Department in a manner and on forms as determined by the Department and must hold and maintain current verification as a burn center by the American Burn Association. 3. The Department may establish additional levels and types of trauma and burn centers as necessary based on advancements in medicine and patient care. 4. Each designated trauma center shall submit data to the state trauma registry in a manner and frequency as prescribed by the Department. (c) The Department may suspend or revoke a hospital's designation as a trauma or burn center after providing written notice to the hospital if the Department determines that the hospital is not in compliance with the requirements or criteria of these rules or applicable statutes. The Department shall provide an administrative hearing on the action to suspend or revoke a hospital's designation if the hospital makes a written request for a hearing. Such written request must be delivered to and received by the Department no later than twenty days after the hospital receives notice of the action. If a timely request for a hearing is not received, the action will become effective twenty days after the hospital's receipt of the notice. In lieu of suspending or revoking a hospital's trauma or burn center designation, the Department may re-designate the hospital at another level and/or type of trauma or burn center if it is determined that the hospital does not meet the criteria for its current level of designation.
5.4.7b	b. Describe any waivers or program flexibility granted for centers not meeting verification requirements.	No waivers are granted.

5.4.7c	c. Describe the process and frequency of de-designation of trauma centers.	Facilities that decide to withdraw from the trauma system must provide written correspondence to DPH/OEMST regarding the reason and date of withdrawal. Once received and reviewed by the Commissioner of Public Health, a letter will be issued to the facility confirming the date of withdrawal. De-designation due to variances: Trauma facilities will be notified in writing regarding any evidence, belief, or finding of critical program variance. This notification will be within ten (10) business days of the periodic review report. Items of non-critical variance will be documented; however, no actions are specifically required unless deemed necessary by the OEMS Medical Director. 2. Failure to resolve a critical program variance(s) to the satisfaction of the OEMS Medical Director within 180 calendar days of notification will constitute state trauma system participation suspension or de-designation. B. Trauma facilities may appeal suspension or de-designation in writing to OEMS/Trauma within ten (10) business days of notification. An appeal of suspension or de-designation may, at the discretion of the OEMS/Trauma Medical Director, require the facility to make a new application for state trauma system participation to OEMS. Upon receipt of the new questionnaire, the OEMS/Trauma will review it to ensure the clarity and completeness of the information. Questionnaires that contain unclear or incomplete information will be returned to the applicant facility within thirty (30) business days of requesting amendment. Receipt of a completed questionnaire will be considered as an applicant's letter of intent for State trauma system participation, which will require a site visit inspection of the facility by a site review team.
5.4.8	Describe your system for assessing the adequacy of the workforce resources within participating centers.	Each center provides a quarterly report (OTCPE) to the Department. The facility updates any changes to the trauma department personnel in this document. Facilities may communicate with others in the system when open positions are available to recruit within the system. Otherwise, the state may be aware of workforce issues but has no structured plan to assist facilities directly. This issue is specific to the facility's needs and is handled by that facility internally.
5.4.8a	a. How are nursing and subspecialty needs (trauma or general surgery, intensivists, neurosurgeons, orthopedic	Each center provides a quarterly report (OTCPE) to the Department. The facility updates any changes to the trauma department personnel in this

	surgeons, anesthetists, pediatric surgeons, and others, as required) addressed?	document. Facilities may communicate with others in the system when open positions are available to recruit within the system. Otherwise, the state may be aware of workforce issues but has no structured plan to assist facilities directly. This issue is specific to the facility's needs and is handled by that facility internally.
5.4.8b	b. What human resource deficiencies have been identified, and what corrective actions have been taken?	These issues are determined and addressed within each facility.
5.4.9	Describe the educational standards and credentialing for emergency physicians and nursing staff, general surgeons, specialty surgeons, and critical care nurses caring for trauma patients in designated facilities.	Each hospital has a policy and process for credentialing providers who care for trauma patients. The Department follows the current ACS optimal resources document regarding educational standards.
5.4.9a	a. What regional educational multidisciplinary conferences are provided to care providers?	At least three RTACS hold multidisciplinary trauma conferences (Region 2, Region 5, and Region 7). The GTC hosts two Day of Trauma events annually in association with GQIP.
5.4.9b	b. Who is responsible for organizing these events?	Regional conferences are organized and hosted by the regions with support and participation from regional trauma centers. The GQIP/GTC organizes the twice-annual GQIP meetings/conferences.
	Documentation Requested	**Submitted: Yes or No**
5.4.a	Document outlining the process for designation, redesignation, and de-designation (if necessary) of trauma centers.	See three attachments: 5.4.a_Designation Process Flow Sheet 5.4.a_Trauma Designation Processes 5.4.a_TC Desig and flow sheet 7-2019
5.4.b	Standards (other than ACS) used for trauma center verification.	**DPH:** None
5.4.c	A list of acute care facilities with the following data for each: • Level of designation/verification • A geographic map showing the location, catchment areas, and designation for all acute care facilities	See attachment: 5.4.c_2021 Facility Volumes 5.4.c_2022_0914 MAP Georgia Designated Trauma and Specialty Care Centers with Numerals

	• Geospatial analysis of access to care within 60 minutes of injury by air or ground
	• Patient volume (total and with Injury Severity Score [ISS] >15, if available)
	  ○ Emergency department (ED) visits
	  ○ Admissions
	• A list of trauma facilities with their level of designation and trauma patient volume (total and with ISS >15)
		5.4.c_Trauma Ctr List 11-30-2022
		Due to the Department's central site transition to the new GTPR, the patient volume data is only available from the GQIP central site.

5.5	**Rehabilitation**	
	Question	**Your Response**
5.5.1	What are the barriers to access to rehab services (ie patient insurance status)?	**DPH:** Due to our barriers collaborating with rehabilitation, we do not have access to this data. We look forward to having our rehab partners at the table as part of our multidisciplinary group to foster collaboration.
5.5.2	How long do patients wait for rehabilitation beds?	**DPH:** Due to delays, limited bed availability, funding, and staffing shortages statewide, the wait time for trauma patients to go to a rehabilitation bed can be protracted. There is no data on wait times for transfer to rehab centers.
5.5.3	Does the average wait vary by type of rehabilitation needed?	**DPH:** Specific data on wait times is unavailable. From our in-house experience working at trauma centers, the average wait varies by type of rehabilitation need based on the approval of government-provided or private insurance coverage and availability of services.
5.5.4	Identify the minimum requirements and qualifications that rehabilitation centers have established for the physician leaders (e.g., medical director of SCI program, medical director of TBI program, and medical director of rehabilitation program).	**DPH:** There are no established system minimum requirements or qualifications.
5.5.5	Describe the qualifications, roles, and responsibilities that rehabilitation leaders have in providing multidisciplinary care in	**DPH:** There are no established system qualifications, roles, and responsibilities.

<table>
<tr><td></td><td>the acute trauma care and rehabilitation settings (e.g., fellowship training, board certification, years of experience).</td><td></td></tr>
<tr><td>5.5.6</td><td>Describe how rehabilitation specialists are integrated into trauma system planning and advisory groups.</td><td>DPH: Rehabilitation is integrated into the coalitions at the local level, but they are not integrated into the trauma system plan or widely participatory in advisory groups.</td></tr>
<tr><td>5.5.7</td><td>Describe the established transfer agreements between designated trauma centers and rehabilitation facilities in the trauma system.</td><td>DPH: Due to our barriers collaborating with rehabilitation, we do not have access to this information. We look forward to having our rehab partners at the table as part of our multidisciplinary group to foster collaboration. Trauma centers and rehabilitation facilities service each other at the local level. It is common for large corporate-operated trauma centers to have a sister rehab facility in-house or nearby with network transfer agreements.</td></tr>
<tr><td></td><td>Documentation Requested</td><td>Submitted: Yes or No</td></tr>
<tr><td>5.5.a</td><td>A list of the rehabilitation centers and their CARF accreditation status.</td><td>DPH: Due to our barriers collaborating with rehabilitation, we do not have access to this information</td></tr>
<tr><td>5.5.b</td><td>A report that specifies the proportion of patients with SCI, TBI (Abbreviated Injury Score for the head ≥3), major trauma (ISS >15), and pediatric patients (age ≤12 years, ISS >15) with a discharge disposition listed as an inpatient rehabilitation center.
Summary of rehab services utilized</td><td>Data Source: GQIP 2021 registry data
2021 Frequency of Hospital Disposition to Rehabilitation by:<table><tr><td>SCI D/C to Rehab</td><td>216</td></tr><tr><td>TBI AIS ≥ 3 D/C to Rehab</td><td>669</td></tr><tr><td>ISS ≥16 D/C to Rehab</td><td>905</td></tr><tr><td>Age ≤12 and ISS≥16 D/C to Rehab</td><td>45</td></tr></table></td></tr>
<tr><td>5.5.c</td><td>Number of new major trauma, pediatric, SCI, and TBI admissions to rehabilitation centers in the region.</td><td>DPH: Due to our barriers collaborating with rehabilitation, we do not have access to this information. We are in the process of transitioning to a new Georgia Trauma Patient Registry and establishing the GQIP central site.</td></tr>
</table>

5.5.d	Data describing trauma system rehabilitation resources and services that provide or support care and recovery, including: • Number of patients receiving rehabilitation services at all levels of care. Include injury type and severity, age, race/ethnicity, gender, and geographic/socioeconomic characteristics. • Types of rehabilitation services provided to patients across the injury spectrum. • Number of patients that medically qualify, yet do not receive, recommended level rehabilitation care, with the reasons for not receiving recommended services.	**DPH:** Due to our barriers collaborating with rehabilitation, we do not have access to this information. We look forward to having our rehab partners at the table as part of our multidisciplinary group to foster collaboration.
5.5.e	Data pertaining to the number of inpatient beds designated for rehabilitation and staff-to-patient ratio.	**DPH:** Due to our barriers collaborating with rehabilitation, we do not have access to this information. We look forward to having our rehab partners at the table as part of our multidisciplinary group to foster collaboration.
5.5.f	A list of the rehabilitation data elements that are transferred to the trauma registry.	**DPH:** None
5.6	**System Integration**	
	Question	**Your Response**
5.6.1	Describe how the trauma system plan drives the various components to work together to achieve the intended goal.	One of our most significant self-identified opportunities is the lack of system stakeholder awareness that the 2015 Trauma System Plan exists. The plan is not housed anywhere that it can be easily accessed and reviewed. Considering the growth of the trauma system since 2015, more stakeholder input is needed for revisions. As a result of a high level of stakeholder engagement, Georgia has a robust committee structure that drives goal attainment.
5.6.2	Describe how the lead agency and each aspect of the trauma system participate in trauma system design, evaluation, and operation, as well as policy development, legislative advocacy, public education, and strategic planning.	**GTC:** The GTC develops a legislative agenda when necessary and is assisted by the Office of the Governor as per its reporting structure. Through the work of GQIP, best practices are identified and shared among the trauma centers through the collaborative. As described in 5.2.f, Georgia

		is a home rule state. EMS protocols are developed and approved at the local level so there is no system development of pre-hospital protocols. Both the department and GTC support public education efforts by the trauma centers, EMS and other system partners through the various statewide initiatives, e.g., Stop the Bleed, Trauma Day at the Capital, and other events. Strategic planning is done at the Commission level and revolves around the three pillars of quality, access, and finance.
5.6.3	Describe the working relationships with the trauma lead agency and the EMS lead agency, if they are different.	The lack of delineation of a lead agency for trauma creates ambiguity and much latitude for interpretation of existing Georgia code by the Department and the GTC. Each entity has specific subject matter expertise. There is a mutual desire to improve trauma patient outcomes in our system, but a lack of alignment in operationalizing a plan to achieve it. As a result, both entities would agree that the relationship is strained.
5.6.4a	Describe the trauma system's collaboration and integration with community services: a. Public health.	**DPH:** The Department and GTC GQIP collaborate with the public health DPH Epidemiology section and Injury Prevention section. The epidemiology section provides demographic and injury frequency data to the Department and GQIP, enabling the two to develop performance improvement processes and policies.
5.6.4b	b. Emergency management system.	**DPH**: The Department works with DPH Emergency Preparedness and Response section and GEMA to provide information and notifications to hospitals and EMS systems during state emergencies and events. DPH is responsible for the ESF 8 section in the state operations center.
5.6.4c	c. Prevention programs.	**DPH:** DPH Injury Prevention section works closely with the GCTE Injury Prevention subcommittee to guide the subcommittees initiatives. Injury Prevention is provided mainly at the local level. The Department collaborates with the GCTE Injury Prevention Subcommittee by providing annual trauma injury reports. Based on the trauma registry data, the subcommittee decides what type of prevention programs are needed. The GCTE Injury Prevention Subcommittee members are volunteers. The community service is provided in addition to their regular assigned trauma program duties.

5.6.4d	d. Mental health resources.	**DPH:** Georgia Department of Behavioral Health Development Disabilities (DBHDD) is a department within public health but does not participate in the trauma system.
5.6.4e	e. Social services.	**DPH:** The Social Workers or Patient Advocates at the trauma centers meet the needs of the patients the facility serves.
5.6.4f	f. Law enforcement.	**DPH:** Law enforcement is included at the state level through the Governor's Office of Highway Safety and Georgia State Patrol. Specifically with the CODES Project and the Armband project that is being developed. At local levels, law enforcement is included in some of the EMS Regional Councils and the RTACS. Although, participation may not be consistent throughout all regions. There has been a collaboration among law enforcement, EMS, and hospitals in recent years regarding Stop the Bleed, Active Shooter training, and other prevention and training programs in the state.
5.6.4g	g. Child and adult protective services.	**DPH:** The trauma center staff work with the Department of Family and Children Services to provide services and protect children and adults.
5.6.4h	h. Public safety (e.g., fire, lifeguard, mountain rescue, ski patrol).	**DPH:** The trauma system relies heavily on our public safety partners to provide quality emergency medical services to trauma patients and transport patients to the closest appropriate facility. Georgia has four geographical regions that include two mountain regions, a piedmont plateau, and a coastal region. The different regions have specialized public safety and military services.
5.6.5	Describe how the integrated trauma system identifies and addresses healthcare disparities.	**DPH:** In the past year**,** the Department and GTC worked to increase the number of trauma centers in rural area EMS region 4. While some areas of the state still need trauma resources, we find the challenges of indigent care and limited specialty physicians/providers in rural areas to be restrictive to our goals and efforts.
	Documentation Requested	**Submitted: Yes or No**

5.6.a	Organizational chart showing the trauma system's relationship with public health and community services.	**DPH:** See attachments: 5.6.a_OEMST Org Chart 9.23.22 5.6.a_DPH Org chart

Essential Trauma System Element #6: Needs Based Designation

The lead agency should develop and administer a trauma center designation process, based upon population needs.

	Question	Your Response
6.1	Does the lead agency have a trauma center designation process, based upon population need?	**DPH: No**
6.1a	a. If so, describe this process.	**DPH:**
6.1b	b. If not, what are the barriers to developing and administering such a process.	**DPH:**
6.2	Describe how the needs-based designation process has been implemented.	**DPH: NA**
6.3	Outline how the geographic distribution and number of designated acute care facilities are aligned with patient care needs.	**DPH: NA**
6.3a	a. Describe the process by which additional trauma centers are brought into the system.	**DPH:** See attachment 5.4.a_Designation Process Flow Sheet Hospitals contact the Department verbally and in writing to express their interest and commitment to becoming a

		designated trauma center. The center collects and downloads to the Department one year of trauma registry data. The center develops new trauma service policies, procedures, and guidelines and educates staff about the designation requirements. Physician and specialty services support is critical to the success of an emerging trauma service. The center requests the PRQ from the State Trauma Program Director. The PRQ is submitted 30 days prior to the scheduled site visit. The site team provides their recommendations and findings to the Department. The DPH Commissioner reviews the team's survey report and decides if the designation status is approved.
6.3b	b. Describe the system response to the voluntary withdrawal of designation by acute care facilities.	**DPH:** The designated and non-designated facilities absorb the admitted patients and open beds for new patients as staff is available. The loss of advanced trauma care is detrimental to the potential survival of trauma patients as they experience longer transport times, longer wait times for transfers, and fewer specialty resources and equipment in the area.
6.3c	c. Describe the mechanism for tracking and monitoring patient volume and flow between centers and how this influences the overall configuration of designated facilities.	**DPH:** The Department is developing a data surveillance tool with Biospatial that will enable the DPH, EMS, and trauma centers to track and monitor patient volume, flow between centers, and injury surveillance. The data that will be available can be used to influence the location of future designated facilities based on need. The data will reveal the transfer pattern or flow of patients statewide.
	Documentation Requested	**Submitted: Yes or No**
6.a	Document outlining the authority of the lead agency to determine number, level, and location of trauma centers, based upon population need.	**DPH:** The requested document is not available.
6.b	Metrics used for the determination of need. Examples may include the following: • EMS response and transport times.	

	• Number of Level I and Level II centers per 1,000,000 population. • Percentage of population within 60 minutes of a Level I or Level II center. • Percentage of time trauma centers are on diversion status. • Number and percentage of severely injured patients (ISS >15) seen at a trauma center. • Frequency, timeliness, and type of inter-hospital transfers. • Trauma-related mortality throughout the continuum.	
6.c	Number of trauma patients receiving definitive care at non-designated facilities.	**DPH:** This information is not available from non-designated facilities.

Essential Trauma System Element #7: Trauma System Registry

The lead agency should have the authority to establish and maintain a trauma system registry to collect, validate, and analyze injury surveillance data. Data collection should include the full continuum of care from point of injury through rehabilitation. These data should include all care facilities that treat injured patients. These data should be integrated with other data collection systems (i.e., vital records, medical examiner, law enforcement, and rehabilitation). Data definitions and patient inclusion criteria should be standardized to a national standard. Data sharing should be inclusive of system stakeholders to support quality improvement, research efforts, and legislative outreach pertaining to trauma.

	Question	Your Response
7.1	Describe the infrastructure of the state trauma and EMS data registries.	**DPH:** The Department has a multi-system platform that enables us to manage different systems of care. The systems of care include Cardiac, Stroke, Trauma, EMS-C, and EMS. All systems of care are on the ImageTrend platform. The GEMSIS, Elite, and HUB are the platforms for the EMS data registries. The Georgia Trauma Patient Registry (GTPR) is the platform for the new trauma central site. The License Management System on the same platform allows the Department to manage EMS agencies, licensed providers, and designated trauma center evaluations. Effective 10/1/2021- The Department discontinued the V5 Georgia Trauma Registry central site. Effective 10/1/2021 -The Department implemented the Georgia Trauma Patient Registry (GTPR) on the ImageTrend platform. Trauma center users have separate logins to access EMS records and import data to the GTPR. Data linkage is possible between the GEMSIS HUB data and the GTPR with matching key data elements and probabilistic linkage. Direct trauma data entry is available on the GTPR platform at no cost to the trauma center. To date, two non-designated centers are using the GTPR for their trauma registry. The direct data entry trauma

		registry has validation rules created by ImageTrend and the Department to ensure the integrity of the trauma data. **GTC:** GQIP recently created a state central site for performance improvement. The site collected its first data in October 2022. This site will collate and "scrub" registry data before sending it to ArborMetrix, our risk-adjusted benchmarking platform.
7.2	Which agency has oversight of the trauma registry?	**DPH:** The Department has oversight of the Georgia Trauma Patient Registry on the ImageTrend platform. **GTC**: GQIP has oversight of the Trauma Registry on the ESO DI V5 platform.
7.2a	a. Describe the role and responsibility of the lead agency in collecting and maintaining the data.	**DPH:** Rule 511-9-2-.05. 1.b.4 Designation of Specialty care Centers. 1.b.4 Each designated trauma center shall submit data to the state trauma registry in a manner and frequency as prescribed by the Department. Rule 511-9-2-.05. 4. Confidentiality. All information reported to any registry as described by this Rule shall be deemed confidential, except that the Department may, at its discretion, release such reports or data in a de-identified form or for research purposes determined by the Department to have scientific merit. Under no circumstances may information reported to any registry as described by this Rule be released in such a manner as to lead to the identification of any hospital, institution, or clinic. The Department receives the designated trauma center data according to the Rules and Regulations. Data is protected by DPH. ImageTrend houses the trauma registry data with a Business Associate Agreement with the Department.

		GTC: GQIP receives designated trauma center data as prescribed in their contracts with GTC. It is housed by ESO.
7.2b	b. How are the completeness, timeliness, and quality of the data monitored?	**DPH:** Trauma registry data completeness is monitored by the trauma registry software to highlight data entry errors and missing required data. The ESO DI V5 software uses a validation tool to notify users of errors before closing the record. When the V5 download is imported into the Department's new central site, Georgia Trauma Patient Registry (GTPR), the user sees a list of System errors, LongID field errors, and Schema errors. The user can click on the error message to see which records contain the error. Users must correct errors in the ESO DI V5 software and reattempt to import the records. Once the import is complete, the GTPR provides a count of records that passed or failed and an average completion rate for the import. Users can view each record and the individual record completion rate. The Department monitors trauma registry data timeliness through the quarterly OTCPE report submitted by the trauma center. The acceptable average quarterly record closure rate is 80% or above. The trauma center verifies for the Department whether or not the center meets the standard. Prior to the transition to the new GTPR, the Department ran the same record closure rate report on the imported records to verify the trauma center answer for the deliverable. The new GTPR does not contain record closure date and times; therefore, the Department must receive a copy of the ESO DI V5 generated record closure rate report in addition to the center verifying the quarterly rate. Trauma centers can run the ESO DI V5 report as frequently as they desire to monitor their own record closure rate as a performance improvement measure. Downloads to the Department have been paused since 09/30/2021, when the V5 central site was discontinued.

		Downloads are resuming to the Department in the new GTPR as the centers gain the ability to import records. We anticipate all centers will import trauma registry data timely by the March 1 download due date. Downloads to the Department are due quarterly. The ED arrival date range is 90 days in arrears from the due date. The trauma center initially monitors the trauma registry data quality by performing internal quality assessments of the registry data and using Inter-Rater Reliability (IRR) processes. The center reports to the Department in the fourth quarter OTCPE the strategies used by the trauma program to monitor the registry data validity, the percentage of records re-abstracted monthly, the number of data elements reviewed in the re-abstraction, and the average annual IRR score. The new GTPR will have a separate screen for the user to perform IRR evaluations on the data elements the Department and GQIP select and data elements the trauma center chooses to verify for their own use. The new IRR screen will provide per record IRR score. The report writer in the GTPR will have a report that will calculate the monthly, quarterly, and annual IRR average rates. Future IRR features in the new ESO DI Gen6 platform are unknown to the Department. The Department and GTC GQIP are collaborating to develop a formal PI process. **GTC:** Since the GQIP central site is new, processes to monitor completeness, timeliness, and quality are still under development. Data completeness is in progress, with the creation of a report highlighting 30 data points that are essential to risk-adjustment or current performance improvement projects. This report will be used to create a scorecard for each center to be reported with every quarterly download. A similar report is being created in the ArborMetrix platform, allowing this analysis

		to be done automatically and populate each center's dashboard and aggregate for GQIP.
7.2c	c. What entity has the authority to establish, maintain, and update these registries?	**DPH:** Department establishes, maintains, and updates the requirements for the trauma registry software on the Georgia Trauma Patient Registry (GTPR) ImageTrend platform by working closely with the ImageTrend representatives. ESO DI provides the initial annual ITDX schema to ImageTrend to add the additional Georgia extensions or required fields. The ITDX includes all NTDS-required fields and changes. ImageTrend provides the completed schema to ESO DI. The ImageTrend turnaround time for the schema depends on when ESO DI provides the initial annual ITDX schema. GTC GQIP establishes, maintains, and updates the requirements for the trauma registry software on the ESO DI platform. Participation is attached to funding with the center's GTC contracts. Both offices collaborate to make sure both data sets match the NTDS fields and most additional fields required by the two offices. The Department maps the GTPR of picklist options to incoming data from the ESO DI V5.
7.2d	d. Which stakeholders have a role in selecting data elements for inclusion in the regional registry?	**DPH:** Department and GTC GQIP collaborate to ensure the data registries contain the NTDS-required fields and data elements needed to monitor trauma care statewide. The two offices also work closely with GTCE to ensure the trauma centers agree to the required fields and definitions.
7.3	Provide information on participation rates and data completeness for the registries.	**DPH:** All designated trauma centers participate in collecting and downloading trauma data to the Department. The data completeness standard is 80% or above for required data elements by NTDS and the Department.

		GTC: All designated centers, but two have completed downloads to the new GQIP registry. The two outliers are working through technical difficulties to complete the download. For data fields needed for robust risk adjustment models, GQIP will require a data completeness standard of 90% that is in line with the TQIP model.
7.4	Describe how the lead agency monitors participation within the system registries and provides system feedback to participants on data quality and completeness.	**DPH:** The Department monitors the timeliness of data downloads, and the data date ranges received. The system feedback on data quality and completeness has been in the form of annual trauma injury reports. The DPH Epidemiology section provides oversight to the drafting of the report. The Trauma Epidemiologist also works with the Department and GTC GQIP to identify cases needing performance improvement reviews. **GTC:** GQIP will monitor that scheduled downloads are being completed as required and can withhold funds until participation is achieved. Scorecards will be developed, as well as the ArborMetrix dashboard, to provide feedback on data completeness.
7.5a	Specify which of the following data sources are linked to the registry, and describe the method of linkage (e.g., probabilistic or deterministic). a. Motor-vehicle crash or incident data.	The DPH Epidemiologist works with other DPH sections by providing trauma registry data for probabilistic linkages to the hospital discharge data set and the CODES data set. The CODES data set includes data from MVC or incident data, EMS, hospital discharge data, and trauma registry data. The current common data element is the LongID. The LongID contains the first two letters of the patient's first name, the first two letters of the last name, the last two letters of the last name, an eight-digit date of birth, and a letter identifying the sex of the patient. JADOOE01012022F

7.5b	b. Law enforcement records.	DPH participates in the GA CODES (Crash Outcomes Data Evaluations Systems), which NHTSA sponsors. This project links crash data, citations, vehicle data, injury, and other databases to identify risk factors and injury prevention opportunities.
7.5c	c. EMS or other transporting agency records.	**DPH:** The new Georgia Trauma Patient Registry records can be linked to EMS records to import EMS data into the trauma registry record. The linkage is done manually by record as the user searches the EMS database for matching date of birth, EMS agency numbers, EMS PCR numbers, dates of service, and the trauma center providing the care.
7.5d	d. ED records.	The Department has access to and reviews with other DPH sections and partners the use of hospital discharge data.
7.5e	e. Hospital records (hospital trauma registries).	The trauma centers can link their Hospital Information Systems to their internal trauma registry. The linkage is established by the hospital information technology department and the ESO DI V5 software vendor. The software feature is underutilized due to the expense.
7.5f	f. Rehabilitation data.	No specific rehabilitation data is collected at this time. Based on the Georgia Trauma Registry and hospital discharge data, we can identify if patients were sent to rehabilitation facilities.
7.5g	g. Coroner and medical examiner records.	Each facility reaches out to its local medical director/coroner to obtain autopsy reports. Georgia has identified that the system as a whole has issues in obtaining autopsy reports. One primary issue in GA is the coroner's role as an elected position in each county.
7.5h	h. Financial or payer data.	The Trauma Registry does not collect financial information.

7.5i	i. Dispatch.	Dispatch records are not linked to any of the GA Registries. Some EMS records contain data that has been downloaded from their PSAP/Dispatch to the EMS record.
7.6	Describe the reports generated from registry data, to include frequency and distribution.	**DPH:** After the DPH transition to the new GTPR is complete, and all centers are importing current data to the central site, the Department will develop new reports in the new GTPR that can be posted to a center's dashboard within the platform. The data in the reports/graphs are updated as new trauma data is imported into the central site. Potential dashboard reports/graphs are Record counts by month/quarter/year, • Trauma surgeon arrival timeliness for level 1 TTA, • Admitting service counts to highlight non-surgical admission frequency by month/quarter/year with and without a trauma consult, • ED Disposition frequency, • Transfer out time averages by month/quarter/year. • Over and under triage of all patients, ages <15 and ages >=65. Mortality rate based on ED Disposition, Hospital Disposition, ISS, for ages <15 and >=15. Graphs in the dashboard will allow users to click on a statistic to see a list of the patients in the statistic. **GTC:** Since the GQIP registry is new, regular reports, frequency, and distribution have not been determined.
	Documentation Requested	**Submitted: Yes or No**
7.a	Documentation for the registry processes, to include: • Data collection methodology, plan, and schedule. • Data dictionary. • Patient/facility inclusion criteria.	**DPH:** See attachment for: • 7.a _DPH FY2023 Due Dates for Quarterly Reports and Data 11272022 • 7.a_2022 GA Trauma Data Dictionary 2022.01.04

	• Data quality and validation plan and schedule of activities that support data quality. • Demonstration of linkage to other data sources.	• 7.a_GA Trauma Registry Inclusion Criteria FY2023 07202022 • Data quality and validation plan and schedule of activities are performed in collaboration with the GTC GQIP. Our offices meet monthly after the quarterly data is received to review cases and data quality. • Direct data entry GTPR users can link trauma records deterministically with EMS records to import EMS data into the trauma record. Demonstration of linkage to other data sources is unavailable. The trauma registry data is exported to SAS for probabilistic linking crash records or hospital discharge data with the common field "LongID." **GTC**: 7.a GQIP data completeness data points
	A typical regional registry report, redacted to maintain confidentiality.	**DPH:** See the attachment for the 7.a_Annual Trauma System Report Y2019-njn_04_22_2022. The 2020 Annual Trauma Injury Report has been prepared but is in draft form and being converted to the DPH FY2023 document template. The preparation of the 2020 and 2021 annual reports was delayed due to the Covid pandemic and the Department's central site transition. The trauma epidemiologist was reassigned to contact tracing and other duties for DPH. The transition to the new GTPR postponed 2021 data downloads and imports as users waited to install the download file enabling the center to resume downloads to the Department. The trauma epidemiologist will begin work on the 2021 data analysis as soon as the data is available from all designated trauma centers contributing data to the new GTPR. The Department and GTC GQIP prepared a schedule for the annual report to be prepared by August of the following year. CY 2020 – November 2022. The document is delayed. The document is being reformatted per DPH Communication requirements. CY 2021 – prepared by August 2023.

		Each following calendar year report will be prepared by August of the next year.

Essential Trauma System Element #8: Injury Epidemiology

The lead agency should have systems and processes in place to regularly track and report on injury frequency, rates, and patterns across the entire jurisdictional population. Analysis and reporting should be based on multiple pertinent data sources (e.g., vital statistics, hospital discharge data, EMS, ED data, and trauma registries), including information obtained through surveillance activities. Data from these sources should be synthesized to provide a comprehensive description of injury and analyzed to identify trends and patterns to inform system development, injury prevention, and performance improvement efforts.

	Question	Your Response
8.1	Describe the systems and processes used to track injury epidemiological data.	DPH/Injury Prevention Program utilizes multiple data sources to analyze and report injury data among different injury mechanisms. These data systems include vital statistics, hospital discharge data, emergency discharge data, EMS, and trauma registry all housed in DPH. These systems have been trended over time by age, sex, race, and injury severity. Other data sources have also been used to track injury including child fatality review data.
8.2a	Describe the epidemiology of injury in the region, to include: a. Children	Trends on numbers and rates for children have been conducted by age and sex for different types of injury mechanisms including: all injury, drowning, fall, fire, firearm, motor vehicle traffic and non-traffic, nondrug poisoning, and suicide for ED, hospital, and vital statistics. The Georgia Traffic Safety Facts include information by all injury data sources on children involved in motor vehicle crashes by age and person type. This is included in GTSF: Non-motorist Pedestrian and Bicyclists. The child fatality review data include information only on children aged under 18. Data on children is provided to the child occupant safety program that included mapping by county, age and sex distribution, total hospital charges, and injury severity.
8.2b	b. Adolescents	Trends on numbers and rates for adolescents have been conducted by age and sex for different types of injury mechanisms including: all injury, drowning, fall, fire, firearm, motor vehicle traffic and non-traffic, nondrug poisoning, and suicide for ED, hospital, and vital statistics. The Georgia Traffic Safety Facts include information by all injury data sources on

		adolescents involved in motor vehicle crashes by age, person type, and total charges. This is included in GTSF: Young Drivers and Non-motorist Pedestrian and Bicyclists. The child fatality review data include information only on children aged under 18.
8.2c	c. Elderly people	Trends on numbers and rates for elderly people have been conducted by age and sex for different types of injury mechanisms including: all injury, drowning, fall, fire, firearm, motor vehicle traffic and non-traffic, nondrug poisoning, and suicide for ED, hospital, and vital statistics. The Georgia Traffic Safety Facts include information by all injury data sources on elderly people involved in motor vehicle crashes by age, person type, and total charges. This is included in GTSF: Older Drivers and Non-motorist Pedestrian and Bicyclists. Data on elderly people is provided to the 55+ program that included mapping by county, age and sex distribution, length of stay and total hospital charges, and injury severity. Falls data for elderly were conducted by county by data source.
8.2d	d. Other special populations	None identified at this time
8.3	Describe all analyses that are performed, populations studied, and reports produced (to include the schedule and distribution list for report dissemination).	State Injury Indicators Report using ED, hospital, and vital records have been conducted each year that includes numbers and rates and is stratified by age and sex for the mechanisms of all injury, drowning, fall, fire, firearm, motor vehicle traffic and non-traffic, nondrug poisoning, and suicide. The Georgia Traffic Safety Facts (GTSF) is produced by CODES that included not only crash data but also injury surveillance data focusing on traffic related data. These injury surveillance data include hospital discharge data, emergency discharge data, EMS, and trauma registry data. They are produced annually with different publication on young adult drivers, older drivers, non-motorist, occupant protection, distracted driving, risky driving, large trucks, motorcyclist, and motor vehicle overall. There was an issue brief on how each of the traffic records system were affected by COVID-19, GTSF: Traffic Safety during the COVID-19 Health Emergency. These GTSF were distributed on the

		Governor's Office of Highway Safety website and a joint press release with GOHS and DPH.
8.4	Describe how emerging injury control patterns (e.g., from trend or surveillance data) were identified and addressed.	The Georgia Traffic Safety Facts were distributed to the Strategic Highway Safety Plan task teams, emphasis areas for Georgia to provide input in their state plans.
8.5	Describe how system epidemiology profile results (e.g., mortality rates, distribution of mechanism, and intent) are compared with benchmark values.	IPP reviews the data and trends in each of the mechanism and compare in the previous 5 or 10 years.
	Documentation Requested	**Submitted: Yes or No**
8.a	List of all datasets used for epidemiological analyses.	**DPH:** The document is not available**.**
8.b	Most recent, regular reports that describe injury at the system level and identify trends and patterns of injury.	**DPH:** See attachments for documents requested • 8.b_Georgia Traffic Records Strategic Plan 2022 • 8.b_Georgia Traffic Records Strategic Plan • 8.b_GA Traffic Record Assessment TRA 2019 Final Report • 8.b_FFY 2022-2024 Georgia Traffic Records Strategic Plan_6.8.21 • 8.b_GA Traffic Records Assessment 2019 • 8.b_GA_FY23_Highway Safety Plan 405_Final • 8.b_Overview of Motor Vehicle Crashes (2022.10.17) – CODES REVIEW • 8.b_Overview of Motor Vehicle Crashes in 2020 • 8.b_Hosptial Discharge Data _2020_Injury Analysis_01_GA • 7.a_Annual Trauma System Report Y2019_njn_04_22_2022
8.c	Most recent Safe State Alliance assessment report.	**DPH:** The document is not available**.**

Essential Trauma System Element #9: System-wide Performance Improvement

The lead agency should establish a system-wide trauma performance improvement (PI) process to evaluate all aspects of the trauma system. The plan should define audit filters to monitor and track specific processes and outcomes, such as access to care, availability of services, and effectiveness of injury prevention initiatives. In addition, the plan should define a process for tracking of the audit filters, addressing performance gaps, and determining loop closure.

	Question	Your Response
9.1	Provide a detailed description of the process for evaluating trauma system performance, including data collection, analysis, PI initiatives, and loop closure.	Data collection occurs within the Department and GQIP, a component of the GTC. GQIP is the state's trauma collaborative, established in 2012 and formalized in 2016. GQIP leadership was previously housed and contracted through one of our academic medical centers. In 2020, GQIP was brought internally with the Director hired under the GTC. GQIP consists of the Trauma Program Managers and Trauma Medical Directors of Georgia's trauma, burn, and pediatric centers. Before its formalization, the trauma center stakeholders became a TQIP collaborative in 2012 with our first collaborative report. Early collaborative projects centered around data quality and homogeneity. The group created a standardized audit filter list for use by all trauma centers. These efforts successfully demonstrated a reduction in error rates from 12% to under 5 % over five quarters. Since those early projects, the collaborative has developed algorithms for complication identification, an external data validation visit process, and statewide practice management guidelines. Several of these initiatives have been disseminated through academic publications or national podium presentations. Both entities house a central data repository for the trauma registry. The Department data repository drives epidemiologic analysis, while the GQIP leads the state's trauma system performance improvement initiatives through the state's TQIP collaborative. The GQIP data platform is new, receiving its first

		data in October 2022. In conjunction with the GQIP data platform, a risk-adjusted benchmarking platform is in the build phase and scheduled to launch by the second quarter of 2023. Current PI initiatives include transfer to definitive care times and data completeness. At present, there is no structured loop closure process. The Department and GTC have jointly completed some case reviews with centers, but centers have no process to provide action plans and evidence of improvement on identified issues. In November, the GTC approved a resolution formalizing the peer protection structure in accordance with the Georgia code. Future state, this structure will enable the review of identified performance improvement opportunities and loop closure within the GQIP structure.
9.2	Describe the entities that have authority and/or responsibility to develop and implement the trauma system PI infrastructure, review trauma system performance, and act on this information for loop closure.	Per OCGA 31.11.102: the GTC shall have the following duties and responsibilities: 12. To establish, maintain and administer a trauma center network to coordinate the best use of this state's existing trauma facilities and direct patients to the best available facility for treatment. 14. To coordinate and assist in the collection of data to evaluate the provision of trauma care services in Georgia; and 15. To study the provision of trauma care services in Georgia to determine the best practices and methods of providing such services, to determine what changes are needed to improve the provision of trauma care services, and to report any proposed legislative changes to the General Assembly each year." GQIP is in the process of attaining Patient Safety Organization(PSO) under the GTC by June 2024.

9.3	Describe several examples of system level performance issues that were identified through the system PI process, how they were addressed, and how improvements were maintained.	Several initiatives were addressed using the statewide TQIP collaborative reports. Data validity was addressed by audit filter reviews followed by the development of data collection tools such as complication algorithms and an external data validation process. Ventilator-associated pneumonia presented an opportunity for the collaborative, which led to the development of a VAP guideline shared with all the trauma centers. The Department & GTC, in collaboration, have completed the review of transfers to a higher level of care to assess time from “ditch to door.” High-risk cases with prolonged LOS at outlying hospitals were identified, and feedback was obtained from sending and receiving facilities to identify issues. The Department trauma epidemiologist has created reports to look at scene & transfer times. The project has stalled recently due to migration to a new trauma registry data platform at the Department.
9.4	List the process and patient outcome measures that are tracked at the trauma system level, including measures for special populations.	EMS Scene times by ISS; Time to definitive care for transfer population by ISS; Each center provides a performance matrix summary from their twice-a-year TQIP reports that is shared with the GQIP leadership team. The summaries are collated to look for trends and high and low outliers. The data included information for mortality and major hospital events and specific process measures such as time to hip fracture repair.
9.5	Specify the core metrics or audit filters that are assessed in the trauma system.	Through the OTCPE (ongoing trauma center performance evaluation aka “quarterly reports”), the Department monitors the following: registry record closure rate, over/under triage, surgeon response, non-surgical admission rate, mortality review validation, multidisciplinary peer review meeting attendance, trauma operational process improvement meeting attendance. In addition, centers are required to report center-specific metrics that are tracked (in addition to the measures already reported). As part of their final annual report, centers must report two example opportunities for improvement with loop closure

		identified from the peer review process as the system/operations process.
9.6	Describe how hospitals in the trauma system participate in regional or national data-driven quality improvement initiatives.	All Level I, II & III centers are required to participate in TQIP. All trauma, burn, and pediatric centers must participate in GQIP (contract/grant). GQIP meets twice annually in person (and twice virtually) to review TQIP collaborative reports. Centers must submit a TQIP performance matrix that includes odds ratios, decile, and outlier status for mortality and major events by cohort. Select process measures (e.g., time to hip fracture repair) are included in the matrix. Meetings are used to review an aggregate of the center's TQIP performance matrix and TQIP collaborative report to allow stakeholders to have input in focus areas and volunteer to lead initiatives. Meetings are also used to identify and highlight high performers for the purpose of best practice dissemination. In addition, each RTAC has region-specific performance improvement activities that hospitals must participate. The risk-adjusted benchmarking platform project will provide Level IV with information and be able to look at data on a regional level that can give feedback to the RTACs. All trauma centers that receive GTC funding must participate in twice-a-year meetings for the GQIP collaborative.
	Documentation Requested	**Submitted: Yes or No**
9.a	Most recent trauma system PI plan, including all audit filters and performance indicators that are tracked and monitored. See examples of audit filters in Appendix A.	The state trauma plan includes some regional trauma performance improvement components but lacks specific statewide indicators, monitoring, and analysis.
9.b	Reports generated from audit filters that are used to track system PI over time.	The performance matrix summaries shared by the centers are reviewed over time to watch for improvement or new areas of opportunity. Attachments: 9b Spring 2022 Performance Matrix

		9b Fall 2020 Performance Matrix 9b Fall 2021 Performance Matrix Summary 9b Spring 2021 Cumulative Report
9.c	Minutes or meeting notes pertaining to the identification, discussion, and resolution of a trauma system (rather than a trauma center) issue.	Attachments: 9c 01.19.21 TMD_GQIP_COT Conference Call Minutes 9c 04.20.21 TMD_GQIP_COT Conference Call Minutes 9c 05.17.2022_Agenda_GQIP_Trauma 9c 05.17.2022 GQIP Meeting Minutes 9c 07.20.2021_TMD_GQIP_Conference Call Minutes 9c 1.19.21_Agenda_TMD_COT_GQIP 9c 11.17.10 TMD_TQIP_COT Conference Call Minutes 9c 2022_Final_Winter Meeting Full Schedule 9c 2022_Summer Meeting Agenda 9c 4.20.21_Agenda_TMD_COT_GQIP 9c 7.20.21 Agenda_TMD_COT_GQIP 9c Pennsylvania Trauma Systems Foundation level IV consultation summary report
9.d	List of the organizations represented on the committee responsible for trauma system quality assurance.	GQIP membership includes all TMDs, TPMs, and PI staff at designated trauma centers.

Essential Trauma System Element #10: Confidentiality and Discoverability

The lead agency should establish a process to ensure confidentiality and provide statutory protection from discoverability to support trauma system performance improvement and research efforts.

	Question	Your Response
10.1	Describe how the lead agency utilizes a mature and formalized data security infrastructure to protect sensitive information of patients and participating stakeholders.	The lead agencies maintain data security infrastructure to protect sensitive information against unauthorized access and use. All information is protected by our security measures. Information is protected using passwords, regularly changed passwords, strictly controlled server access, physical security of the host site, and 128-bit SSL encryption. Aggregate data is blinded when presented so that no single center can be identified. The users can only see their facility's data in the central site databases, analytical tools, and the TQIP collaborative report. GQIP follows a similar process. GTC is administratively attached to DPH for Human Resources (HR) and Information Technology (IT) security processes. See the attachment for the 10a_10b_GC-13_9013 Confidentiality of Personal Health Information & Compliance with HIPAA 04292021.pdf **.**
10.2	Describe the current procedures and processes individuals must follow to request access to the trauma system registry.	**DPH:** Data requests must be submitted in writing to the DPH Privacy Officer. Data requests are submitted online at the Public Health Information Portal (PHIP) for approval, payment, and assignment to the data analyst. See attachment for 10.b_DPH Data Sharing – Legal FAQ 06_2019.pdf.

		Access to the Department's trauma system registry is not allowed by individuals. Trauma centers control access to their registries. Trauma Program Managers at the trauma centers are granted access to the analytical tools to view their data and compare their data against aggregate statewide data. **GTC:** GQIP does not provide data per individual requests. The GQIP dataset is solely for performance improvement purposes.
10.3	Describe how laws related to discoverability impact the ability to conduct performance improvement and participate in robust quality improvement initiatives.	**DPH:** Rule 5-11-9-2-.05 (4) Confidentiality. All information reported to any registry as described by this Rule shall be deemed confidential, except that the Department may, in its discretion, release such reports or data in a de-identified form or for research purposes determined by the Department to have scientific merit. Under no circumstances may information reported to any registry as described by this Rule be released in such a manner as to lead to the identification of any hospital, institution, or clinic. **GTC:** Georgia open records act includes few exemptions from discoverability. One such exemption is under Georgia peer review statutes. In November 2022, the GTC approved a resolution formalizing the peer review process, which it has been engaged in since the inception of GQIP.
	Documentation Requested	**Submitted: Yes or No**
10.a	Statute providing protection from discoverability.	**DPH:** See attachment for the 10a_10b_GC-13-9013 Confidentiality of Personal Health Information & Compliance with HIPAA 04292021.pdf **.**
10.b	Policies and procedures related to the release of data that include consequences, penalties, and/or remediation for noncompliance.	**DPH:** See attachments for the policies and procedures related to the release of data. • 10a_10b_GC-13-9013 Confidentiality of Personal Health Information & Compliance with HIPAA 04292021.pdf **.** • 10.b_DPH Data Sharing – Legal FAQ 06_2019.pdf.

Essential Trauma System Element #11: Disaster Preparedness

A comprehensive emergency disaster preparedness and response plan should be established and reviewed annually. This plan should integrate all components of the trauma system and coordinate with all existing response entities including local, state, federal and particularly military partners. There should be a developed and operational network of Regional Medical Operations Centers (RMOCs) as a major component of the disaster preparedness plan. The plan should be exercised at least semiannually. One of these exercises should be operationally based (not tabletop) and test all components of the system.

	Question	Your Response
11.1	When was the last assessment of the trauma system's emergency preparedness?	There is currently no statewide assessment of the trauma system's emergency preparedness. Each Healthcare Coalition works with their Regional Coordinating Hospital to integrate trauma into their specific areas for planning and exercises.
11.1a	a. Did it include coordination with the public health agency, EMS system, local military experts, and the emergency management agency?	The assessments done at the local level would include resources available to that specific area. The exercises, whether real or tabletop would involve local health department, EMA, EMS and military if available.
11.2	What is the lead agency's assessment of the trauma system resources, including the system's ability to expand its capacity or to evacuate casualties in response to mass casualty incidents (MCI) in an all-hazards approach?	Mobile/semi-permanent hospitals. MCI buses – identified during COVID surge Sentence about what was identified as resource gaps or assets. Over the last 2 years with COVID response, hospitals have utilized their surge plans to manage the increased patient volume of infectious disease patients while maintaining their regular patient volumes and managing other responses and outbreaks in addition to COVID. This has demonstrated their ability to expand capacity and move patients to meet the need.

11.3	Does the lead agency consult with outside experts to assist in identifying the trauma system's ability to respond to MCIs?	Planning for MCI response is done at the local level. Healthcare coalition partners work together to plan for and exercise mass casualty scenarios based on their hazard vulnerability analysis. The job of DPH is to support local response in collaboration with our emergency management partners.
11.4	What actions were taken to remediate or mitigate the gaps identified through tabletop or simulated responses in disaster drills?	During COVID, healthcare staffing gaps were the primary issue. Georgia utilized supplemental federal funding to supply additional healthcare staffing resources to areas most in need, i.e., mobile hospitals and MCI buses were in response to identified gaps
11.5	What is the trauma system's plan to accommodate a need for a surge in personnel, equipment, and supplies?	An immediate need for additional personnel, equipment, and supplies at a local level would be through mutual aid agreements with neighboring jurisdictions. If the needs were expected to last longer or neighboring jurisdictions couldn't help, resources could be requested through the county emergency manager up through the state emergency management agency for additional state support. EMAC requests could also be placed for support from outside our state.
11.6	How is the trauma system integrated into the state's incident command system and communications center?	Incident command and communications integration happens on the local (county) level with reports up to the district and state level. Statewide incident command (Georgia Emergency Management Agency's State Operations Center) is active when an incident is a threat to a large portion of the state. DPH is the lead agency for ESF8 (Public Health and Medical) and is always part of a SOC response.
11.7	What strategies and mechanisms are in place to ensure adequate interhospital communication during an MCI?	Healthcare coalitions hold regular communications drills. If an MCI occurred, the mechanism is in place for emergency communications and notifications to occur.

11.8	How specifically is the military integrated into the disaster response plan, to include resources provided?	Military installations are an integral part of their local healthcare coalitions for planning and exercising. Response activities require federal emergency declarations and permissions, unless immediate lifesaving services are required. During COVID, the National Guard was activated and served in a variety of roles across Georgia such as testing facilities, vaccination sites, disinfecting long term care facilities, assisting with traffic and security at hospitals, and staffing of the Georgia interagency warehouse.
11.9	Does the system have a network of Regional Medical Operations Center (RMOC)?	Georgia does not have a formal network of Regional Medical Operations Centers. Each healthcare coalition is anchored by a Regional Coordinating Hospital (RCH) which is often a designated trauma center. These facilities serve as the regional coordination point for responses of any kind.
11.9a	a. What is the role of the RMOC in daily and disaster/public health events patient care?	The healthcare coalitions serve as a daily communications hub with their local partners so that during disaster/public health events, healthcare facilities know how to communicate with them. Additionally, there is a Georgia Coordinating Center that currently is more active in metro Atlanta than the rest of the state, but they can serve as an individual patient coordination point for destinations.
11.9b	b. How is the RMOC operationalized by all stakeholders?	Statewide DPH utilizes the healthcare coalitions to share information on a daily basis. Healthcare coalitions then share information with member organizations who pass it along to employees at their organizations
11.9c	c. What are the major goals for the RMOC?	Communication and coordination are the goals
11.9d	d. Are all RMOCs on a uniform data system that can be viewed at the state level?	No for coalition communications

11.9e	e. Is there coordination across state lines with neighboring states?	The 8 states that make up Region IV meet regularly for planning and response coordination in a group called the Unified Planning Coalition (UPC). UPC membership includes ESF8 representatives from GA, NC, SC, TN, KY, MS, AL, & FL, our ASPR Regional Emergency Coordinators (RECs) and regional partners.
11.9f	f. What funding is provided to support RMOC activities?	Healthcare coalitions are funded through the HHS ASPR Healthcare Preparedness Program. The Georgia Coordinating Center is funded through state funds to Grady Health Systems. UPC is a cooperative agreement between the states.
	Documentation Requested	**Submitted: Yes or No**
11.a	State/regional disaster plan.	Georgia's Emergency Operations Plan with all the Emergency Support Function annexes is at https://gema.georgia.gov/document/document/geop-2017-2019-updates/download Each healthcare coalition has a base plan that includes preparedness, planning, and annexes for specific scenarios like mass casualty, pediatrics, burns, radiation and chemical events. I've asked Region F for permission to share their coalition plans as examples.
11.b	Reports of yearly disaster exercises, including tabletop exercises, listing the participants and types of disaster simulated.	CMS requires healthcare facilities to hold exercises regularly but COVID responses with After Action Reports were granted approval to meet the requirements. Exercises are planned and conducted by healthcare coalitions with local partners. These local exercises often include the state partners with communication, notifications, and resource requests.

11.c	After-action report of jointly conducted (multiple emergency management agencies) simulated or tabletop drills that exercised the trauma system's capability to respond to MCIs.	See attachment 11.c_Region N MCI FSE AAR IP 10.12.2022
11.d	An organizational chart identifying the relationships among key emergency management agencies (trauma system, EMS, public health, emergency management, military, law enforcement).	See attachments 5.6.a_DPH Org Chart 11.d_GEMA EP Org Chart
11.e	Most recent minutes from joint agency emergency management planning meeting.	GEMA, and the Region IV HHS Regional Emergency Coordinators meet annually prior to hurricane season for joint agency planning. The agenda from the June 2022 meeting is uploaded to files.
11.f	Documentation of military commitment and response plan in a disaster.	The Georgia Department of Defense is Emergency Support Function 16 in the Georgia Emergency Operations Plan. The Georgia DOD is activated during a declared emergency and works with GEMA and the other ESFs at the SOC.
11.g	Documentation of RMOC structure, operation, and funding.	As stated, we do not have a formal RMOC structure. The healthcare coalition map is included in this packet.

Essential Trauma System Element #12: Military Integration

The trauma system should actively support integration and cooperation with military personnel, medical treatment facilities, and transport capabilities. This should include patient care, education, data collection, performance improvement, research, training, disaster response, and clinical readiness.

	Question	Your Response
12.1	Describe how the trauma system plan integrates military resources and is developed in collaboration with military trauma and emergency care representatives.	Military installations are members of their local healthcare coalitions and are active members for planning and exercising. At the state level, the Georgia DOD serves as ESF16 to the GEOP. The plan does not reflect military integration and resources statewide; however, regionally there is collaboration between the military installation and the local/regional response plan.
12.2	Describe the military-civilian collaboration in the region for all components of the trauma system plan.	At the state level, the Georgia DOD serves as ESF16 to the GEOP.
12.3	Does the system have a Memorandum of Agreement/Understanding so that military medical personnel may participate in trauma and emergency medical care, regional civilian trauma systems, federal facilities, and agencies for clinical readiness?	If the Emergency Operations Plan is activated due to a declared emergency, the Governor may activate the DOD to respond in a variety of roles. There is no formal MOA/MOU.
12.4	Describe the integration of military resources into the regional mass casualty and disaster response plans.	Military resources both at the coalition and state level are involved in planning and exercising. Response is at the direction of the Governor, unless is it for immediate events. KN
12.5	Does the trauma system plan address a reciprocal partnership for the contingency of a civilian or military mass casualty event?	The plan does not address reciprocal partnerships.
12.6	Identify a military-civilian credentialing reciprocity addressed for times of crisis.	No process currently exists.
	Documentation Requested	**Submitted: Yes or No**

12.a	Military regional trauma system plan.	No specific plan but this document outlines the work with GA and DOD. See attachment 12.a_GADOD Annex Final
12.b	Memorandum of Agreement/Understanding between military and civilian stakeholders for integration.	No MOU/MOA is available.