EXECUTIVE SUMMARY, TRAUMA SYSTEM PLAN

MISSION:

To develop and implement a statewide, patient-focused trauma system that fosters the development of policies, procedures, and practices that prevent injuries whenever possible and which provides optimal pre-hospital, hospital, and rehabilitative care when injuries have not been prevented.

VISION:

A safe and secure environment in Georgia for all—enhanced and facilitated by a functional, integrated and continuously improving trauma system.

The following ***SEVEN COMPONENTS*** form the core for the Georgia Trauma System plan:

1. Legislation and Finance
   The "Lead Agency" for system planning, implementation, and funding is the Georgia Trauma Care Network Commission while the "Lead Agency" for system regulation, trauma center designation, and EMS licensure is the office of EMS/Trauma.

2. Public Information, Education, and Prevention
   The primary goal of this component is to raise awareness of the scope of trauma, the societal and financial impact of trauma, and that the greatest return on investment may occur with an effective injury prevention program.

3. Professional Resources
   Significant shortages of trauma personnel exist in the pre-hospital, hospital, and rehabilitation sectors of the trauma system. Effective recruiting and ongoing trauma training programs for EMS, physicians, nurses, and various allied health personnel are essential in an optimal trauma system.

4. Pre-Hospital Resources
   The Office of EMS/Trauma has responsibility for regulation and oversight of the pre-hospital providers in Georgia. EMS Councils exist in each of the ten EMS regions of the state. Regional Trauma Advisory Committees are components of those Councils which focus on trauma care and are responsible for crafting a regional trauma plan which fits under the umbrella of the state Trauma System Plan.

5. Definitive Care Facilities

Hospitals may apply to become designated trauma centers with various subcategories to include adult facilities, pediatric facilities, or specialty facilities such as Burn Center or Rehabilitation Centers. Guidelines established by the American College of Surgeons' Committee on Trauma are used by the Office of EMS/Trauma in determining which facilities deserve designation.

6. Evaluation
   Collection and analysis of data from the numerous stakeholders in the trauma system will be used to evaluate the pre-hospital, hospital, rehabilitation, and prevention sectors of the system with the goal of continuous quality improvement.

7. Research
   Trauma system research will have a focus on functional outcomes and will be incorporated into the evaluation and utilization review of the system.

The Strategic Trauma Goals established by the Georgia Trauma Care Network Commission and the Performance Metrics crafted collaboratively by OPB, GTCNC, OEMS/T, and Trauma Coordinators have been reviewed. That review has led to a crosswalk of goals and metrics to the proposed Trauma System Plan. A locus (and often many loci) for every goal and metric can be found in the current draft of the Trauma System Plan.

Georgia Trauma System Plan

DRAFT

January 2014

Department of Public Health
Division of Health Protection
Georgia Office of EMS/T

Georgia Department of Public Health

Brenda Fitzgerald, MD, Commissioner | Nathan Deal, Governor

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January 10, 2014

Georgia Residents and Visitors:

As the Commissioner of the Georgia Department of Public Health, I share in the vision of a safe and secure environment in Georgia for all. I would add that my goal is for that also to be a ***healthy*** environment. In the Department of Public Health we emphasize the importance of data analysis and prevention. It is reassuring to know that the Georgia Trauma Plan also emphasizes the value of Injury Prevention and underscores the need for data collection and analysis to assure the continuous improvement of the Georgia Trauma System. The use of trauma data to improve patient care is exceedingly important to me as a physician. As a Public Health physician, however, I am even more excited that trauma data is also being used to develop strategies for **preventing** injuries! A system that yields the ability to prevent injury deserves to be applauded!

In the Department of Public Health we recognize that we can leverage for success by forming partnerships and collaborations. The Georgia Trauma Plan also calls for meaningful collaborations and partnerships among pre-hospital providers, hospitals, trauma physicians, and rehabilitation providers--just to mention a few.

For the past decade there has also in Public Health been a significant emphasis on emergency preparedness. The Georgia Trauma Plan similarly emphasizes how this plan serves as a key part of the infrastructure for emergency preparedness. It is this very integration of programs and services that makes Georgia such a terrific place to live, work, and play.

Sincerely,

Brenda Fitzgerald, MD
Commissioner
Georgia Department of Public Health

We Protect Lives.

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Introduction

Sustain and Improve an Optimal Trauma System

Interest in establishing a highly effective, responsive statewide trauma system began in Georgia more than three decades ago. At that time, state leaders became aware that the death rate from traumatic injuries in Georgia was higher than in many other states. Elsewhere, high-quality, well-designed, adequately funded trauma systems had dramatically reduced death rates from traumatic injury. Concerned Georgians began trying to develop an effective trauma system in this state in hopes of saving more Georgians' lives.

Our death rates from trauma have been above the national average because adequate, timely, appropriate trauma care requires a carefully designed infrastructure. To protect our lives and the lives of our loved ones and to secure optimal trauma care for all citizens and visitors to Georgia, we have to continue to improve Georgia's trauma system. Sustaining and improving a system of optimal trauma care is expensive but the return on investment justifies the expenditures. (**G**: *C,E*)

Trauma care specialists recognize the "injury clock" begins ticking the moment a traumatic event occurs, regardless of injury etiology. Response to most traumatic events is by emergency medical technicians or first responders. Depending on where the incident occurs in the state, this response may take 3 to 45 minutes. An additional 10 to 60 minutes may elapse before the patient reaches a medical facility, not necessarily a trauma center. Not every hospital with an emergency room is capable of rendering optimal care to an injured patient. (**G**: *C,E,F*; **M**: *1,3,5*)

Georgia Hospital Association indicates a large number of Georgia's hospitals are operating "in the red", leading to numerous closures and reductions in services and size. National, state and local economic factors continue to impact ongoing pressing problems for hospitals:

- a significant pool of uninsured or under-insured patients (**G**: *E*)
- reductions in reimbursements by third party payers (**G**: *E*)
- cost containment efforts by managed care companies (**G:** *E*)
- ongoing expenditures on existing and new medical technologies (**G**: *E*)
- escalating costs of malpractice insurance coverage both for hospitals and physicians (**G:** *E*)

Currently, trauma results in millions of dollars in uncompensated healthcare costs. This uncompensated care is being provided by a fiscally fragile system. This system includes the continuum of care from pre-hospital, to hospital, to rehabilitation, to ongoing care at home. The cost of maintaining and sustaining our statewide trauma system is high Dollars spent on a well-designed, integrated statewide trauma system, though large on the front end, provide a tremendous yield in the future, because many young, productive lives are saved and human potential and functionality are maintained. (**G**: *E*)

A Public Health Priority

Maintaining and improving a high-quality trauma system is an integral part of Public Health's efforts to protect the health of every resident and visitor. Trauma survivors, regardless of age, often face intensive rehabilitation, lifelong disabilities, and increasingly expensive long-term care. Many injuries are preventable and those that are not preventable are still likely to have a much better outcome if high-quality trauma care is rapidly available. National data shows both prevention and treatment of injuries are most effectively accomplished when an inclusive, statewide trauma system is in place. Improving the statewide trauma system and rapid access to high-quality trauma care is a public health issue of great importance, requiring input, assistance and guidance from all partners, including law enforcement, hospitals, Trauma Commission, to name a few. (**G**: *C,D,E*)

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An effective trauma system is an essential ingredient for homeland security and emergency preparedness. An integrated statewide trauma system can provide key infrastructure in our preparedness efforts not only for unnatural acts of terrorism, but also for natural disasters such as tornadoes, floods, hurricanes, and newly emerging infectious disease challenges such as MERS-CoV or pandemic influenza. (**G**: *E*; M: *2*)

The Georgia healthcare picture has many attributes that should make our trauma response and patient outcomes a national model. For example:

- The quality of our existing pre-hospital care is excellent in most instances.(**G**: *F,G,H*)
- The skill level and training of rescue, first responder, emergency medical and air medical services personnel is nationally recognized. (**G**: *F,G,H*)
- The commitment of many hospitals, physicians, surgeons, other healthcare providers and support staff involved in treating victims of trauma is unsurpassed. (**G**: *A,B,C,D,G,H*)
- Our Emergency Preparedness readiness has been tested and implemented through scenario based exercises and actual responses such as the Katrina and Rita hurricanes, the destruction and evacuation of Sumter County Hospital from a tornado, the Savannah Imperial Sugar Refinery fire and explosion and the response to the H1N1 pandemic . (**G**: *E*; **M**: *2*)

Role of the Georgia Trauma Care Network Commission (G-*b,e*;M-*2,3*)

Pursuant to O.C.G.A. §§ 31-11-100, et seq., the GTCNC has been legislatively charged with designing, developing, and funding an optimal trauma system for Georgia. In accordance with Georgia law, the GTCNC has formed a Foundation to explore all funding options. See O.C.G.A. § 31-11-102.

Vision and Mission

Vision
A safe and secure environment in Georgia for all – enhanced and facilitated by a functional, integrated and continuously improving trauma system. (All Goals/Measures)

Mission
Our mission is to develop and implement a statewide, patient-focused trauma system that fosters the development of policies, procedures, and practices that prevent injuries whenever possible and which provides optimal pre-hospital, hospital and rehabilitative care when injuries have not been prevented. (All Goals/Measures)

Role of the Georgia Office of Emergency Medical Services/Trauma, Division of Health Protection, Department of Public Health

The State Office of EMS/Trauma (OEMS-T) is responsible for the ongoing monitoring of the state's trauma system and assisting the GTCNC in system development and implementation. OEMS/T is specifically charged with designating, re-designating, and de-designating Trauma Centers and with the aggregation of statewide Trauma Registry data. Georgia trauma program activities are designed to emphasize and integrate injury prevention and to ensure that adequate resources are readily available for immediate response to traumatic incidents. (**G:** *G,H*; **M**: *3*)

The State Office of EMS/Trauma, in collaboration with designated Trauma Centers, EMS Regional Councils, and the Georgia Care Network Commission works to establish a functional and safe environment. Participants in the trauma care system meet to monitor and assess patient care outcomes, identify opportunities for system improvement, network and build coordination. (**G**: *B,G,H*)

The Office of EMS/Trauma shall complete a crosswalk of this Trauma Plan, the Georgia Trauma System Evaluation Committee Measures and the Strategic Goals. This crosswalk demonstrates the close working relationship between OEMS/T and the GTCNC in the successful sustainment and growth of Georgia's trauma system. These two documents are in Attachments 1and 2. Within each area of this Plan there may be a letter with number after a title, paragraph or line, indicating where it can be found in either/both the Measures (**M**) and/or the Goals (**G**). For example, the above paragraph meets Strategy Goal B, so (**G**: *B*) is listed at the end of the paragraph.

EMS Regional Councils and their Regional Trauma Advisory Committees (RTACs) (G: B and M: 4):

- Promulgate information on process and procedures for the ongoing assessment of the system, trauma care, patient outcome (adult and pediatric), unexpected deaths, unexpected survivors, and provider compliance with state statutes and administrative rule.
- Provide feedback to GTCNC, healthcare providers, facilities, State Office of EMS/Trauma, and other appropriate entities.

Role of the Georgia Trauma Care Network Commission (**G**: *B,E*; **M**: *2,3*)

The GTCNC has been legislatively charged with designing developing, and funding an optimal trauma system for Georgia—see O.C.G.A._____.In accordance with legislation the GTCNC has also formed a foundation to explore all funding options.

The Georgia Trauma Registry (G: *G,H*)

The Georgia Trauma Registry aggregates data which is integral to the development, growth and improvement of the state trauma system. Understanding the nature and cause of trauma establishes an important knowledge base for legislative policy makers, healthcare practitioners, public health, law enforcement, and emergency management. Injury surveillance through the Trauma Registry fosters injury prevention and promotes improved outcomes. Performance improvement for the trauma system, including Trauma Centers, is driven by the Registry data. The Trauma Registry also supports evaluation of trauma resources throughout the state and provides basic information for disaster preparedness.

SEVEN FUNDAMENTAL SYSTEM COMPONENTS

I. Legislation and Financing (G-e)

Legislative action and funding are essential components in the successful development of an optimal Trauma System in Georgia. Although excellent efforts at trauma system planning have occurred in the past, additional progress will be limited without ongoing and specific legislative support and adequate funding**.**

A. Legislative Action

Goal 1: Establish authority for the lead agencies.

Objective:

(a) Pursuant to O.C.G.A. § 31-11-100 et seq., GTCNC is the lead agency charged with planning, developing, implementing, and funding an effective trauma system.

(b) Pursuant to O.C.G.A. § 31-11-1 et seq., OEMS/T is the lead agency for licensing pre-hospital providers, designating, re-designating, and de-designating trauma centers, and for system regulation.

Goal 2: Support Georgia Trauma Care Network Commission (GTCNC)

Objectives:

OEMS/T shall advise GTCNC on compliance of designated Trauma Centers with data reporting and ACS guidelines for Trauma System development and maintenance.

B. Financing (G-e;M-*2*)

Funding for Georgia Trauma System is identified through the GTCNC per Senate Bill 60, Georgiatraumacommission.org. See O.C.G.A. § 31-11-102.

II. Public Information, Education and Prevention

A. Public Information and Education Goals (G: *E,G*; M: *3*)

Most Americans continue to view injuries, regardless of causes, as “accidents”, resulting in little appreciation of traumatic injury as a public health problem. There is little understanding of the role of public safety and healthcare professionals in addressing this problem. The healthcare community faces a profound lack of public and legislative awareness of the scope of traumatic injury, its financial impact on our society, the value of injury prevention, and the limited financial resources currently available for intervention.

Goal 1: Use current appropriate data to identify traumatic injury as an entity amenable to injury control countermeasures (G: *D,E,G,H*; M: *3*)

Objectives:

a) Develop appropriate educational tools to deliver accurate information on trauma issues to the lay public and healthcare providers.

   1. Develop educational tools that focus on trauma issues and contain specific data. The presentation should be constructed so that it can be tailored to meet local needs and data.

b) Obtain and publicize the current financial impact of trauma on a statewide basis and on a per capita basis. Establish a trauma constituency to promote trauma system awareness and assist with prevention activities.

   1. Identify organizations that can be of assistance with trauma system development or injury prevention activities.

   2. Promote regional meetings to expand the trauma constituency.

B. Trauma Prevention Goals

Per the CDC (www.cdc.gov/nchs/fastats/lcod.htm) trauma is the fifth leading national cause of death for all ages, behind heart disease, cancer, respiratory disease, and stroke; trauma is the number one cause of death between the ages of 1 and 44 (www.cdc.gov/injury/overview/leading_cod.html). Trauma – which often strikes the young – is responsible for many more years of lost life and productivity. The cost of trauma is not limited to initial medical costs, but also often involves expensive and prolonged rehabilitation. For those who are permanently disabled in young adulthood, the cost of trauma may involve as many as 40 to 50 years of lost productivity.

Systematic studies of traumatic injuries repeatedly show that trauma does follow patterns – patterns that can be identified and changed. Indeed, many traumatic injuries are preventable. Therefore, a solid, evidence and research-based injury prevention program is a critical component in any statewide trauma plan. (**G**: *G,H*)

Injury prevention offers the single greatest potential for reducing the burden, both financial and personal, of trauma care. Injury prevention reduces morbidity and mortality. According to the National Center for Injury Prevention and Control, “Without exception, preventing injuries costs less than treating them. Add the costs of rehabilitation and long-term consequences of disability, and the savings are dramatic.(**G**: *E*)

Goal 1: Evaluate current injury surveillance tools and programs. (G: *G*)

Objectives:

a) Identify data sources for injury surveillance. Identify data sources that should be linked.
b) Identify and prioritize high-risk groups. Identify existing injury prevention programs that have proven to be effective. Identify new opportun*ities for evidence-b*ased injury prevention

III. Professional Resources (G: *A,B,C,D,E,F,G*; M: *1,4*)

Professional resources are the dedicated team of competent, compassionate individuals with complementary skills and expertise who provide high quality medical care. As in many areas across the country, Georgia is facing a critical shortage of health care professionals in both out-of-hospital and in-hospital settings. Stress and low wages are driving many of these personnel into other professions, while liability and workload concerns are driving physicians and other health care workers away from emergency trauma care. Scarcities of volunteers who provide first responder and EMS coverage for some (mainly rural) areas of the state are also part of the challenge. Small rural communities are finding it more difficult to recruit and retain personnel, because the potential pool of volunteers shrinks as these communities simply do not have residents with the time or money required to train and volunteer for the local EMS service.

A. Trauma Training (G: *A,E,F*; M: *1*)

Goal 1: Develop Trauma education programs/resources.

Objective:

a) Ongoing professional education opportunities shall be available and accessible
b) All first responders, pre-hospital personnel, emergency department personnel, and critical care nursing personnel shall have access to basic trauma training.
c) Trauma Center personnel will be expected to avail themselves of supplemental training as recommended in the ACS's *Resources for Optimal Care of the Injured Patient.*

Goal 2: Mechanisms will be in place for continuing education in trauma care.

Objectives:

a) Continuing Medical Education (CME) programs put on by individual groups or institutions both in- and out-of-state will be publicized.
b) Innovative learning opportunities such as Accordant Learning System (http://dph.georgia.gov/ems-classroom) will be encouraged:

IV. Pre-hospital Resources

Goal: **The agency responsible for pre-hospital care in Georgia is the Office of EMS/Trauma within the Department of Public Health. The Office of EMS/Trauma will regulate and provide oversight for pre-hospital care in Georgia.**

Objectives:

a) The Office of EMS/Trauma shall have a Medical Director who is familiar with, experienced in, and currently involved in pre-hospital care, and whose qualifications are commensurate with his/her scope of responsibility in the EMS system.
b) The Office of EMS/Trauma shall have a Trauma Systems Manager experienced in trauma systems development and management.
c) The Office of EMS/Trauma shall provide system quality improvement (QI) monitoring functions based on EMS and Trauma data. (**G**: *A,G,H*)
d) The Office of EMS/Trauma shall approve programs of continuing education. Continuing education programs often will be based on QI program findings. (**G**: *A,G,H*)
e) The Office of EMS/Trauma shall provide policies, procedures, and/or regulations regarding on-line and off-line medical direction.
f) The Office of EMS/Trauma shall provide protocols for pre-hospital trauma patient triage, trauma patient transport destination decisions, treatment, and transfer. These protocols shall be modeled after the American College of Surgeons' Committee on Trauma criteria, with guidance from current research findings (**G**: *A,D,F*; **M**: *4*).
g) RTACs and their respective Regional EMS Councils shall develop a regional trauma plans following a template provided by OEMS/T.That

template shall enable each region's plan to coordinate with the state trauma plan. (**G**: *D*)

A. Communications – Public Access/ Dispatch Priorities

Goal: **There shall be a pre-hospital communications system that is fully integrated throughout the EMS and emergency disaster preparedness systems. Beginning with the universal systems access number *911,* the communications system should ultimately provide communication to ensure adequate EMS system response and coordination. (G: *A,F*; M: *5*)**

Objectives:

a) There shall be coordination of medical direction and dispatch
b) EMS dispatch protocols shall be utilized
c) The Public Access Communications system (enhanced 911), shall be authorized under the Georgia Emergency Management Agency (GEMA),
d) All public calls requesting EMS response for trauma patients shall be handled by the 911 system
e) OEMS/Trauma shall partner with other agencies to provide an effective statewide communications system between ambulances and hospitals which is not geographically limited and which will serve as a communications network for disaster and multi-casualty incident programs.

B. EMS Medical Direction in Georgia (G: *E,F*; M: *1,4,5*)

Goal: **The goal of EMS medical direction is to provide an operational framework for all medical aspects of pre-hospital care such that there is professional accountability in the pre-hospital setting analogous to that in the more traditional settings of medical care.**

Objectives:

a) See dph.georgia.gov/ems; Rules and Regulations, Chapter 511-9

C. Triage (G: *A,D,E,F*; M: *1,3,4,5*)

Goal: **The trauma system will be designed to see that the right patient gets to the right facility in the right time.**

Objectives:

a) Throughout Georgia, all trauma patients will be identified according to American College of Surgeons (ACS) guidelines and CDC (Centers for Disease Control) Model Uniform Core Criteria based on mechanism of injury, anatomic nature of injury, and physiologic condition of the patient.
b) Each EMS region should develop transport protocols based on both hospital and pre-hospital resources. These protocols will also specify capabilities for specialty needs such as pediatrics, burns, and spinal cord injury.

D. Trauma Communications Center (TCC) (G: *A,G,H*)

Goal: **The TCC shall provide for the expeditious transfer of trauma patients from one medical facility to another and shall thereby assure trauma patients are being directed to the most appropriate level of care. This responsibility includes primary care clinics, critical access centers, rehabilitation centers, nursing homes and others.**

Objectives:

a) Through real personnel or virtual staffing the TCC shall assist facilities with inter-hospital transfers of trauma patients when requested.
b) The TCC shall submit transfer data quarterly to the GTCNC and to OEMS/T for evaluation.

E. Transport

Goal: **The transport goal is for the Office of EMS/Trauma or the Service EMS Medical Director to define minimum standards of pre-hospital care and transport of trauma patients, taking into account regional resources and capabilities.**

Objectives:

a) Each EMS regional RTAC shall develop a regional trauma plan that is coordinated with the state trauma plan.(**G**: *A,D*; **M**: *5*)

b) Each EMS regional RTAC shall define its service area and define its predominant character as urban, rural, or wilderness within its trauma plan.(**G**: *A,D*; **M**: *5*)
c) Each EMS regional RTAC shall describe its population, demography, and clinical needs within its plan. (**G**: *A,D*; **M**: *5*)
d) Each EMS regional RTAC shall describe recommended transport and destination policies within its trauma plan.(**G**: *A,D*; **M**: *5*)
e) Each EMS regional RTAC shall identify its acute care facilities and their current service areas within its trauma plan. (**G**: *A,C,D*; **M**: *5*)
f) Each EMS regional RTAC shall identify its designated Trauma Centers and their respective levels within its trauma plan. (**G**: *A,C,D*; **M**: *5*)
g) Each EMS regional RTAC within its trauma plan shall include mechanisms for reviewing utilization of ambulance services, response times, accuracy of responses, on-scene times, and delivery times in relation to regional standards and protocols. (**G**: *A,F,G,H*; **M**: *4,5*)

V. DEFINITIVE CARE FACILITIES (All Gaps and Measures)

The current trauma care system in Georgia provides a limited number of designated Trauma Centers. There are pockets of excellent trauma care in the metropolitan areas and in scattered rural areas. However, many gaps exist within the network. These gaps are believed to contribute significantly to the higher-than-national-average trauma mortality rate in our state.

National research indicates that designated Trauma Centers have better clinical outcomes and more cost-effective resource utilization through compliance with established trauma management criteria.

A. Trauma Centers

Goal 1: Identify designation standards for Trauma Centers including required resources and equipment. (G: *A,C,E,G,H*; M: *1,4*)
Objective:
a) OEMS/T shall utilize standards for Trauma Center designation based on the guidelines set forth in the American College of Surgeons' *Resources for*

Optimal Care of the Injured Patient, using the most current edition with amendments and clarifications as posted periodically to the ACS web site (www.facs.org). The Office of EMS/Trauma is the authority in the state for trauma center designations.

Goal 2: Georgia shall have a sufficient number of trauma centers and transport capability to meet the needs of the injured public. (G: *A,C,E,H*; M: *3*)
Objective:

a) 95% of the population shall have access to a designated Trauma Center within one hour of the injury. **(M: *3*)**

Goal 3: Establish the severity of injuries appropriate for definitive care at each Trauma Center. (G: *A,G,H*)

Georgia will adopt guidelines that reflect injury severities of patients appropriate for each level of Trauma Center, as recommended in *Resources for Optimal Care of the Injured Patient*.

B. Other Trauma Facilities

Goal 1: Describe the role and responsibility of other acute care facilities within an inclusive trauma system.
Objectives:

a) Identify the immediate needs of all injured patients and evaluate the available resources needed to care for those patients.(**G**: *A,C,F,G*; **M**: *4*)
b) All non-designated facilities shall be capable of providing stabilizing care and arranging timely transport to an appropriate facility for major trauma patients requiring care beyond the scope of the initial, non-designated facility. (**G**: *A,D,F,G,H*)
c) Non-designated hospitals shall be encouraged to submit a minimum data set for systems monitoring and development.
d) All facilities shall be encouraged to participate in the state Trauma Registry, trauma educational offerings, state trauma protocols and performance improvement tools, networking, etc. (**G**: *A,C,D,E,G,H*; **M**: *2*)
e) All hospitals shall provide trauma care commensurate with their capabilities and shall arrange prompt transfer to another capable facility

if the patient needs a resource unavailable at that facility. (**G**: *A,B,C,D,G,H*; **M**: *2,3*)

Goal 2: Describe the role and responsibility of Specialty Care facilities (pediatric, burn, spinal cord injury).(G: *A,B,C,E,G,H*)

Objectives:

a) Specialty Care facilities shall be utilized for the advanced care needs of injured patients and may be accessed in the initial care of the patient or in the recovery and rehabilitation phase.
b) All hospitals shall be encouraged proactively to make both formal and informal transfer agreements with such facilities as Pediatric Trauma Centers, Burn Centers, Brain and Spinal Cord Centers, etc., to ensure expedient patient care.
c) Assessments based on data from both designated Trauma Centers and non-designated facilities shall be used to assist in determining the need for additional facilities and their distribution.

C. Designation Process (G: *A,B,C,E,G*)

Goal 1: Georgia shall have a standard process for selecting and designating Trauma Centers.

Objectives:

Trauma Center designation within Georgia shall be a voluntary process

Designation –, A Georgia acute care facility must be recommended for designation by its Regional EMS Council and must show intent to participate by having trauma-specific organizational tools in place prior to the request, as outlined in the ACS document *Resources for Optimal Care of the Injured Patient*.

Among the trauma-specific organizational tools the facility must have (1) an approved Trauma Registry program and (2) the collection of no less than 180 days (six months) of data. (This data will be downloaded and reviewed by the OEMS/Trauma prior to the request being acted upon.) Facilities must meet specific criteria based on the level of care provided and the resources available. Once the requesting

hospital has completed all requirements for designation at the application level, a physical review of the facility will take place.

The physical review (site visit) will be conducted by a team that includes, but is not limited to, a trauma surgeon, an emergency room physician or PA/NP, a trauma coordinator, and a representative from the OEMS/Trauma. These visits will be conducted and monitored by the OEMS/Trauma. Based on the recommendations of the site team and all submitted documentation, a final recommendation of designation will be forwarded to the OEMS/Trauma Medical Director. This individual, acting as a designee of the Commissioner and Board of DPH, makes the final decision regarding designation.

Designations will be for a three-year period, subject to periodic compliance audits. Any Georgia facility meeting ACS verification standards will also be accepted as a state designated Trauma Center.

Goal 2: **There will be a process for monitoring designated centers and a process for subsequent re-designation and /or de-designation. (G: *A,C,D,G*; M: *3*)**

Objectives:

a) A Trauma Center will be subject to re-designation every three years.
b) The Georgia DPH, through the Office of EMS/Trauma, will be responsible for the designation, re-designation, de-designation, upgrades, and compliance monitoring of Georgia's Trauma Centers.
c) Trauma Centers will be designated as Levels I, II, III, IV, and pediatric Trauma Centers, based on established ACS guidelines.
d) Specialty Care Centers will be designated under their organization's (i.e.; American Burn Association) specific guidelines
e) The state Office of EMS/Trauma may suspend designation or institute a probation status at any time if the Office determines that the hospital has failed to comply with its obligations per the ACS guidelines.

D. Inter-facility Transfer to Trauma Center (G: *A,C,D,F,G*; M: *3,5*)

Goal: **There shall be support for the rapid inter-facility transfer of major trauma patients to Trauma and Specialty Care Centers.**

Objectives:

a) The guidelines for inter-facility transfers as outlined in the ACS document *Resources for Optimal Care of the Injured Patien*t shall be utilized within the Georgia Trauma System.
b) All patient transfers shall be conducted in accordance with applicable state and federal regulations.
c) Transfer agreements shall be made proactively to ensure prompt, appropriate patient care.
d) The decision to transfer to a higher level of care shall be made as early in the patient's evaluation and stabilization as possible.
e) The TCC shall assist in facilitating inter-facility transfers upon request by the sending facility.

E. Transfer from Trauma Centers to Other Facilities (G: *A,G)*

Goal: **There shall be a process and procedures for transferring patients to their originating facility.**

Objective:

a) The concept of transferring medically appropriate patients out of designated Trauma Centers to lower- level facilities or system hospitals ("back transfer") shall be promoted to ensure the availability of critical-care beds and resources for acutely injured patients. This concept is encouraged through Health and Human Service's Healthcare Preparedness Program's surge goals.

F. Rehabilitation (G: *A,G,H*)

Goal: **Rehabilitation facilities shall be integral to the statewide trauma system.**

Objectives:

a) The decision to consult a rehabilitation facility shall be made as early in the patient's care continuum as is medically appropriate.

b) As statewide injury data becomes available a needs assessment shall be conducted to determine the need for appropriate additional rehabilitation facilities.

VI. Evaluation (G: *A,G,H*; M: *3,4*)

Evaluation of the State of Georgia Trauma System shall be performed through collection and analysis of data from the many stakeholders (see glossary) in the trauma system. This data will be used to evaluate pre-hospital care, definitive care, and rehabilitative care as well as general system issues. The results of data analysis shall be used to develop performance improvement strategies and to assist in trauma research. Both performance improvement and research strategies shall attempt to improve outcomes, provide cost-effective care, and develop trauma prevention strategies.

A. Data Collection – System Data Requirements (G: *A,B,E,G,H*)

Goal 1: The collection and collation of trauma care data throughout the state and the populations will continue to evolve and improve

Objectives:

a) The State Office of EMS/Trauma shall be responsible for collection, collation and analysis of trauma data throughout the state of Georgia.

b) Trauma data collection, collation and analysis shall accomplish the following:
   1. Assess the effectiveness of the trauma system.
   2. Develop and/or improve injury prevention programs.
   3. Monitor and evaluate clinical outcomes for trauma patients.
   4. Monitor the financial impact trauma has on the state and stakeholders.
   5. Assess compliance with state trauma standards.

c) The State Office of EMS/Trauma will work with facilities to determine the minimum data set required of each trauma center.

Goal 2: Roles and responsibilities of agencies and institutions for data collection shall be defined. (G: *A,B,G,H*; M: *3,5*)

Objectives:

a) Each facility shall be responsible for collection and submission of data to the State Office of EMS/Trauma on a quarterly basis.
b) Data shall be collected/submitted from each of the following resources:
    1. Acute-care hospitals that care for injured patients.
        a. Trauma Center (Trauma Registry).
    2. Pre-hospital providers.
        a. ground
        b. air
    3. Georgia Hospital Association (GHA).
c) Participate in National Trauma Data Bank

Goal 3: Develop a process for evaluation of the quality of the data and the reporting process. (G: *A,G,H*; M: *5*)

Objectives:

a) The State Office of EMS/Trauma shall provide Trauma Centers with both initial and on-going education to assure accuracy, reliability, and validity of data collection.
b) The State Office of EMS/Trauma personnel shall be responsible for entering submitted data into a database suitable for analysis.
c) The State Office of EMS/Trauma, shall be responsible for generating reports based on queries of the database.
d) The State Office of EMS/Trauma shall assure the protection of data submitted from the perspective of patients, providers, and stakeholders and will maintain compliance with HIPAA regulations.

D. Research (G: *A,G,H*)

Goal 1: Develop plans for trauma research activities, including functional outcome research.

Objectives:

a) Trauma-related research shall initially determine the effectiveness of the system, in order to sustain continued public and financial support.
b) Projects shall be targeted that improve outcomes and /or prevent injury.

Goal 2: Incorporate research activities as part of the trauma system assessment and utilization review.

Objectives:

a) Research shall augment each system component through the statewide trauma database.
b) A data control process for reviewing the independent research efforts of each facility or agency shall assure appropriateness and confidentiality.
c) Research results shall be communicated to participating entities.

ATTACHMENT 1

Georgia Trauma System Evaluation Committee: Metrics Evaluation Meeting
20 November 2013
12:30 PM to 3:00 PM

Governor's Office of Planning and Budget
Trinity-Washington Building, Room 8001
270 Washington Street, SW
Atlanta, GA 30334

Introduction:
Presented by Ms. Zimmerman

- Ms. Zimmerman welcomed everyone to the meeting and gave a brief overview of how the five performance measures where outlined in the last meeting. The purpose was to calculate each measure and indicate what type of methodology one used to determine their outcome. Primary ownership was assigned to each measure at the last meeting and therefore, measures will be presented by each of those individuals.

Measure Review:
Group Discussion

1. Measure #1: "Number of individuals trained through commission funding":
   Assigned to Mr. Pettyjohn
   - Purpose: report how many individuals were trained with FY 2013 funds.
   - Source/Data Collection: GAEMS & TAG are contractors of GTC and provided rosters of courses taught to indicate the number of individuals trained per each course with the amount of GTC funds spent.
   - Method of calculation: simple arithmetic used – add all individuals listed by each course roster provided.
   - Data Limitations: funding provided in a particular FY may not be spent in that FY due to contract extensions. Personnel trained during the current FY may have been trained utilizing funding from a previous FY.
   - FY 2013 actual number of individuals trained: 272 (FY 13 only).

2. Measure #2: "To determine the percentage of approved readiness costs funded by the Commission":
   Assigned to Mr. Terwilliger (presented by Mr. Pettyjohn as Mr. Terwilliger was absent)
   - Purpose: to include all Level I & II trauma centers He described the readiness amounts received by level I & II trauma centers from FY 2008 (dispersed in FY 2009) to FY 2014 (predicted) and FY 2015 (estimated with FY 2014 dollars received) based upon anticipating an additional Level II trauma center. It was also noted the total amount of administrative costs

and physician costs for each fiscal year as normal business operations increase in costs. FY 2014 funding is based on the current committed contract amounts, however these may change due to the hard budget review by the Commission and performance based payment reviews in early 2014.

- Source/Data Collection: appropriate number of committed contracts helps project costs but measure should be based by actual expense.
- Method of Calculation: Combined level I & II readiness funding total divided by combined level I & II estimated average readiness cost (based on readiness cost survey) equals percentage of readiness cost funded for level I & II trauma centers.
- Data Limitation: Survey is not annual and may want to have survey conducted at least biannually or tri-annually.
- FY 2013 percentage of approved readiness costs funded by the Commission: 7.35% with FY 2014 anticipated at 7.08%.

3. Measure #3: "Percentage of trauma patients treated at designated trauma centers":
   Assigned to Dr. Ashley
   - Purpose: Commission has executed a contract with Dr. Etienne E. Pracht of Florida. He is to conduct a report for an analysis of the Georgia Trauma System and provide a report to the Commission during the January workshop. He is also contracted to provide training of SRR/ICISS assignment program.
   - He will provide the following through his report in January: source/data collection, method of his calculations, data limitation, and possibly a percentage of trauma patients treated at a designated trauma center.

4. Measure #4: "Define and evaluate the level of EMS regional participation based on the formation of a regional plan, utilizing a template based on the state plan provided by OEMS/T and approved by the Georgia Trauma Commission.":
   Assigned to Mr. Cannady
   - Purpose: to establish a template for a plan to be used statewide. This will help to ensure Georgia's Trauma System is consistent across the state with regionalization being the best method to produce a productive and efficient state plan.
   - Source/Data Collection: Using EMS region definitions; RTAC using plan based on template which is modeled after the state plan. Dr. O'Neal mentioned OEMS/T is working to develop a state trauma plan to use as template for the regions that have not already developed an RTAC using the Commission's template.
   - Method of Calculation: simple arithmetic
   - Data Limitation: defines participation for a regional plan.
   - FY 2013 number of regions with Commission approved regional plan: 4

5. Measure #5: “Average response time from dispatch to destination for trauma patients. A second measure will show the average time from admission or discharge at ER to arrival at trauma center.”
   Part a “Time from dispatch to destination” plus part b “Time from emergency room to trauma center” equals part c “time from dispatch to trauma center.”
   Assigned to Ms. Angie Rios
   - Purpose: To indicate obstacles (especially those in underserved areas) which prevent a trauma patient from access to care at a trauma center by region; identify possibly solutions; establish and maintain a process by which to effectively get care to the trauma patient.
   - Source/Data Collection: GEMSIS and OEMS/T; write out codes used for identifying a trauma patient for “provider impression.”
   - Method of Calculation: “dispatch to scene” plus “on scene time” plus “to facility time” equals “total time” (in minutes) for 911 emergency treated and transported calls related to provider impression of traumatic injury (this could include minor injuries as well).
   - Data Limitations: If we define trauma, it may only capture a percentage but possibly representative number of trauma patients. Alternate travel modes such as helicopter versus ground. May need to consider region 3 versus all other regions or run all regions but take out the larger metropolitan areas. Thus far, we are only measuring to an individual facility. There needs to be a data validation piece or method of review that has some validation as sample. GEMSIS data uses rules in system to control and encourage self-monitoring. GEMSIS data is currently incomplete due to vendor issues; however they are supposed to be cleaning it up. Volume may skew interpretation because the bulk is near urban centers.
   - CY 2013 provider impression of traumatic injury (911 emergency treated and transported calls): 43.1 minutes of 42,710 incidents thus far; however CY 2013 is incomplete because we have not yet reached the end of the year.
   - Next steps for Measure #5: Complete an urban versus rural breakdown with more detail about severity. Defining “trauma patient” with active code list (PCR) to determine risk to not include specific types of trauma injuries. There are currently over 100 different triage factors. Athens may be a good place to start in region 10 to provide a “snapshot of Georgia”. Look to the Federal Census for classification of urban versus rural for population. Also, determine how/what should we train EMS medics in regards to data entry in order to improve GEMSIS data. Consider additional GAEMS training courses. There are national system changes from NEMSIS 2 to NEMSIS 3. Need to map the college criteria with Trauma System Entry Criteria (TSEC) and translate that into PCR code. Maybe need to define criteria with GEMSIS match it with PCR then compare to Registry and essentially work backwards. There may be a need to obtain more detail about urban/rural population, zip codes,

incidents by region, and demographics at a statewide level. Counties are typically classed by demographics.

- Items to be received from Ms. Rios: data dictionary; actual codes and data sets, ACS criteria, and start filtering data at an urban versus rural breakdown.

Wrap-Up Summary:

Presented by Ms. Zimmerman

- Schedule next meeting by doodle and send out meeting notes. Possible meeting sometime in February 2014 after the January 2014 Commission workshop.

Crafted by Dena Abston

ATTACHMENT 2

Strategic Plan: Goals and Objectives Summary

Goal A: Assess the trauma system and develop plans for improvement.
Objective A1: Complete the Benchmarks, Indicators and Scoring (BIS) assessment by all ten EMS Regions as part of their trauma system regionalization activities by June 2014.
Objective A2: Complete a statewide Benchmarks, Indicators and Scoring (BIS) assessment by trauma system stakeholders by June 2015.

Goal B: Clarify and delineate trauma system leadership roles.
Objective B1: Implement recommendations that assures essential system development tasks are addressed, effective collaboration and coordination of trauma system stakeholders occurs and is the best use of Georgia's trauma system resources by June 2014.
Objective B2: Georgia Trauma Commission to promulgate trauma system rules and regulations to define and describe Georgia Trauma System components and subsystems by June 2015.

Goal C: Expand the number of designated trauma centers to achieve access to a Level I, II, or III within one hour for all Georgians by June 2015.
Objective C1: Develop criteria to determine the number of trauma centers needed to address the trauma care needs in Georgia by June 2013.
Objective C2: Increase GTC members understanding of trauma center designation, associated recommendations and statewide gaps as determined by trauma center designation and re-designation process and results of trauma system surveys by June 2013.

Goal D: Develop trauma system regionalization in Georgia.
Objective D1: Establish Regional Trauma Advisory Committees (RTAC) in each EMS Region to support trauma and emergency care and system building by June 2014.
Objective D2: Implement the Georgia Trauma Communications Center statewide to provide information to EMS and participating hospitals resulting in the transport or transfer of seriously injured patients quickly and to the most appropriate facility ready to provide care as measured by a reduction in time from injury to definitive care by June 2013.

Goal E: Increase trauma system funding.
Objective E1: Develop a Georgia Trauma Foundation to advocate and raise funds for the Georgia Trauma System by June 2013.
Objective E2: Implement a campaign to create permanent and adequate trauma system funding by June 2015.

Goal F: Strengthen Emergency Medical Services in rural areas.
Objective F1: Increase County Commissioner understanding about trauma care and system requirements through presentations, conversations and interactions by June 2014.
Objective F2: Increase efficiencies in the EMS system by June 2014.

Goal G: System-wide Evaluation and Quality Assurance
Objective G1: Establish system-wide metrics to evaluate system performance and implement improvements in the Georgia trauma system by June 2014.
Objective G2: Increase the # (or increase the %) of EMS providers providing quality data to the OEMS&T by June 2014.

Goal H: Conduct trauma system and care outcomes research
Objective H1: Initiate two trauma system research projects by June 2014.