February 2009

Dear Georgia Trauma & EMS Community,

On behalf of the Georgia Trauma Care Network Commission, I am pleased to present the Five Year Georgia Trauma System Strategic Plan that we have prepared to guide the full development of the Georgia Trauma System. It will initially be used to support sustainable trauma system funding from the State Legislature in this session, which as you know will be very challenging.

We believe this plan reflects the tremendous work many of you have conducted this decade in advocating for an effective trauma and EMS system throughout Georgia. This includes those who worked with the Legislature’s Joint Comprehensive State Trauma Services Study in 2006, which led to the formation of the Commission and last year’s $59 million in initial funding, as well as in the recent American College of Surgeons Trauma System Consultation.

We believe this plan reflects the needs of Georgia, best practices from around the nation, and innovative concepts many of you have offered to make it a model for the nation. It is entitled “Our Emerging Vision” because, with your help, it will continue to evolve and be refined to meet Georgia’s needs. We are proposing a robust stakeholder structure to assure strong participation at the local and regional level, as well as statewide. We welcome your comments and ideas, and invite you send them through Jim Pettyjohn, GTCNC Administrator, at Jim@lacueva.com.

We also believe Georgia has the opportunity to not only catch up with the rest of the country in trauma care with a state-of-the-art trauma system, but help lead the nation by developing a new public service that assures emergent, high quality care throughout the state for the seriously injured, stroke and heart attack victims, and adults and children needing emergency surgery. Georgians generally take police and fire services for granted; it is time for Georgians to have the same expectation of its trauma and emergency services!

We hope that our hard work matches your commitment and expectations. Your help will be more critical than ever in obtaining the needed support from the State of Georgia to make a state-of-the-art trauma system a reality in Georgia. We look forward to working with you to make this happen.

Sincerely,

Dennis Ashley, M.D.,
Chair
Georgia Trauma Care Network Commission
TRIUMA & EMERGENCY CARE: A NEW PUBLIC SERVICE FOR GEORGIA

Georgia Trauma Care Network Commission

In 2008, Georgia provided $59 million to the Georgia Trauma Care Network Commission to stabilize the state’s trauma system. It worked as intended and substantially strengthened the remaining trauma centers. Several trauma centers were contemplating dropping out of the system, and the stabilization worked. This level of funding needs to be continued for the existing trauma centers, as well as for physicians and EMS. In addition to determining the appropriate distribution of the $59 million, the Commission also developed over the last few months a vision for the Georgia Trauma System to be achieved over 5 years:

Immediate Objectives 2009-10

1. Obtain Permanent Trauma System Funding
   Without a permanent funding mechanism, trauma system development cannot proceed and it will be impossible to recruit any new trauma centers into the Georgia trauma system.

2. Maintain and Expand Georgia’s Trauma Centers, Focusing On South Georgia
   The trauma centers’ funding cut their annual loss in half and was sufficient for them to maintain their status. The Commission conducted discussions with hospitals that have a potential for becoming designated as Level II & III trauma centers, with a focus on South Georgia where the need is greatest. These discussions indicated that 4-6 Level II & III trauma centers could be developed in 2009-2010 if they are assured sustainable funding and a transfer system to manage the flow of trauma patients.

3. Strengthen Emergency Medical Services Focusing On Rural Regions
   Due to the integral relationship between EMS and trauma care, the Commission has placed a major emphasis on strengthening EMS. Major initiatives include support for readiness, resources targeted at rural regions, consolidation of EMS Districts to promote efficiency, a GPS/Automatic Vehicle Locator System, and air medical transport. This should grow over time into a fully integrated EMS/Trauma system that assures high quality emergency care for all, regardless of their type of injury or illness.

4. Develop Statewide Trauma Transfer System
   A trauma transfer/communications center that coordinates trauma patient triage, transfer and transport will be built to assure that injured patients are quickly transported to the most appropriate trauma facility. This state’s 4 Level I trauma centers would take on this responsibility.

5. Build Trauma System Infrastructure Under Department of Health
   The Commission asked for an external, “warts and all” American College of Surgeon’s Trauma System Consultation, and they were stunned by the lack of state support for trauma system infrastructure in Georgia. In order to build an effective state trauma system, an effective and fully-staffed Division of EMS & Trauma under the Department of Health will be essential.

6. Establish Mechanisms To Assure Exceptional Accountability
   In 2009-2010, the Trauma Commission will develop a performance improvement and accountability system to assure optimum performance by all trauma system components. This approach will assure the best possible value for Georgia’s investment in its trauma system.

5 Year Objectives

- Pilot/Build Trauma Telemedicine System
- Enhance Pediatric Trauma Subsystem
- Strengthen Physician Support For Trauma Care In Rural Georgia
- Expand System To Rehabilitation, Burn Care, & Interstate Transfers
- Assist In Initiatives To Reduce Traumatic Injury
- Integrate Trauma System With Disaster/Terror Preparedness
- Expand System To Acute Emergency Care Needs

Organizational Objectives

- Develop Trauma System Regionalization In Georgia
- Continue Developing Trauma System Policy/Stakeholder Structure

A New Public Service

Georgia has the opportunity to not only catch up with the rest of the country in trauma care, but help lead the nation by developing a new public service that assures emergent, high quality care throughout the state for the seriously injured, stroke and heart attack victims, and adults and children needing emergency surgery. This vision for the Georgia Trauma System will bring a high value to everyone. Georgia generally takes police and fire services for granted, and it is time for the state to have the same expectation of its trauma and emergency services.

The Best Way To Fund The Georgia Trauma System

While there are a variety of funding sources for trauma care in the nation, the best practice is one that is trauma related, is a sustainable source of funding, and expands with population growth. Half of trauma injuries result from motor vehicle crashes, so an added fee on annual vehicle registrations fits this profile perfectly. A $10 fee per vehicle registration would raise $85 million annually, the approximate amount needed to sustain a fully developed Georgia trauma system and new public service.

Benefits of a Fully Developed Trauma System

The return on Georgia’s investment in trauma will include a reduced death rate from injury, especially in the “corridor of death” along I-75 in South Georgia, exceptional trauma care throughout the state, cost savings in patient treatment, the economic benefits of saving lives of younger, productive people, and spin-off benefits to emergency care and disaster/terror preparedness.
OUR EMERGING VISION: A NEW PUBLIC SERVICE FOR GEORGIA

February 2009

Georgia is experiencing a crisis in trauma care that has placed at risk anyone who is seriously injured in the state. The Governor, Lieutenant Governor and Speaker of the House responded in 2008 by appointing the Georgia Trauma Care Network Commission (GTCNC), and providing initial funding of $59 million to stabilize and strengthen the state’s remaining trauma centers and help support trauma patient care and transport by Emergency Medical Services.

This strategy worked as intended, and with sustainable funding, the Georgia trauma system will not only remain intact, it will both be strengthened and expanded to meet the needs in the state.

The Georgia Trauma Commission has pursued an aggressive assessment and planning process, which included reviewing the extensive record of stakeholder input over the past several years, a review of the Georgia trauma system by the American College of Surgeon’s Trauma System Consultation program, economic analysis by Georgia State University’s Georgia Health Policy Center, and trauma system consulting support partially funded by the Healthcare Georgia Foundation.

This has enabled the Georgia Trauma Commission to outline a vision for the Georgia Trauma System for the decades ahead, and defines a cost-effective plan for moving achievement of this vision forward over a five year period, between 2009 and 2014. The silver lining of the cloud of Georgia’s previously poorly supported trauma system is that today’s technology is much better and more cost effective, and other states now offer best practices on issues Georgia faces.

In addition, Georgia has a unique capability for innovation on trauma care due to the high level interest and commitment to developing the best system possible by trauma care providers, philanthropic and academic organizations, hospital, physician and EMS stakeholders, and the highest levels of state government. As a result, Georgia is now poised to build a model trauma system for the nation.

A major feature of this emerging vision is a statewide system built to optimize trauma care that also strengthens inter-related state systems and sectors for:

- Emergency Medical Services
- Disaster/Terror Preparedness
- Emergent cardiac, stroke and other emergency surgery cases
- Emergent patient flow to and from all hospitals (e.g., ED diversion solutions)
- Georgia’s healthcare safety net

This approach will produce the best possible value for Georgia’s investment in a trauma system. It will coalesce the fragmented components of trauma and emergency care into a new public service that will assure that should anyone need acute emergency care, no matter where they are in the state, they will be transported professionally and expeditiously to a reasonably close facility fully capable of providing the necessary treatment. Georgia generally takes police and fire services for granted, and it is time for the state to have the same expectation of its trauma and emergency services.

GEORGIA TRAUMA CARE NETWORK COMMISSION

Dennis Ashley, M.D.
Chairman
Linda Cole, R.N.
Leon Haley, M.D.
Ben Hinson, EMT-P
Rhonda Medows, M.D.
Bill Moore
Joe Sam Robinson, M.D.
Kurt Stuenkel
Kelli Vaughn, R.N.
FIVE YEAR GEORGIA TRAUMA SYSTEM STRATEGIC PLAN OUTLINE

The objectives of the 2009-2014 plan, with short term objectives in bold, are as follows:

1. Obtain Permanent Trauma System Funding
2. Maintain & Expand Georgia’s Trauma Centers Focusing On South Georgia
3. Strengthen Emergency Medical Services Focusing On Rural Regions
4. Develop Statewide Trauma Transfer System
5. Pilot/Build Trauma Telemedicine System
6. Enhance Pediatric Trauma Subsystem
7. Strengthen Physician Support For Trauma Care In Rural Georgia
8. Expand System To Rehabilitation, Burn Care & Interstate Transfers
9. Assist In Initiatives To Reduce Traumatic Injury
10. Integrate Trauma System With Disaster/Terror Preparedness
11. Expand System To Acute Emergency Care Needs
12. Develop Trauma System Regionalization In Georgia
13. Continue Developing Trauma System Policy/Stakeholder Structure
14. Build Trauma System Infrastructure Under Department of Health
15. Establish Mechanisms To Assure Exceptional Accountability

A summary framework for a five year plan that assures effective implementation and full system accountability is attached. The *Five Year 2009-2014 Trauma System Strategic Plan* is as follows:

1. **OBTAIN PERMANENT FUNDING**
   Without a permanent funding mechanism, trauma system development cannot proceed and it will be impossible to recruit any new trauma centers into the Georgia trauma system.

2. **MAINTAIN & EXPAND GEORGIA’S TRAUMA CENTERS FOCUSING ON SOUTH GEORGIA**
   The initial 2008 funding has stabilized and strengthened Georgia’s remaining 13 Level I & II trauma centers. They received $36 million to help with the added costs they incur due to their trauma center status, and passed on another $12 million to their trauma medical staff. A grant program of $4.2 million also supported additions of critical equipment purchases at the state’s trauma centers.

   The Commission surveyed these trauma centers to establish a baseline for measuring progress in strengthening Georgia’s trauma centers and performance of them. For example, the average score for the challenge Level II trauma centers faced in maintaining support of major trauma specialties in 2007 was 3.2 (on 1-4 scale with 4 indicating extreme problem). In 2008 this had declined to 2.8, providing an early indication of the impact of the state’s financial support.

   Key measures of trauma center performance will be established to uniformly monitor defined quality indicators. These indicators may include:

   - Number of hours of “diversion” (i.e., denying access to injured patients)
   - Quality of trauma care assessments conducted monthly at each trauma center
   - Regional and statewide quality of trauma care reviews
   - Trauma center designation reviews conducted by the Office of EMS/Trauma to assure adherence to trauma center requirements
By 2014, based upon this plan and national trends, we anticipate the state’s trauma centers will have taken on added responsibilities in acute emergency care, including regional transfer system management and a broader role in emergency surgery.

The Commission has conducted discussions with hospitals that have the potential for becoming designated as Level II and Level III trauma centers, with a focus on South Georgia where the need is greatest. These discussions indicate that 4 to 6 Level II and Level III trauma centers may be developed between 2009 and 2011 under the following conditions:

1. New trauma centers would receive sustainable funding at the level trauma centers received in 2008. (They are being asked to make a long term commitment.)

2. A statewide trauma transfer system that facilitates the flow of trauma patients requiring a higher level of care to trauma centers, and when appropriate with low severity patients, requires they remain in their local hospital for care.

3. The startup of several trauma centers to assure a new trauma center is not overburdened with volume due to pent up demand in its greater region.

The key initial measure of performance for them to obtain funding is whether they can meet stringent trauma center requirements. Thereafter, the trauma centers’ performance would be measured with the same system used for all Georgia trauma centers.

3. **STRENGTHEN EMERGENCY MEDICAL SERVICES FOCUSING ON RURAL REGIONS**

Due to obvious needs among Georgia’s many and varied Emergency Medical Services programs, the integral relationship between EMS and trauma care, and best practices in other states, the Commission has taken on significant responsibility for strengthening EMS. This should grow over time into a fully integrated EMS/Trauma initiative that assures high quality emergency care for all, regardless of the type of injury or illness they present.

**Readiness Support**

To assure that EMS is prepared to meet the needs of trauma center patients, it is necessary to support EMS readiness for all emergency cases. The most cost-effective alternative to help do so is to transfer trauma funds to Medicaid to use, coupled with federal matching funds, to raise Medicaid reimbursement for all EMS Medicaid-eligible transports. There should be a guarantee that EMS reimbursement would not then be cut, essentially wasting the trauma funds.

**GPS & Automatic Vehicle Locator System**

This system will continue to be developed in conjunction with the statewide trauma transfer system and disaster and preparedness systems in Georgia. No state trauma funds are being requested in 2009-10.

**Advocacy On Behalf of EMS**

EMS in Georgia is a fragmented and under-resourced system, and since it is essential to an effective trauma system, the Commission has advocated for its needs and will continue to do so. This includes the implementation of the recommendations of the Senate Study Committee on EMS Recruitment, Retention, and Training in Georgia.

**Incentivize Consolidation of EMS Districts**

As a system EMS is hindered by its fragmentation between the state’s high number of small county jurisdictions. As is happening in other states, Georgia must move towards a regionalized structure for EMS system design to serve the most patients in the most effective and efficient manner. Many rural EMS organizations in Georgia should be combined to create regional EMS districts, geography, and patient flow patterns.
These larger EMS districts would provide more stability to EMS employees, enhanced opportunities for training, and the overall challenges of recruitment and retention would be lessened. In addition, fewer ambulances would be needed around the clock due to more efficient use of scarce ambulance resources. The capability for equipment replacement would be enhanced again due to better use of resources. The bottom line would be to provide faster response times with personnel that provide a higher quality of care. This can be accomplished through a regional EMS/trauma infrastructure offering economic incentives based on performance improvement.

**Air Medical Transport Imbalance**

There are apparently more than enough air medical helicopters in north Georgia and none southwest of Macon. This imbalance presents problems in terms of the timely transport of critically injured patients. Georgia is beginning to regulate air medical providers, and to optimize the role of air transport within the emerging Georgia Trauma System, a coordinated approach by air medical providers to assure full coverage of Georgia should be implemented. The first step would be a collaborative planning process that engages both EMS and air medical transport companies in determination of solutions.

**EMS Resources Targeted At Specific Regions’ Needs**

2008 funding included a capital grants program for EMS to purchase new ambulances that should be continued. These grants will be targeted based upon need, with priority given to EMS programs serving regions with long transport times to trauma centers.

4. **DEVELOP STATEWIDE TRAUMA TRANSFER SYSTEM**

Serious injuries in Georgia often trigger a time consuming search for a trauma center that has room to accept new patients for treatment, and they may not end up at the appropriate hospital. A transfer control/communications center that coordinates trauma patient triage, transfer and transport can be built to streamline the process and assure that injured patients quickly get to where they need to go. It can redirect patients throughout the state should one or more facilities become saturated, and will also serve to keep patients with minor injuries in their own community for care at less cost. It can also support patient stabilization and definitive care in local emergency departments and community hospitals.

The regionalized system built around lead trauma centers throughout Mississippi and in other state systems will be used as the working model for Georgia. This state’s four Level I trauma centers would take on this responsibility and lead the process for collaboratively determining patient transfer protocols among all hospitals within their regions. This system will be integrated statewide and with EMS regions and all hospitals, and also use state-of-the-art technology statewide to optimize efficiency.

System development will start with system planning and the organization of a collaborative process within each region. The Commission requests support for planning and adding appropriate infrastructure to pursue regionalization. Federal funding will be pursued as well for future development.

It is important to recognize that this system will coordinate/enhance the operational relationships between trauma centers, EMS regions, EMS providers, and all acute care hospitals, which will in turn open up added opportunities to optimize emergency care beyond trauma care. This Transfer Control/Communication System will also be developed in conjunction with a con-current initiative led by the Georgia Hospital Association to mitigate and resolve the broader emergency department diversion problem.
5. PILOT/BUILD TRAUMA TELEMEDICINE SYSTEM

Telemedicine is a decade old concept to bring the doctor remotely to the patient, and the time has come for its use to support trauma specialty care in rural Georgia. While the need for telemedicine has escalated, barriers to its effective use such as cost, technology, reimbursement, liability, and physician participation have lessened, but continue to exist. Best practice models for the use of telemedicine in trauma care have been developed in other states. In Georgia, there is experience in using telemedicine (e.g., Center for Tele-Health at the Medical College of Georgia) as well as a developing statewide infrastructure to support it (e.g., Georgia Partnership for Tele-Health, Inc.) that may be used in collaboration with the Georgia Trauma System to pilot and develop trauma telemedicine.

In trauma care, telemedicine would bring specialty surgeon expertise to rural hospitals to help direct treatment when unstable patients cannot be transported. In addition, it also serves to help determine whether low severity patients can remain in their own community for treatment at their local hospital which is more cost effective and convenient for injured patients and their families.

The shortage of pediatric neurosurgeons provides an excellent opportunity to pilot trauma telemedicine. Instead of transporting a child with a suspected head injury to a pediatric trauma center, the child could be evaluated remotely at the local community hospital by a neurosurgeon based at the pediatric trauma center.

Telemedicine promises to enhance and expedite care of children with serious injuries, and ultimately adults, and also benefits rural trauma care providers who are in short supply, as well as urban surgical specialists.

A $500,000 USDA federal grant for telemedicine support to rural areas will be pursued in collaboration with the Georgia Partnership for Tele-Health, Inc. The grant award will support equipment purchases to launch two pilot programs in rural trauma telemedicine. Additional support for technical assistance in the development of a successful rural trauma telemedicine initiative for Georgia will be needed.

6. ENHANCE PEDIATRIC TRAUMA SUB-SYSTEM

Georgia enjoys an exceptionally strong array of pediatric trauma centers that are well located to care for seriously injured children under age 15. They account for 12% of trauma center patients and require a different system than adults due to their specialized needs. The pediatric trauma facilities are collaborating on a model trauma sub-system plan for pediatrics that includes:

- A statewide pediatric patient transfer system that functions as part of the overall system.
- The provisions of pediatric emergency care training and equipment for EMS.
- Development of physician extender roles specific to pediatric trauma centers.
- Maintenance of surge capacity to children regarding disaster/terror events.
- Support for prevention of childhood injury in collaboration with other organizations.
- Telemedicine program development to enable local hospitals to effectively evaluate possible head injuries in children.
- Expansion of the pediatric trauma care system to pediatric emergency care.

The components of this pediatric trauma sub-system will be fully integrated with the overall Georgia Trauma System, and the transfer system and telemedicine components will actually be piloted within this pediatric trauma sub-system.

The result will be the nation’s state-of-the-art model for delivering high quality care to children who are seriously injured, as well as those needing emergency surgery due to causes other than injury.
7. **STRENGTHEN PHYSICIAN SUPPORT FOR TRAUMA CARE IN RURAL GEORGIA**

The essential challenge facing Georgia is strengthening trauma medical staff support in the face of a nationwide trend of declining numbers of surgical specialists interested in trauma care. The following strategies to both expand and leverage scarce trauma physician resources will be pursued:

- Develop corps of trauma physician “extenders”, perhaps including nurse practitioners, physician assistants, registered nurse first assists, and/or trauma nurse specialists.
- Expand trauma surgeon training and retraining to augment the supply of trauma surgical specialists in rural Georgia.
- Maintain Georgia’s strong liability protection for trauma physicians.
- Facilitate fair compensation of trauma physicians in terms of their emergent response (like we pay plumbers) and the sacrifices they make in taking trauma call.
- Manage trauma patient flow with an effective transfer system.
- Develop community call systems for high demand, low supply trauma specialties (hand, eye, etc.) to engage as many surgeons as possible in trauma and emergency call.
- Use of telemedicine to leverage scarce trauma physician resources and enable effective evaluation of patients, in regards to the necessity of transfer to a higher level of care.
- Technical assistance on best practices for building sustainable trauma hospital-based practices for trauma physicians.

For 2009-10, collaborative planning with a variety of partners will be conducted, including the Level I trauma centers and their medical school partners, nursing schools, the Georgia Board for Physician Workforce, and the Medical Association of Georgia.

8. **EXPAND SYSTEM TO REHABILITATION, BURN CARE & INTERSTATE TRANSFERS**

These will be important steps as the Georgia trauma system matures:

**Uninsured Access to Rehabilitation**

Georgia’s trauma centers report transferring Medicaid/uninsured patients to rehabilitation facilities is generally impossible since such care is not funded. This requires the trauma centers to keep such patients in expensive acute care settings, which adds unnecessary costs and inappropriately fills scarce hospital beds. The patients, who tend to recover and become productive citizens, would be better off in the lower cost rehab facility. Approaches to resolving this dilemma can require creativity and collaboration rather than funding.

**Burn Centers**

Georgia’s two burn centers, located at Grady Memorial Hospital and Doctors Hospital of Augusta, provide burn care to patients in a multi-state region. An assessment of their capabilities in relation to Georgia’s long-term needs will be appropriate in the future, and they should be integrated into the trauma transfer/control system.
Stability of Interstate Trauma Transfers
Some regions in Georgia rely on trauma centers located in adjacent states due to proximity (e.g., Tennessee, Florida), and the stability of these resources are essential to a stable Georgia Trauma System. For example, Erlanger Medical Center in Chattanooga, Tennessee treats a substantial amount of the major trauma patients treated by all Georgia trauma centers. In addition, four Georgia trauma centers - Memorial Health University Medical Center in Savannah, John D. Archbold Memorial Hospital in Thomasville, Medical College of Georgia in Augusta, and Medical Center-Columbus - serve patients from neighboring states. Regional and interstate collaboration is materializing on such issues and this will need to be addressed. In the short run, such transfers will need to be incorporated into the transfer control system.

In 2009-10, the Commission will conduct basic planning on these issues.

9. **ASSIST IN INITIATIVES TO REDUCE TRAUMATIC INJURY**
Fire departments are a great example of a public service that broadened its mission to provide a higher value to the public by working to prevent fires rather than just extinguish them. Trauma center personnel, driven by the carnage they witness, are uniquely motivated and credible for work on preventing injury, but are rarely given resources to do the job.

Each trauma center can serve as a “Community Focal Point on Injury”, which incorporates the following functions:

1. Identify injury causes in the community that are subject to intervention.
2. Define solutions that have proven effective in similar circumstances.
3. Focus media attention and community resources on the specific cause of injury.
4. Foster and coordinate the development of interventions.
5. Evaluate the effectiveness of specific prevention programs.

The Georgia Trauma System can use this same approach statewide in a collaborative role that assists established injury prevention organizations. In 2009-10 the Commission will ask members of the Trauma Advisory Council to form a committee to identify and assess feasible opportunities for injury prevention as the best means of reducing the tremendous costs of serious injury. Advocacy for a federally funded Injury Prevention Center will also be conducted.

10. **INTEGRATE TRAUMA SYSTEM WITH DISASTER/TERROR PREPAREDNESS**
Trauma care is already integrated with disaster and terror preparedness in Georgia. Trauma centers need to be able to amass resources needed to respond to mass casualties by scaling up their everyday operations. Ongoing relationships with EMS and other hospitals result in rapid patient triage and treatment decisions in community crises of all types.

Because Level I trauma centers have larger capacities, unique staffing, and enhanced training programs, they are often the logical base (in collaboration with regional EMS and homeland defense personnel) to coordinate hospital response to terror and disaster events. This has proven to be the case in North Carolina, Texas and Oklahoma where strong regional trauma systems have been built, and is emerging as a strong trend in other states.
As the regionalized Georgia trauma system materializes, its infrastructure will enhance trauma care’s involvement in local, regional, and state disaster preparedness planning. The emerging transfer control/communication system may prove to be a major asset to Georgia’s disaster/terror preparedness sector due to its potential to efficiently monitor and route emergency medical transports to acute care facilities throughout the state and greater region.

In 2009-2010, the Commission will collaborate with the Georgia Hospital Association and the Georgia Emergency Management Agency (GEMA) on how the trauma system can best enhance disaster/terror preparedness in Georgia.

11. **EXPAND SYSTEM TO ACUTE EMERGENCY CARE NEEDS**
A major benefit from constructing a robust, statewide trauma care infrastructure and system is that it can be expanded to address broader emergency care service issues. This enables a highly cost-effective approach to strengthening the entire problematic emergency care safety net. This is already being accomplished in some respects. Assuring adequate coverage for surgery, neurosurgery, orthopedic surgery, etc. for care of trauma patients also assures the same specialties will be available to care for non-trauma patients requiring their services.

An expansion to other time sensitive emergency health care issues such as strokes and heart attacks is feasible since they require the same systems approach and components required for trauma care. Before progress can be made in this regard, the trauma system must be substantially complete.

While this expansion to supporting broader emergency care functions promises to be an important return on the state’s investment in trauma care, in 2009-2010 the Commission will focus on building the core trauma system.

12. **DEVELOP TRAUMA SYSTEM REGIONALIZATION IN GEORGIA**
Key lessons from other states in building a strong and effective infrastructure to support trauma and emergency care include:

- Build a statewide system that incorporates all local and regional stakeholders and integrate them into a regionalized network.
- Define regions by patient referral patterns to enable participants within traditional catchment areas to work together with the major referral hospital.
- Provide technical assistance and basic operational funding to help regional groups organize.
- Build it for the long term and make it expandable to emergency care and related functions.
- Foster a grassroots network that generates statewide public support.

Georgia already has 10 established EMS regions which provide a base to build upon for development of trauma regions.
As Georgia considers regionalizing its trauma system, the first step is to define trauma regions. Presently, Georgia has four well positioned Level I trauma centers. If they were to serve as a focal point for trauma regions that incorporate existing EMS regions, the map above provides an example of how trauma regions could be designed. In the event that additional regional trauma centers develop, it is important to note that the determination of trauma regions may be dynamic to accommodate changes in trauma center resources and trauma patient flow patterns.

13. CONTINUE DEVELOPING TRAUMA SYSTEM POLICY/STAKEHOLDER STRUCTURE
Georgia enjoys strong leadership for trauma and EMS, and has established a successful Trauma Commission, composed of key stakeholders to guide the development of the Georgia Trauma System. The next step will be to extend this developing structure to the Level I trauma regions described above and to incorporate local EMS regions. The following chart outlines the emerging policy development structure for Georgia:

In essence, local and regional trauma stakeholder groups will provide input to the Commission based upon trauma patient and provider experiences and needs. The Commission will formulate policy, which will be implemented by the Office of EMS/Trauma. A statewide stakeholder group will be formed by the Commission with broad representation from Governor/Lt. Governor, Speaker of the House, State Legislature, Georgia Hospital Association, Georgia Association of EMS, Medical Association of Georgia, the business community, media, etc. to provide input and support the work of the Commission.

The Commission will regularly reach out to stakeholders for input, including EMS agencies, trauma centers, local hospitals, County government, injury prevention partners, community groups, local legislators, burn care, air medical transport and other interested and participating stakeholders.
OUR EMERGING VISION

This coalescing of collaborative leadership locally, regionally and statewide, will strengthen the Commission’s ability to quickly move this conceptual plan to reality throughout Georgia. In turn, this structure will reinforce the Commission’s role of planning, policymaking, oversight and advocacy.

14. BUILD TRAUMA SYSTEM INFRASTRUCTURE UNDER DEPARTMENT OF HEALTH

The Commission asked for a thorough, expert, “warts and all” review of Georgia’s trauma system by the American College of Surgeon’s Trauma System Consultation program, which occurred on January 4-7, 2009. While their findings were not surprising, they underscored the fact that critical components of the Georgia Trauma System infrastructure are either missing or largely unsupported. They include:

• Establishment by State statute of the trauma system lead agency’s authority and provision for promulgation of clear system regulation and rules.

• Comprehensive trauma system plan defines the system, its subsystems and structure, and establishes procedures and standards for implementation, monitoring and system performance improvement, and is supported by promulgated rules and regulations.

• Staffing for the State of Georgia to build and operate trauma and EMS systems.

These critical needs are addressed in detail by the ACS Trauma System Consultation report. In order to build an effective state trauma system, an effective and fully-staffed Office of EMS & Trauma under the Department of Health will be essential.

15. ESTABLISH MECHANISMS TO ASSURE EXCEPTIONAL ACCOUNTABILITY

Aggressive assessments of quality of care and system performance are core strengths of the field of trauma care in part because it was founded based upon such assessments. State-of-the-art performance improvement standards and accountability measures will be included in the Georgia trauma system, such as the following:

• Time trauma centers are on diversion and deny access to injured patients.
• Percent of state’s trauma patients (by severity) who reach trauma centers.
• Time of EMS transport from call to scene, and from scene to trauma center.
• The “preventable” death rate for each trauma center and overall system.
• Severity-adjusted trauma center length of stay/costs compared to national/state norms.
• Reductions in injuries targeted by injury prevention measures.

In 2009-10 the Commission will develop a performance improvement and accountability system to assure optimum performance by all trauma system components.

In addition to the accountability system described above, the Trauma Commission will arrange a follow-up visit from the American College of Surgeons Trauma Systems Review program at a time determined by the GTCNC. A return visit will assess Georgia’s progress on implementing recommendations made by the ACS during the course of its site visit in January 2009.
1. Obtain Permanent Trauma System Funding, as without a permanent funding mechanism, trauma system development cannot proceed and it will be impossible to recruit any new trauma centers into the Georgia trauma system.

2. Maintain and Expand Georgia’s Trauma Centers, Focusing On South Georgia, to achieve access to a Level I, II, or III trauma center within one hour for all Georgians by 2012, and maintain such access for three decades.

   A. Maintain Georgia’s remaining 13 Level I & II trauma centers, to prevent further closures, and strengthen them so they can meet state standards and increase their capacity for delivering trauma care.

      1. The 2008 funding has stabilized Georgia’s trauma centers. Due to a poor cost structure with substantial readiness and uninsured patient care costs, long term funding will be required.

   B. Expand number of trauma centers in Georgia, focusing on developing new Level I/II trauma centers in South Georgia along I-75, while seeking additional trauma center capacity in the greater Atlanta region and in other rural regions where such need exists.

      2. Commission leads the work in hospitals that have significant volumes of trauma patients to consider trauma center designation.

   C. Maintain/enhance trauma center review process conducted by Office of EMS/trauma, and supplemented by transparent economic reporting, to foster high level of trauma center performance.

      3. After EMS is strengthened in 2009-10 and new trauma centers are added, gap areas will be identified and filled.

   D. Develop EMS/air medical transport solutions for areas in which trauma center proximity is a challenge to effective trauma care.

      4. Continued funding to new trauma centers in Georgia.

3. Strengthen Emergency Medical Services Focusing on Rural Regions, to fully develop an integrated, statewide EMS/trauma system that assures high quality emergency care for all, regardless of their type of injury or illness, by 2014.

   A. Support EMS readiness for all emergency care with a focus on increasing Medicaid reimbursement for all EMS Medicaid-eligible transports, including a capital grants program for EMS to purchase new ambulances based upon need.

      1. The initial plan of involving a Medicaid match may not be effective over the long term, so other means to increase EMS Medicaid payments may be needed. Timeframe is 2009-10.

   B. Build GPS Automatic Vehicle Locator System in conjunction with the trauma transfer system and disaster preparedness systems in the state.

      2. Timeframe is 2009-11 for full development and integration into trauma and preparedness.

   C. Advocate on behalf of EMS in Georgia, a fragmented and under-resourced system that is essential to an effective trauma system.

      3. Timeframe is continuous with focus on short term improvements in Medicaid payments to EMS and funding for Office of EMS/trauma.

   D. Facilitate Consolidation of EMS Districts into a regionalized structure with many rural EMS organizations combining to create more efficient and effective regional EMS districts.

      4. This is a 5 year objective that will be pursued incrementally with EMS regions as effective strategies emerge and funding is available.

   E. Optimize air transport within emerging Georgia Trauma System with a coordinated approach by air medical providers to assure full coverage of the state.

      5. Timeframe is 2010-12.
## OUR EMERGING VISION

### STRATEGY/OBJECTIVES

1. **Develop Statewide Trauma Transfer System:** The trauma transfer system will move seriously injured patients quickly to the best facilities for their care, and will be organized at the four Level I Trauma Centers in GA.

   **A. Develop Statewide Trauma Transfer System for Georgia that coordinates transfer system with Level I regional transfer centers.**

   - **B. Develop regional trauma transfer protocols for GA that coordinate with Level I trauma centers.**

   - **C. Implement Statewide Pediatric Trauma Transfer System for Georgia that coordinates transfer system with Level I regional transfer centers.**

2. **Implement Telemedicine System:** To bring specialty surgical expertise and rural hospitals to help treat patients when unstable patients cannot be transported, as well as help determine whether few severely injured patients can remain in their own community for treatment.

   **A. Implement Pediatric Trauma Telemedicine System for Georgia that coordinates trauma system with transport and telemedicine.**

3. **Pilot Teletrauma System:** To establish remote surgical care for children in GA.

   **A. Establish tele-trauma pilot projects for children in GA.**

4. **Enlist Pediatric Telemedicine Program:** To bring specialty surgical expertise to rural hospitals.

   **A. Implement Pediatric Telemedicine Program to bring specialty surgical expertise for children.**

### MEASURES OF SUCCESS

- Development of pediatric trauma telemedicine system.
- Pilot teletrauma system for children.
- Teletrauma telemedicine program for children.

### TIMELINE/FRAMEWORK

#### FY 2009-2010

<table>
<thead>
<tr>
<th>Task</th>
<th>Funding Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Developing Commission workgroup and prepare common protocols for state telemedicine project.</td>
</tr>
<tr>
<td>B.</td>
<td>Developing collaborative efforts between level I trauma centers.</td>
</tr>
<tr>
<td>C.</td>
<td>Developing pediatric protocols for state telemedicine project.</td>
</tr>
</tbody>
</table>

#### FY 2009-2010 TASKS

<table>
<thead>
<tr>
<th>Objective</th>
<th>Lead Agency/Partner(s)</th>
<th>Timeframe</th>
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<tbody>
<tr>
<td>A.</td>
<td>GTNC Transfer System, Level I</td>
<td>June 2010</td>
</tr>
<tr>
<td>B.</td>
<td>CHOA Pediatric Telemedicine Program</td>
<td>June 2010</td>
</tr>
<tr>
<td>C.</td>
<td>GTNC Pediatric Telemedicine Program</td>
<td>June 2010</td>
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### FUNDING IMPLICATIONS

- Developing Commission workgroup and prepare common protocols for state telemedicine project.
- Developing collaborative efforts between level I trauma centers.
- Developing pediatric protocols for state telemedicine project.

### FULL-TEXT

**4. Develop Statewide Trauma Transfer System:** The trauma transfer system will move seriously injured patients quickly to the best facilities for their care, and will be organized at the four Level I trauma centers in GA.

   **A. Develop Statewide Trauma Transfer System for Georgia that coordinates transfer system with Level I regional transfer centers.**

   - **B. Develop Regional Trauma Transfer Protocol for GA that coordinates transfer system with the State Telemedicine Program.**

   - **C. Implement Statewide Pediatric Trauma Transfer System for Georgia that coordinates transfer system with Level I regional transfer centers.**

**5. Implement Telemedicine System:** To bring specialty surgical expertise to rural hospitals to help treat patients when unstable patients cannot be transported, as well as help determine whether few severely injured patients can remain in their own community for treatment.

   **A. Implement Pediatric Trauma Telemedicine System for Georgia that coordinates trauma system with transport and telemedicine.**

**6. Enlist Pediatric Telemedicine Program:** To bring specialty surgical expertise to rural hospitals.

   **A. Implement Pediatric Telemedicine Program to bring specialty surgical expertise for children.**

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2009-2014 GTNC STRATEGIC PLAN
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<tr>
<th>STRATEGY/OBJECTIVES</th>
<th>LEAD AGENCY/PARTNER(S)</th>
<th>FUNDING IMPLICATIONS</th>
<th>MEASURES OF SUCCESS</th>
<th>TIMEFRAME</th>
<th>FY 2009-2010 TASKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Strengthen Physician Support for Trauma Care in Rural Georgia.</td>
<td>Commission of Georgia</td>
<td>Major funding will be obtained from existing sources</td>
<td>Patient access to care will be enhanced</td>
<td>For 2009-10, collaborative planning will be conducted, with implementation in 2010-13, and ongoing leadership provided by Commission.</td>
<td>A. Develop a strategic plan for strengthening trauma physician resources.</td>
</tr>
<tr>
<td>8. Expand System to Rehabilitation, Burn Care &amp; Intestate Transfers: Establish rehabilitation and burn centers as active participants in Georgia's trauma system, resulting in coordinated post-acute and burn care for trauma victims.</td>
<td>Georgia Department of Human Services</td>
<td>Funding implication can be substantial, although other states have added support for rehabilitation.</td>
<td>Planning and support will be needed.</td>
<td>For 2009-10, collaborative planning will be conducted, with implementation in 2010-13, and ongoing leadership provided by Commission.</td>
<td>A. Develop a strategic plan in collaboration with trauma system stakeholders, hospital and government partners, and other health care providers in Georgia to expand rehabilitation and burn care services.</td>
</tr>
<tr>
<td>9. Assist in Initiatives to Reduce Traumatic Injury.</td>
<td>Georgia Department of Human Services</td>
<td>Major funding will be obtained from existing sources</td>
<td>Planning support will be needed.</td>
<td>For 2009-10, collaborative planning will be conducted, with implementation in 2010-13, and ongoing leadership provided by Commission.</td>
<td>A. Develop a strategic plan in collaboration with trauma system stakeholders, hospital and government partners, and other health care providers in Georgia to reduce traumatic injury.</td>
</tr>
<tr>
<td>10. Integrate Trauma System with Disaster/Terror Preparedness: Ensure optimum use of staff and support of the Georgia Trauma System by agencies charged with disaster and terror preparedness.</td>
<td>Georgia Department of Human Services</td>
<td>Major funding will be obtained from existing sources</td>
<td>Planning support will be needed.</td>
<td>For 2009-10, collaborative planning will be conducted, with implementation in 2010-13, and ongoing leadership provided by Commission.</td>
<td>A. Develop a strategic plan in collaboration with trauma system stakeholders, hospital and government partners, and other health care providers in Georgia to integrate the trauma system with disaster and terror preparedness.</td>
</tr>
<tr>
<td>11. Expand System to Acute Emergency Care Needs.</td>
<td>Georgia Department of Human Services</td>
<td>Funding implication can be substantial, although other states have added support for emergency care.</td>
<td>Planning support will be needed.</td>
<td>For 2009-10, collaborative planning will be conducted, with implementation in 2010-13, and ongoing leadership provided by Commission.</td>
<td>A. Develop a strategic plan in collaboration with trauma system stakeholders, hospital and government partners, and other health care providers in Georgia to expand the acute emergency care system.</td>
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<td>STRATEGY/OBJECTIVES</td>
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<tr>
<td>12. Develop Trauma System Regionalization in Georgia: Establish regional trauma system structure for Georgia that integrates with established EMS regions to build a strong statewide infrastructure.</td>
<td>A. Develop statewide Trauma Transfer System</td>
<td>To:</td>
<td>No funding implications; see additional funding required for regional trauma operations.</td>
<td>GTCN, EMS</td>
<td>FY 2009-2010 FUNDING</td>
</tr>
<tr>
<td>13. Continue Developing Trauma Policy/Statewide Structure: To:</td>
<td>B. Build and operationalize Level 1 Trauma Regions that integrate with EMS regions and ultimately serve all emergency care needs in GA.</td>
<td>Build functionality and organizational structure.</td>
<td>No funding implications; see additional funding required for regional trauma operations.</td>
<td>GTCN, EMS</td>
<td>FY 2009-2010 FUNDING</td>
</tr>
<tr>
<td>14. Build Trauma System Infrastructure Under Department of Health:</td>
<td>C. Define and establish relationship between each regional structure and the statewide structure.</td>
<td>Cooperate with all stakeholders.</td>
<td>No funding implications; see additional funding required for regional trauma operations.</td>
<td>GTCN, EMS</td>
<td>FY 2009-2010 FUNDING</td>
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**Our Emerging Vision**

The transfer system will be a critical mass of trust to effectively support trauma and emergency care. The actual formation of the statewide trauma system will provide overall direction to trauma system plan. The mission’s strategic plan, advocating for funding, and organizational structure is necessary. Adequate levels of permanent, declared, and sustainable funding are required to maintain the existing network and to develop a true trauma system for GA. **Incorporated in administrative and office of EMS funding.**

**Foundation of Objectives and Plan**

1. **A. The Georgia Trauma Care Network Commission will conduct a statewide review of trauma system performance.**

**Incorporated in administrative and office of EMS funding.**

2. **B. The Office of EMS/Trama is designated as the designated trauma center oversight agency with broad responsibility for the development, oversight, monitoring, and regulation of the trauma system plan.**

**Incorporated in administrative and office of EMS funding.**

3. **C. Work with Office of EMS/Trama to prepare statewide trauma system plan and promote its adoption by the regional trauma system.**

**Incorporated in administrative and office of EMS funding.**

4. **D. Seek additional levels of permanent and recurring funding for components of the statewide trauma system plan to support the statewide trauma system.**

**Incorporated in administrative and office of EMS funding.**

5. **E. The Georgia Trauma Care Network Commission will review the Office of EMS/Trama statewide review of trauma system performance.**

**Incorporated in administrative and office of EMS funding.**

6. **F. The Georgia Trauma Care Network Commission will review the plan for trauma system development and implementation.**

**Incorporated in administrative and office of EMS funding.**

7. **G. The Georgia Trauma Care Network Commission will develop recommendations for the plan for trauma system development and implementation.**

**Incorporated in administrative and office of EMS funding.**

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15. **O. The Georgia Trauma Care Network Commission will develop recommendations for the plan for trauma system development and implementation.**

**Incorporated in administrative and office of EMS funding.**