

Georgia Trauma System Regionalization Pilot Project Evaluation

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Prepared by

Public Health Consultants, LLC

for the

Georgia Trauma Commission

GEORGIA TRAUMA CARE NETWORK COMMISSION

"Right patient, Right hospital, Right time, Right means"

Georgia Trauma System Regionalization
Pilot Project Evaluation

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I. Executive Summary

In 2007, the Georgia Legislature through Senate Bill 60 established the Georgia Trauma Care Network Commission, also known as the Georgia Trauma Commission (GTC). The GTC has the responsibility to establish, maintain and administer a trauma center network and to coordinate the best use of existing trauma facilities in Georgia.¹ Following a Georgia trauma system review by the American College of Surgeons' Trauma System Consultation Program in January 2009, the GTC identified the need for both a comprehensive state trauma system plan and for a statewide trauma communications system. In 2009, the GTC developed the "Regional Trauma System Planning Framework" and a plan to test that framework through a pilot project ("Pilot Project for Georgia Trauma System Regionalization, White Paper"). The pilot project tested the framework as a regional trauma plan development guide and was the opportunity for the GTC to operationalize the Statewide Trauma Communications Center. In 2011, the pilot project was funded and was implemented in three of the state's 10 EMS regions (Regions V, VI and IX).

This report provides a qualitative evaluation of the pilot project For Georgia Trauma System Regionalization. The evaluation is based on interviews with trauma system stakeholders in each of the three pilot project regions. Interviewees were asked a set of questions intended to assess how well the pilot project had achieved each of the six identified goals specifically within their respective EMS Region. Each region is unique and has different assets, stakeholders and providers. This qualitative assessment evaluates how these unique regions implemented the pilot project. This evaluation addresses to what extent the regions accomplished the pilot project goals.

The evaluation found that the pilot project has succeeded in introducing the framework as a planning tool for regional trauma plan development. The framework has been utilized as a guide to develop regional trauma plans. It was flexible and accommodated various regional needs, as the needs of each region are different. The GTC developed and operationalized the Trauma Communications Center as a statewide communications component. This evaluation of the pilot project found that utilization of the TCC varies by regions. RTAC and TCC staff are working to address communication needs and technology challenges between the TCC and EMS Services and hospitals.

The pilot project brought together multidisciplinary stakeholders in each region. This evaluation found that these discussions were successful in the development of a trauma plan and a Regional Trauma Advisory Committee (RTAC). Pilot region stakeholders consistently described the positive value of developing a plan for their region with input from a variety of perspectives including trauma centers, non-designated hospitals, physicians, EMS, Public Health and the public.

Interviewees recognized and articulated a common Trauma System goal: get the right person to the right place at the right time by the right means. The best trauma system possible in Georgia requires ongoing information sharing and discussion.

II. Overview and Context

Each year in the United States, approximately two million people are hospitalized for treatment of a traumatic injury². Even though there have been many safety measures in effect including seatbelts and airbags among others, injury remains the third leading cause of death overall and the leading cause of death up to 44 years of age.³ The years of potential life lost because of injury outweighs the loss from cancer, heart disease and stroke combined.⁴ The National Study on the Costs and Outcomes of Trauma (NSCOT) showed that the risk of death is 25% lower when care is provided in a Level I trauma center than when it is provided in a nontrauma center hospital.⁵ Similarly, a retrospective cohort study of 11,398 severely injured adult patients who survived to hospital admission in Ontario, Canada, indicated that mortality was significantly higher in patients initially under-triaged to nontrauma centers.⁶ However, not all injured patients can be quickly nor should be transported to a Level I trauma center. Other hospitals, lower-level designated trauma centers and committed community hospital emergency departments (ED) can effectively meet the needs of patients with less severe injuries and may be more readily accessed. Transporting all injured patients to Level I centers—regardless of injury severity—limits the availability of Level I trauma center capabilities for those patients who really need the level of care provided at those facilities.⁷ Population-based research assessing the effectiveness of trauma systems concluded that there was approximately a 15-20% reduction in death among seriously injured trauma patients due to the implementation of a trauma system.⁸

The Georgia Trauma Commission (GTC) has the responsibility to establish, maintain and administer a trauma center network and to coordinate the best use of existing trauma facilities in Georgia. The GTC is to coordinate its activities with the Department of Public Health including data collection to evaluate the provision of trauma services and to determine the best practice and methods to improve trauma care services.⁹ Working to identify regional needs is not a new concept in Georgia. The formation of Regional Emergency Medical Service Advisory Councils (EMS Regional Councils) is included in the Department of Public Health, Office of Emergency Medical Services and Trauma Rules and Regulations established in the 1980's.¹⁰ There are 159 counties in Georgia, which are divided into ten EMS regions. Each region has an EMS Regional Council. Some Councils have developed Trauma Committees. For example, the Region III EMS Regional Council has one of the most long-standing Trauma Care Committees.¹¹ Currently (December 2012) in Georgia, there are six Level I Trauma Centers (five adult and one pediatric); nine Level II (eight adult and one pediatric); two Level III; five Level IV; and two designated burn trauma centers. Three of the five adult Level I centers are designated “with pediatric commitment.” See Figure 1.

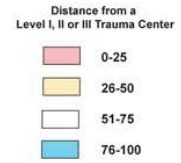
Following a trauma system review by the American College of Surgeons Trauma System Consultation Program in January 2009, the GTC identified the need for both a comprehensive state trauma system plan and for a statewide trauma communications system. A “Regional Trauma System Planning Framework” was developed and approved by the GTC in October 2009.¹² The framework defines and describes the Georgia trauma system and provides a planning guide to develop trauma system plans in each EMS Region. In 2009, the “Pilot Project for Georgia Trauma System Regionalization White Paper” was approved by the GTC.¹³ The purpose of the pilot project was to test the framework as a regional trauma plan development guide and to operationalize the Georgia Trauma Communications Center.



Georgia Trauma Commission

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- ★ Level I Trauma Centers
- ☆ Level I Trauma Centers with Pediatric Commitment
- Level II Trauma Centers
- Pediatric Trauma Centers including Level I Children's Healthcare of Atlanta at Eggleston
- Level III Trauma Centers
- Level IV Trauma Centers
- Burn Centers



*Adjacent state trauma center locations obtained May 2012 from states' regulatory agency's websites.

This map was last updated 6/25/12.

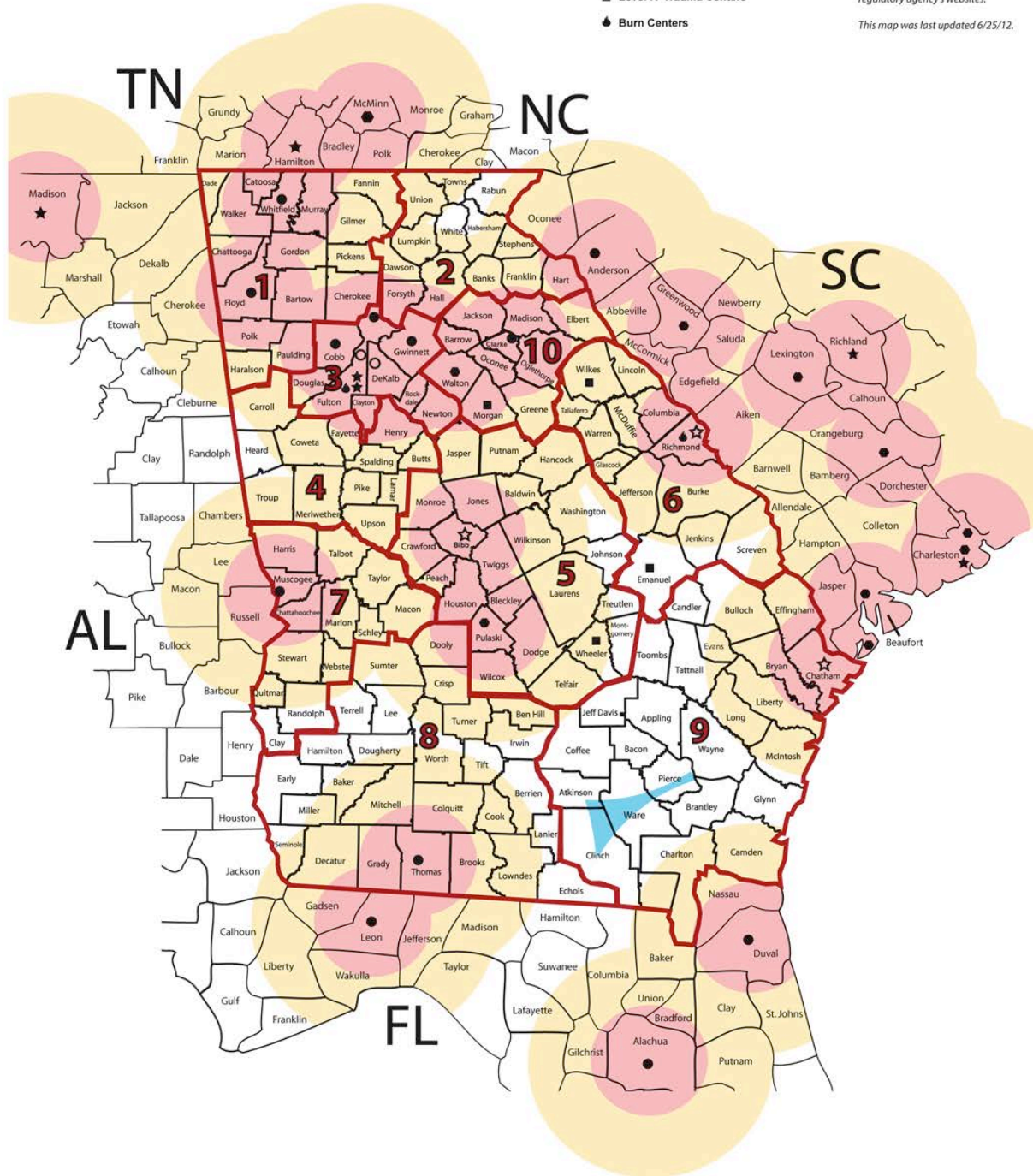


Figure 1: Designated Trauma Centers by EMS Region in Georgia as of June 2012

The GTC funded the pilot project via administrative support grants to the Level I trauma centers in EMS Regions V, VI and IX. The white paper identified six pilot project goals. Goals 1 through 4 directly relate to the implementation of the pilot project. Goals 5 and 6 are overarching project goals that relate to the future development of regional trauma plans utilizing the framework. The purpose of this qualitative evaluation is to assess the degree of accomplishment of pilot project goals 1 through 4 and to provide information related to goals 5 and 6.

The pilot project goals are:

- Goal 1) Introduce trauma system regionalization as a possible construct for Georgia Trauma System development;
- Goal 2) Test the Framework as a planning guide for a regional Council to develop a plan;
- Goal 3) Operationalize the Georgia Trauma Communications Center (TCC) as the interoperable statewide communication component of the System; and
- Goal 4) Identify and involve regional trauma system stakeholders including physicians, EMS, designated Trauma Centers, non-designated participating hospitals, hospital personnel, local governments and the public in system planning.

The Overarching Goals are:

- Goal 5) Revise the Framework as a regional planning guide pursuant to the results of the pilot evaluation, and
- Goal 6) Identify specific steps to expand the Georgia Trauma System statewide by introducing regional trauma system planning statewide and by extending the coverage area of the Trauma Communications Center.

Regional Trauma System Planning Framework

- Defines and describes the Georgia trauma system as comprised of integrated systems and plans with a centralized and statewide trauma communications center as the common component of a state trauma system.
- Identifies regional trauma system components to improve a region's transport to care: pre-hospital, hospital, and communications with ongoing system assessment and improvement, as needed
- Establishes an RTAC in each Region to develop and maintain the Regional Trauma System Plan and to monitor system compliance and improvement activities
- Describes the development of a regional trauma plan including decisions about how regional trauma system components work together to get the right patient, to the right care, at the right time

III. Evaluation Methodology

To evaluate the pilot project, key stakeholders were identified by critical positions in the three EMS regions. Several statewide system stakeholders were included as interviewees because of their knowledge relevant to the evaluation of the project goals. Individual telephone interviews were conducted between July and October 2012. A total of eighteen (18) people were interviewed. Interviewees included: GTC and OEMS&T staff, EMS Regional Council Chairs, Regional Trauma Advisory Committee/Council (RTAC) Chairs, Level I Trauma Coordinators/Managers from EMS Regions V, VI and IX, RTAC staff, OEMS&T Regional Coordinators, Georgia Association of Emergency Medical Services (GAEMS) Chairman and the TCC Manager.

This qualitative evaluation utilizes interview information representing the views, opinions and ideas of the interviewed stakeholders related to the six pilot project goals. The evaluation includes information from the regional trauma plans. EMS Regions V, VI and IX each provided its regional trauma plan.^{15, 16, 17} Based on this information, the evaluation assesses the degree of accomplishment of pilot project goals 1 through 4. Goals 5 and 6 are overarching goals that relate to the future development of regional trauma plans utilizing the framework.

Evaluation criteria were established to score the accomplishment of goals 1-4. Evaluation criteria are not provided for overarching goals 5 and 6 as these goals relate to future changes to the framework revision and statewide regional trauma system development. The report provides the next steps to be considered and discussed among trauma system stakeholders.

The evaluation criteria are as follow:

- Goal Met: all three regions accomplished the goal
- Goal Substantially Met: two regions accomplished the goal
- Goal Partially Met: one region accomplished the goal
- Goal Not Met: none of the three regions accomplished the goal.

For the evaluation, the pilot project goals were interpreted to include:

Goal 1) Introduce trauma system regionalization as a possible construct for Georgia Trauma System development.

The evaluation criteria are stakeholder actions taken within the region to introduce the pilot project and the framework to stakeholders and actions taken to develop an RTAC.

Goal 2) Test the Framework as a planning guide for a regional Council to develop a Plan.

The evaluation criterion is the development of a regional trauma plan including the core elements identified in the framework. These core elements are:

Part One: Components and Organization

Part Two: Regional Trauma System Function and Pre-Hospital Component.

Note: Part Three: Regional Plan Revision Process was not included since these plans have not been in place for two years.

Goal 3) Operationalize the Georgia Trauma Communications Center (TCC) as the interoperable statewide communication component of the System.

The evaluation was conducted based on two perspectives, statewide and from the regions participating in the pilot project. The evaluation criteria are:

Goal 3A) The GTC developed the TCC as the statewide communication component of the Georgia Trauma System.

Goal 3B) The TCC is actively in use in each pilot project region measured by its utilization for patient transport and destination recommendations.

Goal 4) Identify and involve regional trauma system stakeholders including physicians, EMS, designated Trauma Centers, non-designated participating hospitals, hospital personnel, local governments and the public in system planning.

The evaluation criterion is the inclusion of regional trauma system stakeholders in planning for regional trauma plan development.

Overarching Goals 5 and 6:

Goal 5) Revise the Framework as a regional planning guide pursuant to the results of the pilot evaluation.

Goal 6) Identify specific steps to expand the Georgia Trauma System statewide by way of introducing regional trauma system planning statewide and by extending the coverage area of the Trauma Communications Center.

The report provides information collected during stakeholder interviews related to goals 5 and 6. This information should be discussed among trauma system stakeholders to:

- make framework revisions;
- strengthen the implementation of regional trauma system planning; and
- be taken into consideration prior to regional trauma system planning expansion statewide.

Of importance to note, the framework describes the development of a Regional Trauma Advisory “Council” that reports directly to OEMS&T; however, two of the three regions in the pilot have created a Regional Trauma Advisory Committee that reports to the EMS Regional Council. The term RTAC will be used in this report to describe both organizational structures. See Glossary for additional terms.

At the start of this evaluation, Region V and VI regional trauma plans had been in place (from the date of GTC approval) for ten months and eight months respectively. The Region IX Trauma System Regionalization plan had been in place (from the date of GTC approval) for five months. During the July-October 2012 evaluation period, the pilot project continued which resulted in new information during the evaluation period. To the degree possible, new information has been included in this report.

Once the interviews were completed, the draft summary of the interview information for each region was sent to the interviewees from that region. All interviewees were given an opportunity to provide feedback; comments were received from seven interviewees. Their additional information was incorporated into Appendix A.

draft

IV. Evaluation Results

Based on the interviews conducted, pilot project goals were evaluated per established criteria. Information used to determine the result for each goal and the related region is noted. Additional interview details from each region are included in Appendix A. Hyperlinks to the regional trauma plans for Regions V and VI and the regional business plan for Region IX are available in V. References.

Goal 1) Introduce trauma system regionalization as a possible construct for Georgia Trauma System development.

The evaluation criteria are stakeholder actions taken within the region to introduce the pilot project and the framework to stakeholders and actions taken to develop an RTAC.

Result: Goal was met.

Result Support:

- The development of a small, credible steering committee or pilot project leaders to guide the introduction of regionalization was important. (relevant to all three regions)
- Pilot project leaders scheduled individual face-to-face meetings with regional stakeholders such as hospitals, EMS Services and physicians to promote a shared understanding about the RTAC vision. In some regions, pilot project leaders traveled to meet regional stakeholders in their communities. (relevant to all three regions)
- Pilot project leaders mailed letters to all stakeholders in the region including hospitals (trauma centers and non trauma centers) and EMS Services to describe the intended vision of a regional trauma plan: get the right patient to the right hospital at the right time. (relevant to all three regions)
- Hired a knowledgeable and experienced RTAC Plan Coordinator with GTC-grant project funding. The Coordinator was essential to project success because of their knowledge and relationships with hospitals and EMS Services in the region. (relevant to Region V)
- Scenarios were used at the face-to-face meeting to illustrate the value of a regional plan. (relevant to Region V)
- Conducted multiple stakeholder meetings to discuss and begin RTAC plan development. Meetings were well attended. (relevant to all three regions)
- Included hospitals and EMS Services adjacent to the region but not geographically within the region in stakeholder meetings. (relevant to all three regions)
- As part of training, project leaders made visits to some EMS Services to talk about the regional plan and answer questions. (relevant to Region V)

Observations/Information About Differences Among Regions:

- The pilot project leadership varied among the three regions but all included Trauma Coordinators and Trauma Surgeons from Level I Trauma Centers.
- Region V and VI developed Regional Trauma Advisory Committees and Region IX established a Regional Trauma Advisory Council. The Regional Trauma Advisory Committees report to their respective EMS Council; the Regional Trauma Advisory Council reports to the GTC and

OEMS&T. The Framework and White Paper recommended that the RTACs ultimately report to the OEMS&T. Region IX elected to establish a matrix structure with relationships established with the Region IX EMS Council, GHA, Ga ACSCOT, the GTCNC and OEMS&T.

- The EMS community has concern that the Region IX RTAC is not a Committee of the EMS Council.
- According to the Attorney General’s opinion,¹⁴ RTACs are considered review organizations and are afforded peer review protection and their work is non discoverable.

Goal 2) Test the Framework as a planning guide for a regional council to develop a plan.

The evaluation criterion is the development of a regional trauma plan including the core elements identified in the framework. These core elements are:

Part One: Components and Organization

Part Two: Regional Trauma System Function and Pre-Hospital Component.

Note: Part Three: Regional Plan Revision Process was not included since Plans have not been in place for two years.

Result: Substantially Met (Part One)

Partially Met (Part Two)

Table 1: Framework Core Elements Identified in the Regional Trauma Plans

Regional Trauma Plan	Region V	Region VI	Region IX	Evaluation Criteria Based on Framework
Part One: Components and Organizations				
Pre-Hospital	X	X	0	-Inclusion of TSEC criteria to determine entry into the trauma system - EMS education regarding plan including protocol for interaction with the TCC
Hospital	X	X	0	- Resource Availability Display information -Non designated hospital inclusion
Communications	X	X	0	-Info. regarding status of pre-hospital capability, trauma center and non-designated participating hospital resource availability through TCC and RAD
Data-Driven Performance Improvement	X	X	0	PI Utilizes: -EMS run data -Trauma Registry data maintained at each TC -TCC data -Each hospital conducts internal performance improvement

Injury Prevention and Outreach	X	X	X	-Describe approach and goals for injury prevention.
Regional Trauma Advisory Council/ Committee	X	X	X	-Describes responsibilities and reporting relationship -Multidisciplinary RTAC membership
Part Two: Regional Trauma System Function				
Trauma System Entry Criteria	X	X	O	Inclusion of Primary Triage based on TSEC, CDC Field Triage Decision Scheme
Communication Protocols	O	O	O	Describes the basic information EMS provides to TCC and the role of the TCC Note: Communication information is included in part one but specific protocols are not described.
Systems Operation	X	O	O	-Secondary Triage to determine Trauma Center destination
Regional Trauma System Compliance	X	X	X	-Oversight of system compliance, participation and effectiveness. -Reports provided regarding effectiveness and improvement needed to EMS Council and/or OEMS&T (depending on RTAC structure)
Part Three: Regional Trauma System Revision Process				
Regular Review and Revision, as needed	NA	NA	NA	Review recommended every 2 years

Result Support:

- Regional trauma plans as described in the framework were submitted and approved by the GTC in September 2011 (Region VI) and November 2011 (Region V). A business plan was approved by the GTC for Region IX in March 2012.
- Regional trauma plans from Regions V and VI have all the required components for part one of the framework.
- Regional trauma plans from Regions V and VI have most of the required components for part two; however, both plans do not include TCC communications protocols. Region VI does not include Pre-Hospital Destination Guidelines. Guidelines are currently being developed.
- The framework was a useful tool for RTAC and regional trauma plan development. (relevant to all three regions)
- All three regions worked closely to share experiences on RTAC and regional trauma plan development. (relevant to all three regions)
- Establishing the RTAC and developing a regional trauma plan is very time and level-of-effort intensive. (relevant to all three regions)

- Misunderstanding occurred among some stakeholders who believed the regional trauma plans would direct or mandate EMS service transport to a specific location for treatment. (relevant to all three regions)

Observations/Information About Differences Among Regions:

- Project leaders surveyed EMS Services to determine what services had a trauma patient triage protocol/policy in place and who incorporated CDC criteria into their protocols/policies. (relevant to Region V)
- The adaptation and inclusion of CDC Field Triage Decision Scheme Pre-Hospital Destination Guidelines and the Hospital Guidelines for the Inter-facility Transfer of Trauma System Patients were important for “buy-in” to the regional trauma plan. (relevant to Region V)
- The framework includes the importance of injury prevention and outreach; however, it is not specifically detailed in part one, Components and Organization section of the framework. However, the regional plans in Regions V and VI describe injury prevention and outreach in their plans.

Goal 3): Operationalize the Trauma Communications Center (TCC) as the interoperable statewide communication component of the System.

The evaluation was conducted based on two perspectives, statewide and from the regions participating in them. The evaluation criteria are:

Goal 3A) The GTC developed the TCC as the statewide communication component of the Georgia Trauma System.

Goal 3B) The TCC is actively in use in each pilot project Region measured by its utilization for patient transport and destination recommendations.

Result:

Goal 3A) Goal Met. The GTC developed the TCC as the statewide communication component of the Georgia Trauma System.

Goal 3B) Goal Partially Met. Based on the data below, the TCC is actively in use in Region V, not actively used in Region VI and not implemented yet in Region IX.

Result Support:

- The TCC is actively utilized in Region V and the majority of counties in the Region have used the TCC. See Table 2.
- The TCC is in use in Region VI; however, it is used on a limited basis because of the inability of the largest EMS Service to contact the TCC. This EMS Service does not allow EMS personnel to use cell phones and there is limited two-way radio communication between EMS and the TCC. Cell phone or radio use is needed to communicate to the TCC. See Table 2.
- All three regions introduced the concept of the Trauma Communications Center to trauma system stakeholders at individual and/or group face-to-face meetings. (relevant to all three regions)

- Regional trauma plans describe the TCC, but protocols for TCC use are not included in regional trauma plans. (relevant to Region V and VI)
- Many interviewees expressed that the majority of EMS Services already knew where they needed to take patients for care and did not see the need to call the TCC.
- Positive interactions between the RTACs and TCC Manager have resulted in improvements in hospital, EMS and TCC communication. Examples include: upcoming planned testing for use of the Resource Availability Display (RAD) by EMS Services and the use of TCC by EMS dispatchers for those without cell phones.
- A total of 616 calls were made to the TCC between January 2012 and October 2012. One-third of the calls were made while en route to the hospital. EMS Services made another third of the calls when the patient was already at the hospital. While this communication pattern does not represent the intended process for EMS communications with the TCC, it represents a positive pattern of using the TCC as a part of trauma patients' dispositions. See Table 3.

Region	Number of Patients
Region 1	0
Region 2	0
Region 3	1
Region 4	72
Region 5	452
Region 6	72
Region 7	4
Region 8	4
Region 9	9
Region 10	2
Total	616

Total patients on scene.	104
Total patients en route to hospital.	267
Total patients when EMS is en route to scene	22
Total patients already at hospital	213
Total patients from inter-facility transfers	10
Total number of calls based on location	616

Observations/Information About Differences Among Regions:

- The number of patient calls going through the TCC with recommendations made and accepted are modest. See Table 4 and 5.
- Current TCC protocols do not allow a transport recommendation to a non-designated or community hospital for patients that meet Trauma Systems Entry Criteria unless regional guidelines indicate transfer to a non-designated or community hospital is acceptable. Region V trauma plan, Pre-Hospital Destination Guidelines includes specific provisions for transport in accordance with local medical direction and/or agency protocols for patients having pelvic fractures without significant mechanism of injury.

- Concerns have been expressed by hospitals about Resource Availability Display (RAD) relationship to HIPAA and EMTALA agreements. The Attorney General is currently addressing this issue. (relevant to Region IX)

Table 4									
Number of patients who went through the TCC and met TSEC criteria; recommendation was given/accepted, went to a designated trauma center									
January 1, 2012 through June 30, 2012									
ALL		Inter-facility transfers		En route to scene		On Scene		En route to Hospital	
Level 1	31	Level 1	2	Level 1	1	Level 1	19	Level 1	9
Level 2	0	Level 2	0	Level 2	0	Level 2	0	Level 2	0
Level 3	1	Level 3	0	Level 3	0	Level 3	0	Level 3	1
Level 4	0	Level 4	0	Level 4	0	Level 4	0	Level 4	0
Total	32	Total	2	Total	1	Total	19	Total	10

Table 5									
Number of patients who went through the TCC and met TSEC criteria; recommendation was given/accepted, went to a designated trauma center									
July 1, 2012 through September 30, 2012									
ALL		Inter-facility transfers		En route to scene		On Scene		En route to Hospital	
Level 1	12	Level 1	0	Level 1	0	Level 1	2	Level 1	10
Level 2	0	Level 2	0	Level 2	0	Level 2	0	Level 2	0
Level 3	0	Level 3	0	Level 3	0	Level 3	0	Level 3	0
Level 4	0	Level 4	0	Level 4	0	Level 4	0	Level 4	0
Total	12	Total	0	Total	0	Total	2	Total	10

Goal 4) Identify and involve regional trauma system stakeholders including physicians, EMS, designated Trauma Centers non-designated participating hospitals, hospital personnel, local governments and the public in system planning.

The evaluation criterion is the inclusion of regional trauma system stakeholders in planning for regional trauma plan development.

Result: Goal was met.

Result Support:

- Multidisciplinary participants attended meetings to discuss regional trauma plan development. Overall multidisciplinary representation was excellent; however, Regions expressed the desire for more physician participation including ED physicians, EMS Medical Directors, and agencies with a prevention focus and rehabilitation services. (relevant to all three regions)

- The benefits of having multidisciplinary participants working together were valuable toward trauma system development. (relevant to all three regions)
- The majority of the stakeholders including physicians, EMS, designated Trauma Centers non-designated participating hospitals, hospital personnel, local governments and the public participated in RTAC meetings and RTAC Subcommittees. (relevant to Region V and VI)
- Interviewees in Region V and VI related multidisciplinary representation on the EMS Regional Council promotes confidence and communication between the Council and the RTAC; strong working relationships among disciplines are critical and an important contributor to success.

Observations/Information About Differences Among Regions:

- Regional planning meetings were rotated to different regional locations to promote accessibility and minimize turf issues. (relevant to Region V)
- Diverse stakeholders were engaged to assure a variety of perspectives in trauma plan development. (relevant to Region V and VI)
- Smaller rural EMS providers did not attend stakeholder meeting perhaps because they are not 911 providers and/or they may have mutual aid agreements in place. (relevant to Region IX)

Overarching Goals 5 and 6

Goal 5) Revise the Framework as a regional planning guide pursuant to the results of the pilot evaluation.

Based on the interviews, framework revisions have been suggested which may be helpful to regions utilizing the framework for trauma plan development.

Suggested Framework revisions are:

- Identification of the HRSA Model Trauma System Planning and Evaluation Trauma System Self-Assessment Tool: Benchmarks, Indicator, and Scoring (BIS) as an important resource to use and the first step for plan development. Regions used the BIS to evaluate the existing resources and to identify existing trauma system gaps. BIS assessment can inform the development of the Subcommittees/Task Forces for regional trauma plan development.
- Creation of RTAC Subcommittees to help develop the regional trauma plan and to monitor effectiveness and identify improvements needed as plan is implemented. For RTACs that are a Committee which reports to the EMS Council, review how RTAC Subcommittees and EMS Council Committees can work together or combine work since goals and members may be similar.

- Referencing and inclusion of the national research which demonstrates a reduction in preventable death rates when treatment occurs in a designated trauma center and inclusion of the research demonstrating a risk reduction of seriously injured trauma patients due to the implementation of a trauma system which includes providing care through regionalized trauma system infrastructure.
- Prevention of unnecessary injuries and deaths due to trauma is one of the major goals of the trauma system. The framework needs to include Injury Prevention as a component in part one, components and organization and part two, regional trauma system function. Injury prevention programs specific to the region based on regional injury data and trends need to be included in the Plan.
- Provision of additional details in the framework *Appendix F. Regional Trauma Plan Development Process* to include implementation strategies that worked for the pilot project (e.g. introduction letters, face-to-face meetings).
- Emphasis on the development of guidelines not protocols. Protocols are developed by local EMS Medical Directors in accordance with guidance from OEMS&T. The regional trauma plans will include agreed upon guidelines for their region; however, EMS Service protocols must be followed.
- The framework describes the development of a Regional Trauma Advisory Council that reports directly to OEMS&T; however, two of the three regions in the pilot have created a Regional Trauma Advisory Committee that reports to the EMS Regional Council. This infrastructure variable should be addressed in the framework revision.
- Inclusion of a list of resources useful for regional trauma plan development. Examples include: Minnesota Trauma System Performance Improvement Plan, Birmingham (AL) Regional Emergency Medical Services System Regional Trauma Plan, the New Mexico Trauma Strategic Action Plan and ACS Essential Criteria for Levels of Design.
- Strengthening information in the framework about the roles and responsibilities of the GTC and OEMS&T by specifically articulating how the organizations work together to improve trauma care in the region.

Goal 6) Identify specific steps to expand the Georgia Trauma System statewide by way of introducing regional trauma system planning statewide and by extending the coverage area of the Trauma Communications Center.

The information below should be discussed among trauma system stakeholders to strengthen the introduction and implementation of regional trauma system planning statewide.

Suggested next steps (not in priority order) are:

1. Stakeholders want to understand the result of the pilot project including what works well and what needs to be changed before expansion occurs.
2. Consider expansion in a region with multiple Level 1 Trauma Centers and in a region with no trauma centers to gather information about regional trauma plan implementation.
3. TC and OEMS&T Leadership have emphasized that their organizations have the same goal: to get the right person to the right place at the right time; however, ongoing dialogue and clarification is needed to continue to strengthen the partnership between GTC and OEMS&T and to implement improvements as needed. The roles and responsibilities of each related to trauma system development need to be more clearly described in the framework.
4. Continue to adapt TCC operations to accommodate regional trauma planning. Discuss the ability for TCC to recommend non-designated hospitals to provide care. Explore additional communication mechanisms for communication between EMS Services and TCC to overcome EMS Service inability to use cell phones and limitations of two-way radio communication. (e.g. computer display)
5. There are multiple sources of trauma and EMS data held by different key organizations (GTC, OEMS&T, GHA). There is a need to discuss and develop agreed upon collection processes to measure patient transport time to definitive care for all regions. Utilize and integrate information from the TCC, EMS Reports, GHA Hospital Discharge Set, Trauma Registry and 911 Providers.
6. Determine whether future funding will be available for ongoing RTAC support.

V. References

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draft

Appendix A
Region V
Interview Results

draft

Region V

Goal 1) Introduce trauma system regionalization as a possible construct for Georgia Trauma System development.

Successes:

The Trauma Regionalization Pilot and RTAC Action Plan were first presented to Regional EMS Advisory Council in January 2011.

The RTAC Steering Committee, consisting of the Regional EMS Advisory Council Chair, the Regional EMS Program Director, the Trauma Services Manager, and a Trauma Surgeon, along with the RTAC Coordinator worked to familiarize stakeholders with regionalization concepts as set forth in the Regional Trauma System Planning Framework and White Paper.

Members of the RTAC Steering Committee and the RTAC Coordinator met with key stakeholders individually and discussed the RTAC vision with an emphasis on getting patients the care they need.

- The project leaders sent a letter and information packet to key all stakeholders in the region, EMS Services and hospitals (trauma centers and non trauma centers), to describe the idea of a regional plan and the intended goal of the plan: get the right person to the right place at the right time.
- The Steering Committee followed up the letter with face-to-face meetings with hospital and EMS Directors. During the meetings, the Steering Committee answered questions regarding the pilot and solicited stakeholder participation in regional trauma planning. The committee used scenarios to illustrate the potential of a regional plan (e.g. a paramedic from a rural county might not know what is happening in a particular trauma facility).

The project hired a knowledgeable and experienced person with trauma experience as project coordinator with project funding.

- The Coordinator was essential to project success. The Coordinator's knowledge and relationships with hospitals and EMS Services in the region was very beneficial. The Coordinator hired as a .25 FTE.

EMS and hospital representatives from four counties located outside the Region attended initial RTAC meetings. They were included due to their proximity to the Region and patterns of transport to MCCG.

- Of those invited from outside the Region, Crisp Regional Medical Center and Upson Regional Medical Center have both EMS and hospital representatives that actively participate in the Region V RTAC and communicate with the TCC.
- Representatives from Emanuel Medical Center and Meadows Regional Medical Center participated in the Region V Trauma Plan Development and remain active participants in sister RTACs.

The majority of stakeholders in Region V believe that having RTAC as a committee of the EMS Council has worked and creates buy-in from the EMS community.

The Region V RTAC was structured to operate in accordance with the current Region 5 EMS Advisory Council Bylaws. The RTAC is a subcommittee of the Regional EMS Advisory Council and is therefore governed by the Region V EMS Advisory Council Bylaws.

- Current EMS Council by-laws require the RTAC Chair to be a member of the EMS Advisory Council and to be appointed by the Regional Advisory Council Chair.
- The Region V EMS Advisory Council Chair appoints RTAC members.
- Appointed RTAC members are able to send proxies if they are unable to attend.
- As a part of regional training, project leaders made visits to many EMS Services in the region to talk about the regional plan and answer questions.
- The Coordinator visited many EMS Services to clarify understanding about the regional trauma plan, answer questions and dispel any misinformation.

Challenges:

Structural issues regarding RTAC needed to be figured out with the EMS Council.

- The appointed RTAC Chair was less able to participate in RTAC than anticipated due to other responsibilities.
- Initially, there was some uncertainty regarding whether or not the RTAC Vice Chair needed to be an EMS Council member. Regional V Plan states, “the Vice-chair is not required to be a member of the Region V EMS Council.”
- RTAC did not have a meeting quorum for a few meetings and the use of proxies had not yet been determined. Note: At the last RTAC meeting, there was a quorum and proxy votes were allowed.

There is a desire for broad multidisciplinary RTAC membership, which will provide a range of viewpoints. Currently, RTAC membership is more heavily weighted toward EMS representation.

- Fewer hospital representatives and physicians have attended than is optimal.

The RTAC plan represents a new way of doing things and the shift has been difficult for some entities.

- One difficulty was overcoming early concerns by the EMS community that the TCC was going to “tell EMS services” where to take patients.
- Once the regional trauma plan was approved by the Regional EMS Council and the RTAC appointed, the RTAC implemented a training initiative to operationalize the components of the plan and the use of the TCC.
- The RTAC coordinator worked closely with the TCC Manager to develop training materials appropriate for EMS and hospital providers.
- Four joint EMS and hospital train-the-trainer sessions were held by the RTAC coordinator throughout the region. Fifty-six individuals attended train-the-trainer sessions.
- The Train-the-Trainer sessions and the subsequent provider training served to clarify understanding about the regional trauma plan, answer questions, and dispel any misinformation.
- Region V RTAC participants currently average 53.5 calls a month. TCC calls have originated from 20 of the 25 counties participating in the Region V Plan.

- Room for improvement does still exist. For instance, in September, EMS providers called 55 patients into the TCC. However, MCCG Trauma Registry data indicates that 13 prehospital patients meeting TSEC criteria were not called into the TCC.
- January - September 2012, Region V RTAC participants made 84% of all TCC calls. (439 of 545 TCC calls.) Of those, prehospital providers or their designees initiated 97%.
- Currently, all designated and non-designated participating hospitals within Region V are considered active plan participants.

Noteworthy Quotes:

" The initial introduction through a face-to-face meeting was key - you can't just send out a memo."

"The buy-in from the EMS community is important."

"Everybody knew there needed to be a link or a way to incorporate everybody and bring everyone to the table."

"...no one had a big issue with the larger concept of the pilot. "

" I think the idea is great if we can make it work for the state of Georgia...but it requires people to be open-minded. "

"Could not have done the project without the position funded by grant money. The Coordinator was essential to project success."

"Yes, a regional plan can be a tool to help improve care...we have the right stakeholders at the table to improve care."

"It is difficult to support regionalization and the TCC with the hope it is going to work."

"This pilot is about all of the stakeholders, would like things to be more in sync across disciplines."

Goal 2) Test the Framework as a planning guide for a regional Council to develop a Plan.

Successes:

The framework provided a good outline of what needed to be included in the plan.

The EMS Council and GTC submitted and approved the regional trauma plan.

- The regional trauma plan makes any issues about transport more transparent and allows for discussion. The RTAC has information to better understand the reasons for the final destination of patients.
- The regional plan includes 23 EMS Agencies (all 911 zone providers). Twenty agencies are 911 zone providers within Region 5. Three others were included due to their proximity to the Region and MCCG.

The HRSA Model Trauma System Planning and Evaluation Trauma System Self-Assessment Tool: Benchmarks, Indicator, and Scoring (BIS) was used to evaluate the existing resources available in the region and to provide a broader perspective about trauma system needs.

The adaptation and inclusion of the CDC Field Triage Decision Scheme in the Region V Pre-Hospital Destination Guidelines and the Hospital Guidelines for the Inter-facility Transfer of Trauma System Patients was important for multidisciplinary “buy-in” to the regional trauma plan.

- During the trauma plan development meetings, the EMS Subcommittee worked on Pre-Hospital Destination Guidelines and the Hospital Subcommittee worked on the Hospital Guidelines for the Inter-facility Transfer of Trauma System Patients.
- Stakeholders felt it important that these two operational guidelines documents should be responsive to local variations in resources. For instance, though the CDC Guidelines for the Field Triage of Trauma Patients recommend that patients meeting mechanism of injury (MOI) criteria be transported to a Trauma Center, several non-designated participants indicated that they had sufficient resources to manage patients meeting only MOI criteria. They also maintained that having pre-hospital patients meeting only MOI criteria bypass their facilities would potentially tax their local EMS resources.
- The Region 5 Pre-Hospital Destination Guidelines included specific provisions for transport in accordance with local medical direction and/or agency protocols for patients having pelvic fractures without significant mechanism of injury (MOI) and not meeting physiologic criteria for patients meeting MOI criteria but not meeting physiologic and/or anatomic criteria.
- Stakeholders share the understanding that the operational components of the regional trauma plan do not include protocols, that only guidelines are included. Participating EMS Services and hospitals were encouraged to incorporate parts of the Region V Pre-Hospital Destination Guidelines and the Hospital Guidelines for the Inter-facility Transfer of Trauma System Patients into their protocols and SOP’s.
- The surveyed EMS services determined which services had a trauma patient triage protocol/policy in place and who incorporated CDC criteria into their protocols/policies. Fifty-four percent of EMS ground services indicated they did have a trauma patient triage protocol/policy in place. Forty-one percent indicated that they incorporated the CDC criteria into their protocols/policies.
- The surveyed hospitals determined who had a trauma patient transfer protocol/policy in place. Forty-two percent indicated that they had a trauma patient transfer policy in place.
- Project leaders utilized existing EMS Services and OEMS&T protocols, which include the CDC criteria, to aid in the development of operational components of the regional trauma plan.
- The two guideline documents, Pre-Hospital Destination and Inter-facility Transfer of Trauma System Patients were developed to meet the needs of all EMS services and hospitals in the region (those near or far to a trauma center).

Project leaders worked closely with other pilot regions so as to not “reinvent the wheel” on RTAC development.

- Pilot project leaders communicated frequently with pilot participants in Regions VI. Initial stakeholder meetings were structured in a similar fashion.
- The Region VI Trauma Plan served as an early template for Region V trauma plan. Early plan drafts were modified to be Region V specific and then subsequently modified based on stakeholder input.
- Goals and objectives were from Reg. VI Trauma Plan.

Noteworthy Quotes:

“We had to come up with a document that was palatable for everyone.... we addressed those issues in regional plans.”

“We made allowances for local medical directors and hospitals to work together and evaluate local resources.”

“When we were educating EMS providers, they began to understand that not all trauma patients need to go to a Level 1 center. Before this pilot, few services had destination protocols...they may have been doing it right but it was not on paper. The medics had been taught in school about CDC criteria but didn't have the supporting documents to back them in their decision making.”

“A written plan, guidance and protocols give the medics more support for the decisions they make. Written plans can separate the medics from the in politics that goes on in the regions. Information from the TCC provides the ability to track the information.”

Goal 3) Operationalize the Trauma Communications Center as the interoperable statewide communication component of the System.

Successes:

The majority of counties in the region have used the TCC.

- Of the 23 counties in the region, only 5 counties have not used the TCC...each of these counties is remote and covered by an individual service.
- Train-the-trainer sessions and subsequent provider training were implemented soon after the approval of the regional trauma plan. The RTAC Coordinator, TCC Manager, and TCC Operations Specialists worked together to train EMS and hospital participants on the operational components of the plan.
- Project leaders developed a standard EMS reporting format (PAMCo) was developed and field providers were trained on why, when, and how to call the TCC.

Improvements have been made in the interface between EMS services and the TCC.

- TCC Manager has attended all RTAC meetings, has been receptive to feedback and has provided follow-up and information.

- The TCC Manager and RTAC Coordinator have worked together to provide feedback and data from the TCC to the RTAC and the Regional EMS Advisory Council. The manager and coordinator provide reports detailing the month-by-month TCC call totals; the distribution of TCC calls by location and agency, and the destination of TCC patients at each meeting. They make additional reports available on request.
- The communication interface between EMS services and TCC has improved to make sure the message the medics are trying to relay is reflected in the data and in the information the hospital is receiving.
- EMS and TCC staff have a better understanding of their roles as a result of more time and experience with the TCC.

RTAC Coordinator provided a laminated document with the CDC trauma triage criteria, standard EMS-TCC reporting format (PAMCo), and TCC contact information to all participating EMS services and hospitals. Coordinator distributed over 200 identification badge laminates containing TCC and the trauma triage scheme throughout the region.

Challenges:

For some services, the ability to communicate with the TCC is limited.

- There are some services that do not have cell phones which are needed to communicate with the TCC. Two-way radios can be used by some but have a limited mileage capability.
- Some services are calling the TCC after the patient has been transported.

Some EMS Services do not utilize the TCC and haven't "bought in" to the advantage of using it.

- There are some medics who do not communicate with the TCC to find out where to go because they know where they are transporting the patient.
- Instances still occur in which patients are being initially transported to a trauma center even though they could have been well served in another facility. On the other hand, some hospitals are receiving patients that probably should have been initially transported to a trauma center.
- Project leaders need to get all the 911 centers on board...so they know what the TCC is and what they can do.

RTAC needs more data to check what is working or not about the use of TCC in the transport of patients.

- RTAC and TCC needs to make sure that the message that the medics are relaying is reflected in the data and in the information the hospital is receiving.
- More time and use of the TCC will result in more data to be able to discuss with RTAC and stakeholders.
- More information is needed from the field providers calling the TCC to find out what is working and not working.
- RTAC would like to determine if the utilization of the TCC to facilitate the interfacility transfer of patients has resulted in a reduction in time to definitive care.

Concerns about the lack of health experience of some of the TCC dispatchers.

- TCC dispatchers did not all have EMS or health backgrounds which would have been helpful in communication with medics. Note: Now TCC dispatchers are going to EMT school or are being hired with a health background.
- The interpretation of medical terms and “jargon” is difficult without medical training.

Noteworthy Quotes:

“Initially medics were giving too long of a report and people on the phone were not as familiar with medical terms as they needed to be...it is working better now.”

“TCC staff have been very proactive and available.”

“The services that have utilized the TCC have only good things to say...wish I would have used the TCC when there was a burn patient...some of us are not in a habit of using.”

“Think the TCC Advisory Board will be helpful to provide guidance.”

“The TCC has been as successful as we could have been at this point...thought it “TCC” would have been more gradual. Would like to see more interfacility transfers occur.”

“A lot of paramedics are following the plan, ‘they have broken the code’. Now that it is written down, they should feel more protected because it is written in the plan. Some folks said, why do we need a TCC, we know where to go...but now there is a system to protect them.”

“I think we need to see it in action a little longer to see the impact in the region. I think people are still learning about it and still figuring it out. They are consistently getting better but they need more call time and experience before the TCC can be evaluated.”

“The medics knew where they were going before the TCC was developed....in this region there is only one Level 1 Trauma Center and not many other options.”

“There is not a free flow of information of how the TCC has been used.”

Goal 4) Identify and involve regional trauma system stakeholders including physicians, EMS, designated Trauma Centers, non-designated participating hospitals, hospital personnel, local governments and the public in system planning.

Successes:

- Every county within Region V had representation during the initial stakeholder’s meetings and Trauma Plan development.

- The development of regional trauma plan and associated documents responded to stakeholder input. Project leaders worked with RTAC stakeholders to identify strengths of existing practices within the region and, when appropriate, incorporated the information collected into the regional trauma plan.
- Project leaders conducted three initial meetings in July, August and Sept. 2011. Meetings were well attended. There was a great turn out and positive feedback about the meetings.
- Project leaders rotated RTAC meetings to different locations to promote accessibility and attendance.
- In the selection of RTAC members, a wide array of viewpoints was desirable for a balanced perspective.
- RTAC meets quarterly. Members represent a multidisciplinary group of people committed to making the plan work.

Challenges:

- The project leaders wanted more physicians to participate. A few attended the initial meeting, but after that there was attrition in attendance from trauma and ER physicians and EMS Medical Directors.
- The project leaders wanted more stakeholders with a focus on accident/injury prevention from the beginning.

Noteworthy Quotes:

“We asked them to participate in the pilot as a way to work in the region together on challenges and have a way to communicate issues happening in the field with hospitals and visa versa ”.

“We wanted everyone to be players in the system and to participate whether they were hospital-based EMS or county-based EMS, designated facility or non-designated facility.”

“We had every EMS service and every hospital at the same shared table for the first time I can remember in my history.”

“We wanted to work through challenges together and needed everyone’s input to develop the region’s plan.

“Needed more EMS Medical Director participation because they sign off on the EMS Protocols.”

Goal 5) Revise the Framework as a regional planning guide pursuant to the results of the pilot evaluation.

- Developing the regional trauma plan could have been made easier by including a clearer outline for plan development in the framework. Talking with other regions was useful to learn from them and their plan outlines.
- The framework could be more informative and useful if key reference documents were included to help standardize plans. Examples include the trauma plan template and templates for operational components of the plan.
- The framework does not provide enough clarification about the roles of GTC and OEMS&T staff.

Goal 6) Identify specific steps to expand the Georgia Trauma system statewide by the way of introducing regional trauma system planning statewide and by extending the coverage area of the Trauma Communications Center.

OEMS&T and GTC Leadership have emphasized that OEMS&T and GTC have the same goal: get the right person to the right place at the right time; however, for some it has been difficult supporting regionalization work because this is work that OEMS&T used to be funded to do. For some with a long-standing history of EMS work, this change is difficult and role clarification is needed. Some stakeholders expressed concern about the focus on trauma since it is a small percent of the overall work of EMS.

- Ongoing dialogue and clarification will continue to strengthen the partnership between GTC and OEMS&T and to implement improvements as needed.
- GTC needs to provide additional information in the framework to clarify roles and responsibilities including how the work of different roles contributes to the overall goal of strengthening the Georgia Trauma System.

Stakeholders want to discuss the pilot project including what works well and what needs changed prior to expansion to the rest of the state.

Diligent work overcame early concerns by EMS community that the TCC was going to “tell EMS services” where to take patients. The TCC made some accommodations, which have promoted TCC use.

- Project leaders will continue to gather input from EMS Services to identify areas of improvement in trauma communication.
- Stakeholders will discuss and consider less expensive methods for trauma communication, which would provide better access to all medics including a mechanism to virtually display data that would be accessible to all. (e.g. web-based system).

Some stakeholders wish for a better way to integrate trauma data and work systemically to see impact.

- There is a need to discuss and develop an agreed-upon process to utilize the data to measure patient transport time to definitive care.

Noteworthy Quotes:

“ OEMS&T has authority and responsibility to get things done but doesn’t have the ability to get everything done with less and less funding every year. There are disparities in funding between OEMS&T and GTC. This has to be fixed to get the buy-in from other regions. ”

“Looking at the Framework and the pilot, I don’t know what my role is.”

Region VI
Interview Results

draft

Region VI

Goal 1: Introduce trauma system regionalization as a possible construct for Georgia Trauma System development.

Successes:

The development of a small, credible steering committee was important. The committee met with key stakeholders to lay the groundwork for regional trauma plan development success.

- At the onset of the pilot project, a small steering committee was developed and served as “champions” for the project. Steering committee members represented different disciplines (e.g. EMS, hospital) with credibility in their field. The steering committee included: EMS Council Chair and GTC member, Trauma Coordinator, OEMS&T Regional Coordinator and Georgia Association of Emergency Medical Services Chairman.
- All EMS Council members were provided a copy of the GTS Regional Trauma System Planning Framework, Oct. 2009, and Pilot Project for Georgia Trauma System Regionalization White Paper, October 2009.
- Project leaders sent letters to all the hospitals, EMS providers, local government agencies etc... in the region introducing the concepts of trauma system regionalization and inviting them to the Forum. The letter included the date, time and location for the first forum.
- Face-to-face meetings occurred with hospital administration, ED Directors and medical leadership to discuss regionalization concepts, provide information and to “dispel rumors” related to the project.

Formation of the RTAC as a committee of the EMS Council worked for the Region and the system stakeholders.

- Based on an opinion from the Attorney General’s Office, RTACs are considered review organizations and are afforded peer review protection and their work is non discoverable. RTAC members are health professionals serving and reviewing data to improve the quality of care rendered and to reduce morbidity and mortality due to trauma.
- EMS Council membership includes EMS, physicians, hospitals, and community organizations (e.g. Red Cross) resulting in views from different perspectives although the majority of members are from EMS. While there can be “turf” issues between EMS and hospitals--strong, good working, non-territorial relationships strongly prevail and contribute to the success of the RTAC.
- Organizing the RTAC as a Committee of the EMS Council promotes alignment and the potential to “speak with one voice.” This model fits with other health care charges in the region. For example, the Injury Prevention Committee is a committee of the EMS Council and had been independent.

Funding for RTAC formation was important.

- Funding helps to pay for staff time and “raise awareness” for this work. It is an “easier sell” when a request is made when there is money available for this work. Funding was used to provide lunches during meetings and training--participants were very appreciative.

Challenges:

- Project leaders as concerns that the plan might not really impact change especially if there is not funding that follows the plan. Funding is needed to “return value” to the facilities and help with equipment, staffing or sharing resources such as on-call physicians.

Noteworthy Quotes:

“I was pleased with the openness of the discussion....didn't hearing people say 'we are going to do it our way'. All opinions were listened to with an open mind....people listened with the idea of meeting people's needs. Process was very positive.”

“I don't see a downside to the RTAC. Twenty years ago we set up all these designated centers....but it comes down to funding. The computer in the ED would not be there if the GTC had not funded it. Just knowing how care was rendered, improving communication –these are the important things to get done.”

“It [the RTAC] is formalizing what many of the regions have done in the past. In the past, [we] called each other up if we had a problem. Now we have the opportunity to serve on a committee and develop a joint plan. The RTAC formalized relationships.”

“EMS Council has been very open to assure that RTAC has the broadest membership possible, if they touch trauma they should be on the RTAC and appointments have been made.”

“It is formalizing what many of the regions have done in the past. The pieces for success are there; we've been there we can do this.”

Goal 2: Test the Framework as a planning guide for a regional Council to develop a Plan.

Successes:

The framework was a useful guide for plan development.

- Some parts of the framework were used directly in our trauma plan such as in the hospital section.
- Definitions of terms were useful to establish shared understanding and were distributed in initial meetings.
- All stakeholders received the framework and pilot project description prior to face-to-face visits.
- RTAC identified injury prevention resources in the region and goals and gaps and developed a plan to address the gaps.

Collaboration with other Pilot Regions was important and very useful.

- Talking with and learning from other pilot RTACs was very helpful especially so one didn't need to "reinvent the wheel".

The RTAC developed the regional trauma plan and the EMS Council approved the plan. The Georgia Trauma Commission accepted the plan.

- Regional trauma plan includes a Performance Improvement Matrix (and relates to the ACS Committee on Trauma and Performance Improvement and Patient Safety) in plan to identify how success will be measured.
- Regional trauma plan does not include Pre-hospital Guidelines at this time. As more data becomes available through the TCC, then Pre-Hospital Guidelines may be added. The lack of EMS participation in the TCC limits the available data.
- The Resource Subcommittee has identified local resources in the Region by surveying hospitals. The Resource Subcommittee discussed including non-designated hospitals. All hospitals agreed except two non-designated hospitals.
- RTAC decided not to include Interfacility Transfer Guidelines in the regional trauma plan at this time. Currently, physician-to-physician discussion occurs about transfers. The Subcommittee may decide to include Interfacility Transfer Guidelines in the future and may need to include repatriation language. Right now ACS does not require these Interfacility Transfer Guidelines to be in writing.

Face-to-face meetings and pre-assigned multi-disciplinary Task Forces worked to develop the plan by getting input and buy-in from a broad range of people.

- Project leaders invited system stakeholders to attend three Forums designed to develop the Regional Plan. Participants RSVP'd about attending and received a Task Force assignment ahead of time to assure broad multidisciplinary representation. Task Forces included: Development, Administrative, Pre-Hospital, Hospital, Performance Improvement and Injury Prevention and Outreach.

The HRSA Model Trauma System Planning and Evaluation Trauma System Self-Assessment Tool: Benchmarks, Indicator, and Scoring (BIS) provided valuable baseline information.

- The RTAC used the BIS to evaluate the existing resources available in the Region. This model is useful since it is based on the public health model, assurance, assessment and policy development.
- At the first of three Forum meetings, each Task Force completed their section of the BIS assessment tool. Stakeholders reached consensus regarding Region VI's specific benchmark scores after completing a review of all scores. At the second Forum meeting, each Task Force presented their plan and identified performance indicators. At the third Forum, further agreement and alignment occurred on the plan. Meetings were held in "neutral" locations. The Forums provided the opportunity for input and involvement in plan development.

RTAC and Subcommittee structure has evolved to include integrated committees between the EMS Council and RTAC, which are working on established goals.

- The structure combined EMS Council and RTAC Education Committees since many Council members were attending both Committees--it was efficient and made sense to combine the committees. Many of council members are members of the RTAC.
- The RTAC initially started with a TCC Subcommittee with each of the EMS services participating. Its initial responsibility was training. Now the TCC Subcommittee is merged with the Guidelines Subcommittee.
- The Resource Subcommittee is looking at data to identify where injuries are occurring. Based on the analysis, injury prevention education is needed for 16-18-year-olds on distracted driving. The Subcommittee is working on a presentation that will be distributed to EMS to use in their communities. The Trauma Coordinator and EMS Regional Director worked together to provide training to all EMS services in the region. The EMS Director sent out the notice and required services to attend the training. An overview of the training system, what is an RTAC, field triage including mock scenarios and CDC Field Triage criteria comprised the training.
- RTAC is focused on the process of care to make sure patients receive the treatment that results in the best outcome for the patient.

Challenges:

RTAC needs to continue to gather data to establish measurable goals.

- Establishing measurable goals was a challenge, but as the plan is implemented it may be easier to evaluate and modify as needed.

The RTAC did not include guidelines in the plan because they did not have data to inform the best decisions.

- RTAC would like the ability to transfer to non-designated hospitals if that is the most appropriate care for the patient. During the Resource Committee discussion there was limited attendance and all hospitals agreed except one.

Noteworthy Quotes:

“The Framework provided a good foundation. It would have been difficult to not have it as a guide and I wouldn’t have wanted to start from scratch.”

“The Commission has brought the structure and resources to bring together a multidisciplinary team and have an RTAC materialize.”

“RTAC provides a focus to do an assessment and develop a plan based on the assessment.”

Goal 3: Operationalize the Trauma Communications Center as the interoperable statewide communication component of the System.

Successes:

- TCC Manager has done a good job of being available and attending regional meetings. He has listened to the need for changes and has made them when possible (e.g. Burke County made changes so they could be patched in when radio communication wouldn't work).
- TCC operators are friendly and helpful.
- The Manager sent the TCC report every month for review by Guidelines Subcommittee.

Challenges:

The ability for the EMS in the field to communicate with the TCC is limited.

- TCC cannot recommend a non-designated hospital if the patient does not meet TSEC criteria. This is a problem since the ambulance may be closest to a non-designated hospital that can provide definitive treatment.
- The ability for EMS services in the field to communicate to the TCC is limited because of the inability for cell phones use in ambulances and/or the ambulances are not within a range to use radio communication. Many ambulances do not have cell phones (often because of budget or limited cell coverage) and/or the service policy does not allow medics to use cell phones. The largest EMS 911 provider in the region does not allow cell phone use.
- Sometimes the TCC tracking number does not follow the patient.
- Georgia patterned their communication system after Alabama's system. Stakeholders expressed concern that Alabama and Georgia have differences that impact the use of a communication system. Alabama introduced their central communication system at the same time they introduced trauma centers whereas trauma centers in Georgia have been established and around a long time.
- Some EMS services are communicating with the TCC retrospectively once they have arrived at their destination; however, that is not the intended use.

Noteworthy Quotes:

“Georgia is celebrating a 30 year history of trauma centers...there is a deeply entrenched way of doing things, not sure if changes can be made.”

“When I first came on, I went to ER and looked at availability “the jelly beans” it takes some time to get used to but the advantage is that the patient goes to appropriate level of care. It takes time and training. To adopt something new there will be resistance.”

“If medics can't use cell phones, they can't communicate with the TCC.”

Goal 4) Identify and involve regional trauma system stakeholders including physicians, EMS, designated Trauma Centers non-designated participating hospitals, hospital personnel, local governments and the public in system planning.

Successes:

Fifteen member RTAC established and subcommittees continue to meet.

- RTAC meets quarterly. Members represent a multidisciplinary group of people committed to making the plan work. The group includes a community representative. Each of the Subcommittees are chaired by an RTAC member. Overall, meeting attendance has been good although some members have had to miss meetings. Subcommittees are active and will present information about goals met and not met at Oct. meeting, then update the RTAC plan.

Reference material was provided and included:

- Region VI Results from the Benchmarks, Indicators and Scoring BIS Self-Assessment completed in 2011. This assessment is from the Department of Health and Human Services, Health Resources and Service Administration (HRSA), Model Trauma System Planning and Evaluation, Benchmarks, Indicators and Scoring (BIS) developed in 2006.
- RTAC By-Laws
- RTAC Meeting Minutes
- CDC Field Triage Criteria
- American College of Surgeons Essential Criteria for Levels of Trauma Center Designation
- Georgia Office of EMS/Trauma, Department of Human Resources, Division of Public Health Hospital Resources Checklist For Trauma Center Designation, Re-designation or Upgrade.

A broad range of participants participated in the RTAC meetings.

- The Forums needed mental health and rehabilitation services representatives present. This was a recognized early on so subsequent meetings included participant representing these areas.
- Ensuring everyone has a voice and is involved in plan development is key. It is particularly important to engage those who are reluctant to participate or who think system planning is not necessary. Getting their input and addressing their concerns was important.
- EMS, Fire, and representatives from across the industry attended and had the opportunity to express concerns.

Challenges:

Establishing the RTAC is very time intensive.

- Some expressed the desire to have more ED physicians at the meetings. They can be a challenging group to get to attend because of their shift work.
- Public Health partners are important and needed to be included earlier.

There was a short time frame for RTAC and plan development.

- RTAC and plan was developed in 5 months. A more reasonable timeframe is one year.

Noteworthy Quotes:

“ RTAC is helping to formalize relationships across boundaries and bringing different people together. No down side, not costing us anything...if it helps benefit the delivery of EMS and trauma care in region, the only side is up.”

“Need to take the time needed to set up the RTAC. A shaky foundation will lead to collapse of the system and this needs to be kept in mind each step of the way.”

“The goal is to save lives....that is what people have to remember. This is not just another committee or another meeting, it is about the survivability. It is important to have people in the region that have a passion for this work.”

Goal 5) Revise the Framework as a regional planning guide pursuant to the results of the pilot evaluation.

The framework is not an implementation manual.

- The framework needs information about the development and the implementation of the RTAC with details about how to set up the RTAC.

GTC should expand the framework to include additional information needed for plan development.

- Additions to the framework include: BIS assessment, ACS Essential Criteria for Levels of Design, US Dept. of Health and Human Services Trauma Program Design Policy.
- Information about the lead agency included in the framework is unclear to some and relates to the lack of role clarity.

Goal 6) Identify specific steps to expand the Georgia Trauma system statewide by the way of introducing regional trauma system planning statewide and by extending the coverage area of the Trauma Communications Center.

The GTC and OEMS&T each have specific responsibilities. The GTC has the responsibility to administer and fund the trauma system network; and OEMS&T has regulatory responsibilities. The organizations are interdependent and need each other to accomplish shared goals. For some staff, there is role confusion and uncertainty about who has the responsibility for EMS system development, which includes trauma.

- Ongoing dialogue and clarification need to occur to strengthen the partnership between GTC and OEMS&T and to implement improvements as needed.

- GTC needs to provide additional information in the framework to clarify roles and responsibilities including how the work of different participant roles contributes to the overall goal of strengthening the Georgia Trauma System.

Different key organizations including GTC, OEMS&T and GHA have trauma and EMS data.

- There is a need to discuss and develop an agreed-upon process to utilize the data to measure patient transport time to definitive care.

Consider using alternative methods for EMS communication with the TCC. Stakeholders need to discuss the use of a web-based system.

Noteworthy Quotes:

“In the past, OEMS&T staff worked with Trauma Coordinators to look at data and was involved in addressing trauma needs. Now there are less OEMS&T staff and budget resulting in less ability to be involved.”

“Regionalization is not a new concept.”

Region IX
Interview Results

draft

Region IX

Goal 1) Introduce trauma system regionalization as a possible construct for Georgia Trauma System development.

Accomplishments:

Project leaders had individual meetings with hospital CEOs, COOs and ED physicians in the region. Meetings were a positive introduction to the RTAC.

- Prior to submission to or approval of the GTCNC, in 2010, Region IX physicians to include the Chief of Trauma of the Level I Trauma Center and the Trauma Director visited all regional hospitals (21), met with stakeholders: CEO, CNO, ED Med Dir, Nursing ED Leaders, Educators and ED Physicians, the purpose of which was to discuss the regionalization plan, statewide trauma efforts and the expanse of the GTCNC.
- Individual meetings occurred with all but two hospitals in the region that do not send patients to the Level 1 Trauma Center. These hospitals sent their patients to the closest trauma centers, which are over the border (into Jacksonville and Macon).

Project leaders organized and implemented a meeting to bring stakeholders together which was the “launching point” for plan development.

- Approximately seventy people representing hospital CEO’s and COO’s, ED Clinical Directors, EMS and GTC attended a face-to-face meeting to discuss trauma regionalization. The goals of the meeting were to introduce regionalization, to complete the BIS assessment and to gain participant perspective’s about regionalization.

Collaboration with other Pilot Regions was important.

- Participants learned from other pilot regions by talking with them so not to “reinvent the wheel”.
- Communication with other regions helped to create understanding of similarities and differences among the regions.

Trauma regionalization was included as part of the Memorial University Medical Center business plan.

Some members in the region supported the formation of the RTAC as an independent council but not all.

- Project leaders conducted research to identify other state’s models for regionalization that had been successful. Reg. IX used the experiences in Texas, Michigan and Duke University (North Carolina) as their model.
- The framework describes the “regional trauma system” operating according to the Regional Trauma Advisory Council. Council formation requires dual reporting to OEMS&T and GTC, which is the structure desired and supported by the research conducted of working models in other states.

- Pilot project leaders did not believe “they had heard a good reason a hospital should report to the EMS Council.” Pilot project leaders wanted to have the same reporting relationship as the EMS Council.
- Concern was expressed that there are not many hospital or physician representatives on the EMS Council.
- Trauma Coordinator provides RTAC updates to the EMS Council on behalf of RTAC Chair.

Challenges:

Formation of the RTAC as an independent council worked for some system members in the Region but was not supported by all.

- Project leaders wrote letter to the EMS Council requesting their endorsement for RTAC formation as an independent council. A motion was made at the EMS Council regarding the formation of the RTAC but was deferred.

More participation is needed on RTAC Subcommittees.

- More members are needed on Injury Prevention and Performance Improvement Subcommittees.
- Few EMS Council members are active on the RTAC Prehospital Subcommittee.
- Time required for travel to attend Subcommittee meetings can affect meeting attendance.
- More consistent representation on Subcommittees is needed.

Noteworthy Quotes:

"The meeting was a healthy mix of people working with trauma."

“Regional Trauma Advisory Council is the umbrella that defines trauma care in our region.”

“The initial meeting was an opportunity to get all the players in the same room and have a dialogue.”

“The Pilot has been a very positive experience for the trauma center and those who have participated in the meetings.”

“It was very beneficial to meet with hospitals in the region. I wish I would have done that 15 years ago.”

“There is an opportunity to look at data transparently to identify improvements that can be made.”

Goal 2) Test the Framework as a planning guide for a regional Council to develop a Plan.

Successes:

The framework provided a useful roadmap for plan development.

The RTAC developed the Region IX Trauma System Regionalization plan. The Georgia Trauma Commission accepted the plan. The RTAC is currently developing the regional trauma plan.

Completion of the BIS assessment provided valuable information for plan development and provided the basis for committee development.

- The Trauma Director and a Trauma Chief completed the BIS assessment separately prior to the stakeholder meeting. At the face-to-face stakeholder meeting, participants completed the BIS assessment. The Trauma Director and a Trauma Chief and the participants compared and discussed ratings for each section of the assessment to identify a shared ranking. This process resulted in a baseline. Participants appreciated the Trauma Chief sharing his perspective on the assessment.

The RTAC created subcommittees to further develop plan objectives and tactics.

- Member interest was the basis for subcommittee development. The role of the subcommittees was to develop objectives and tactics to address the gaps identified in the BIS and the resulting improvements made. Subcommittees included: Performance Improvement, Pre-hospital, Injury Prevention, Education and Medical Oversight. There are an average of seven to eight people on the committees. The Performance Improvement Subcommittee has been the most active and has used conference calls to conduct its business.
- Medical Oversight and Prehospital Subcommittees are currently in the process of developing transportation and pre-hospital protocols. A Pre-hospital Ad Hoc Subcommittee is developing methods and plans to introduce the TCC to the hospitals and EMS in the region.

Challenges:

Lack of familiarity with the framework.

- Not all interviewed stakeholders were familiar with the framework.

More people in the region need to know about the RTAC and its vision.

Not all people may participate in the RTAC, yet if it is an agreed upon, approach funding needs to be tied to their participation in the plan.

Noteworthy Quotes:

“The Framework is the foundation for building the plan.”

“Developing a plan is a tremendous amount of work and requires a lot of commitment.”

“If you want to get the data, it needs to be tied to funding. For example, in Alabama every 911 provider has to use the call center. If you don’t get funding.....that will get your attention. ”

“The BIS validated what we knew and that we had room for improvement...we scored low.”

Goal 3) Operationalize the Trauma Communications Center as the interoperable statewide communication component of the System.

Successes:

- At initial stakeholder meeting, participants discussed that there are hospitals that could take care of lower acuity patients and the process at would be described in the Pre-hospital Guidelines to be developed by the Pre-hospital Subcommittee.
- Belief that the TCC will be helpful to outlying counties for EMS to identify the most appropriate hospital which to transport the patient and that the TCC could be useful if a hospital is on diversion.
- The regional trauma plan will include the hospital's role, which needs to be understood before hospitals sign the agreement to receive equipment. The Pre-hospital Subcommittee is facilitating this.
- There is good collaboration between the Chatham County EMS Council and the RTAC. Chatham County gave a presentation to the Prehospital Subcommittee to help develop Prehospital Guidelines for the plan.
- TCC use in the region cannot be operationalized without first developing the Transportation and Pre-hospital Guidelines.

Challenges:

- The EMS community has expressed concern since the RTAC is not formally part of the EMS Council.

TCC is not yet being used.

- Paramedics know that Savannah is the Region's Level I trauma center. They already know where to transport.
- A comprehensive effort to get TCC information out to EMS and hospitals has not occurred yet until the Transportation and Pre-hospital Guidelines are developed.

Noteworthy Quotes:

“Local medics don't know how the TCC can be beneficial to them.”

"....it is a matter [of] how we will get all these rural EMS services to utilize the TCC. This is a new way and a change from how they have been doing things."

“If you want to get data from EMS it needs to be tied to funding. That's how it is done in other states. That will get your attention.”

Goal 4) Identify and involve regional trauma system stakeholders including physicians, EMS, designated Trauma Centers, non-designated participating hospitals, hospital personnel, local governments and the public in system planning.

Successes:

- At the initial face-to-face meeting there was representation from hospital administration and EMS although more physicians present would have been preferable/optimal and of the ones who attended, some had to leave early. The physicians who attended were described as "enthusiastic".
- One hundred percent of the 911 zone providers attended the initial face-to-face meeting.
- Trauma system stakeholders continue to be invited to participate in the RTAC to expand representation at the meetings.

Challenges:

- Of the 18 hospitals in the region, not all had representatives at the face-to-face meeting.
- Smaller rural EMS providers had limited attendance because they are not 911 providers and have mutual aid agreements in place.
- The EMS Regional Director was new to his position and attended the first RTAC formation meeting; however, due to job demands and less staff, the Director was not able to attend subsequent RTAC meetings.

Noteworthy Quotes:

"We need to get more participation from EMS and nursing. They all need to be at the table so we can establish better communication to work together."

"EMS is the foundation for trauma in Georgia and they have been there since the beginning; however, we've got to get beyond EMS and include a broad group of people thinking about trauma including rehabilitation and more."

"We developed communication links with people in the region that had not been there before."

"EMS has the ability to override the recommendations of RTAC and TCC and take the patient where they want to go."

"We want to get the patient the right care at the right time. Let's look at outcomes."

Goal 5) Revise the Framework as a regional planning guide pursuant to the results of the pilot evaluation.

GTC should consider including additional information needed for plan development in the framework.

- Include research about other state's models for regionalization that have been successful.

Goal 6) Identify specific steps to expand the Georgia Trauma system statewide by way of introducing regional trauma system planning statewide and by extending the coverage area of the Trauma Communications Center.

- Hospitals expressed concerns about Resource Availability Display (RAD) relationships to HIPAA and EMTALA agreements. The Attorney General is addressing this issue.
- Participation in the regional trauma plan should be required and tied to funding.
- Stakeholders need to make a stronger statement about the importance of the TCC and how it can benefit EMS services and the trauma system. Stakeholders should consider having a forum for EMS to discuss the TCC and show them how the system can work.

Statewide Stakeholder

Interview Results

draft

Statewide Stakeholders:

Goal 1) Introduce trauma system regionalization as a possible construct for Georgia Trauma System development.

Strengths:

- Some EMS regions have strong acting regional programs for trauma. In 1999, OEMS&T staff attended EMS Regional Council meetings and discussed the idea of developing Trauma Committees as a part of the EMS Council. Regions III, V, and VI developed Trauma Committees. The Region III Trauma Committee was developed especially because the region had two major pediatric trauma centers. The Committee talked about the importance of having pediatric patients transported to those centers.
- RTACs provide an opportunity for dialogue among system stakeholders.
- Regions reached across their regional boundaries to include hospitals that transferred patients to them. Including hospitals outside the region is a good idea and worth replicating.
- There is no downside to the creation of a plan; a detailed plan can provide useful structure to the region.
- Trauma is a small percent of the calls that EMS run; however, if trauma systems are strengthened, the overall system will be improved, too.

Challenges:

- Benefits of the pilot might have been greater if EMS Regions were selected that did not already have a strong regional trauma program in existence or have any trauma centers.
- Regions were formed for administrative purposes not for patient care or clinical regions. Counties may transfer to different regions for definitive care. Regional boundaries can be misleading.
- A decline in OEMS&T funding has caused a decrease in staff. Staff has been involved in trauma system development and training but now there is only one staff person, an EMS Regional Director in each region with multiple responsibilities.
- There can be inconsistency in standards in different regions.
- It seemed there was a “rush factor” to get everyone involved. It is important to allow enough time for development of plans and to build relationships. In some states, regional plans took 10-15 years to be developed.
- Organizations have multiple stakeholders and if only one or two are represented, all the viewpoints may not be heard.
- Medical Directors set medical and community standards. RTAC and EMS Councils make recommendations to OEMS&T. RTACs and EMS Councils don't set standards in the region. There are not ten independent sets of standards. They offer guidelines and recommendations which the local medical director may or may not adopt.

Noteworthy Quotes:

“The RTAC work being done would have been done by state staff in the past, but none of the regions have a training person any more. They only have an EMS Regional Director.”

“Each region is going to move at a different pace; you can’t force feed the timeframe.”

“It is not like a hospital versus EMS versus physicians. The BIS assessment helps ground everyone in reality and put everyone on the same page.”

Goal 2) Test the Framework as a planning guide for a regional Council to develop a Plan.

Strengths:

- The framework is comprehensive and was well organized. Many stakeholders could “relate” to the document including the EMS community.
- OEMS&T believes that regional work is best performed as a committee of the EMS Regional Council so resources are not divided and data collection is not duplicated.
- Region III RTAC, developed under the Region EMS Council, has been in place a long time and is working. Their Trauma Council is bigger than their EMS Council. They have good working relationships and committee structure in place.
- There should be consistent performance measures for trauma utilized by the EMS Council and RTAC.
- EMS Councils are not addressing the important issue of injury prevention. This can be addressed by RTACs especially when data is reviewed to identify specific interventions.

Challenges:

- There is potential for confusion with EMS providers when they cross regional boundaries and different guidelines are included each region’s plans.
- There is already a process in place for local EMS medical directors to develop transportation protocols. Interviewees were not sure if an RTAC provides help with the development of a transportation protocol.

Other:

- There is overlap in the systems of care among trauma between STEMI and stroke. Many people may experience a multiple system trauma.
- Having RTACs as a Committee of the EMS Council provides a structure to make recommendations to the EMS Regional Council. EMS Regional Councils are recognized in state statute and code.

Noteworthy Quotes:

“Strengthen trauma and the overall system will be strengthened.”

Goal 3) Operationalize the Trauma Communication Center as the interoperable statewide communication component of the System.

Strengths:

- The TCC corrected factual reporting errors, which occurred in the early phase of implementation.
- Some believe there is a better solution than the TCC because in most cases the trauma center accepts the patient being transported.
- The TCC does help when a medic has trouble finding a receiving hospital and can be most useful to rural EMS providers.
- TCC staff has done a wonderful job communicating with “uninviting audiences” and maintaining open communication with all stakeholders.

Challenges:

- Currently, the amount of time from onset of trauma to arrival for definitive care is not completely known. This timeframe is an important system indicator but is challenging to measure because there are not a large number of cases. Is the intended outcome of TCC to improve response time?
- Some believe that many TCC calls occur after the transport occurs.
- Some expressed uncertainty about the difference being made by the TCC.
- Many EMS providers do not allow personal cell phone use in ambulances or have cell phone capability. Many EMS services rely on radio communication. The TCC has limited radio capability.
- When the TCC was first implemented, the TCC wanted to access trauma registry and EMS data. The data was not shared because it is HIPPA-protected information. Stakeholders would like to see the TCC system working and beneficial before data is shared.

Noteworthy Quotes:

“In the beginning of the project, communication got off track....TCC proposed telling the EMS community where to take patients but the medics know their primary transport patterns.”

“Reflecting on the TCC and moving forward, there are early adopters, but we need to continue the discussion and promotion with others.”

Goal 4) Identify and involve regional trauma system stakeholders including physicians, EMS, designated Trauma Centers, non-designated participating hospitals, hospital personnel, local governments and the public in system planning.

Strengths:

- Including counties who are not formally a part of the region to participate in discussions and plan development is a good idea and worthy of replication.

Challenges:

- Initially a wide variety of stakeholders were included in the RTAC discussions but some have stopped attending and full participation is important.
- More fire and police needed to be involved in plan development.

Noteworthy Quotes:

“Smaller hospitals, EMS services and public health were at the table to help develop plans.”

“It is very powerful to get the non-designated hospitals, physician representation, EMS all in the same room is very powerful.”

“People were hungry in their region to address trauma. Regions needed resources to do the planning.”

Goal 5) Revise the Framework as a regional planning guide pursuant to the results of the pilot evaluation.

Strengths:

- Regional stakeholders have local knowledge about what organizational structure to develop a regional trauma plan may work best in their region. Stakeholders have different perspectives on the approach to take.
- Completing the BIS assessment provided valuable information about the resources in the region and helped to identify partners to include in plan development. Reference to BIS needs to be included in the framework.

Challenges:

- The framework uses the term Regional Trauma Advisory Council. There was not a clear understanding of the difference in the meaning of the terms “council” and “committee”.
- It may be challenging if different organization structures are used in the regions as opposed to one consistent way to organizationally approach regional trauma system development.

Goal 6) Identify specific steps to expand the Georgia Trauma system statewide by way of introducing regional trauma system planning statewide and by extending the coverage area of the Trauma Communication Center.

- The biggest opportunity for improvement is in a region where there are no Trauma Centers.
- The pilot project is too early in its implementation to fully know the impact.
- Some expressed concern that the TCC was expanded statewide but many EMS services don't know about it.

Noteworthy Quotes:

“Let's build on what has been learned in the three pilot regions so others don't need to start from scratch.”

draft

Appendix B. People Interviewed for Report

Region V

Debra Kitchens, Trauma Services Manager Medical Center of Central Georgia, Level One Trauma Center

Kristal Claxton Smith, RTAC Coordinator

Lee Oliver, EMS Region Council Chair

Chris Hobbs, RTAC Chair

Russ McGee, EMS Regional Director

Region VI

Regina Medeiros DNP, RN, Trauma Program Coordinator (Medical College of Georgia) MCG Health, Inc, Level 1 Trauma Center

Ernie Doss, EMS Council Chair

Ralph Randall, RTAC Vice-Chair

Lawanna Mercer-Cobb, EMS Regional Director

Courtney Terwilliger, Chairman, Georgia Association of EMS

Region IX

Elaine Frantz RN, BSN, MA, Vice President, Physicians' Services
Memorial Health University, Level 1 Trauma Center

Tim Genest, EMS Council Chair

Gage Ochsner, M.D., RTAC Chair

Robert Shad, EMS Regional Director

Statewide

Dennis Ashley M.D., GTC Chair

Linda Cole, R.N., M.B.A., GTC Commission Member

Courtney Terwilliger, Chairman, Georgia Association of EMS

Renee Morgan, State Trauma Systems Manager

Keith Wages, Office of EMS Director

John Cannady, TCC Manager

Appendix C. Interview Questions

Pilot Project for Georgia Trauma System Regionalization

Pilot Project Evaluation

August 2012

In 2010, a pilot project in three regions was funded to test the development of a regional trauma system structure based on the Regional Trauma System Planning Framework developed October 2009. The purpose of this evaluation is to understand how the pilot project goals were addressed; to identify overall benefits provided by the framework; and to make potential recommendations to adjust the framework. The six pilot project goals are:

- Introduce trauma system regionalization as a possible construct for Georgia Trauma System development;
- Test the framework as a planning guide for a regional Council to develop a Plan;
- Operationalize the Trauma Communication Center as the interoperable statewide communication component of the System;
- Identify and involve regional trauma system stakeholders including physicians, EMS, designated Trauma Centers, non-designated participating hospitals, hospital personnel, local governments and the public in system planning;
- Revise the framework as a regional planning guide pursuant to the results of the pilot evaluation; and,
- Identify specific steps to expand the Georgia Trauma system statewide by introducing regional trauma system planning statewide and by extending the coverage area of the Trauma Communication Center.

Interview Questions

- 1) Describe your experience with the pilot project.
- 2) What worked about introducing a regional structure for trauma system development? What didn't work?
- 3) How well has it worked to have a broad group of stakeholders in system planning? Have all the representatives been at the table? If not, who is missing?
- 4) What was your experience using the framework as a guide to regional system plan development? How much was it used?
- 5) In your development of the plan, did you use other planning resources to meet your regional planning needs? If so what?
- 6) Understanding that the Trauma Communication Center became operational in January 2012, how has it been used as a resource for EMS services in your region? What needs to be improved?
- 7) What are the benefits of having a Regional Trauma Advisory Committee/Council in your Region? What is the downside?
- 8) What advice would you give other EMS Regions as they proceed to develop RTACs?
- 9) What else needs to be said that is an important part of this pilot process?

Appendix D. Glossary of Georgia Trauma System Definitions

Benchmarks, Indicators and Scoring assessment (“BIS”)

Health Resources and Services Administration (HRSA), an agency of the U.S. Dept. of Health and Human Services, developed the Model Trauma System Planning and Evaluation Benchmarks, Indicators and Scoring (BIS) assessment. Developed in 2006, this self-assessment tool is used to quantify a trauma system’s development.

EMS Region

One of ten established geographic programmatic regions of the State of Georgia Office of Emergency Medical Services and Trauma within Georgia Department of Community Health.

EMS Regional Council

One of ten established geographic programmatic regions of the State of Georgia Office of Emergency Medical Services and Trauma within Georgia Department of Community Health.

Non-designated participating hospital

An acute care Georgia licensed hospital with an emergency services department and varying specialty physician coverage and service line capabilities to treat, stabilize and admit low acuity trauma patients. These hospitals have signed a letter of commitment indicating Trauma System participation.

Non-participating hospital

A Georgia licensed hospital that has not signed a letter of commitment with the Georgia Trauma Commission indicating System participation and is not a designated Trauma Center.

Performance improvement

A data-driven, documented, methodical and reviewable process for identifying and achieving component-specific, regional, or state-level system improvements.

Regional Trauma Advisory Committee –(“RTAC”)

A body endorsed by the Georgia Trauma Commission within a trauma service area to develop, implement, and oversee a Regional Trauma System Plan.

Regional Trauma Advisory Council

A body endorsed by the Georgia Trauma Commission within a trauma service area to develop, implement, and oversee a Regional Trauma System Plan.

RTAC Leadership

Identified multidisciplinary people who guide and organize the development and implementation of the regional trauma plan.

Regional stakeholders

A multidisciplinary group of people who represent the trauma system continuum from injury prevention through rehabilitation.

Regional trauma system

Assets, capabilities, stakeholders and providers of a given trauma service area, organized to improve the area's ability to identify and then transport Trauma System patients to an appropriate hospital for definitive care within an optimal time.

Regional Trauma System Plan (“Plan”)

A document developed by a Regional Trauma Advisory Council/Committee that specifies and formalizes the relationships between the various regional trauma system components.

Regional Trauma System Planning Framework (“framework”)

A document put forth by the Georgia Trauma Commission to be used as a planning guide for regional trauma system plan development. The framework sets forth components and functions necessary for operation of a regional trauma system.

Resource Availability Display (RAD)

A computer system screen, which indicates the system-open status for Trauma Centers and resource service line availability for each participating hospital in the Georgia Trauma System. RAD terminals are limited to participating hospitals and the Trauma Communications Center.

Subcommittees

The structure used by Regional Trauma Advisory Committees to develop the regional trauma plan.

Trauma Center

A Georgia licensed hospital designated by the State Office of EMS and Trauma as a Level I, II, III, or IV trauma facility. State designation standards are extrapolated from the American College of Surgeon's Committee on Trauma, Trauma Center Verification Standards.

Trauma System Entry Criteria

Primary triage criteria.