Minutes approved 17 November 2011

Georgia Trauma Commission
GEORGIA TRAUMA CARE NETWORK COMMISSION

MEETING MINUTES

Thursday, 15 September 2011

Scheduled: 10:00 am until 1:00 pm
Atlanta Medical Center
Health Pavilion-Letton Auditorium
320 Parkway Drive NE-Atlanta, GA 30312

CALL TO ORDER

Dr. Dennis Ashley, Chair, called the scheduled monthly meeting of the Georgia Trauma Care Network Commission to order at 10:08 a.m.

COMMISSION MEMBERS PRESENT	COMMISSION MEMBERS ABSENT
Dr. Dennis Ashley Linda Cole, RN Dr. Leon Haley Rich Bias Kelli Vaughn, RN (via tele-conference) Kurt Stuenkel Elaine Frantz, RN	Ben Hinson Bill Moore

STAFF MEMBERS SIGNING IN	REPRESENTING
Jim Pettyjohn, Executive Director	Georgia Trauma Care Network Commission
Lauren Noethen, Office Coordinator	Georgia Trauma Care Network Commission
Judy Geiger, Business Operations Officer	Georgia Trauma Care Network Commission

OTHERS SIGNING IN	REPRESENTING
Alex Sponseller	Assistant Attorney General
Scott Sherrill	GTRI
Regina Medeiros	MCG Health
Lawanna Mercer-Cobb	SOEMS/T – Region 6
Gina Solomon	Gwinnett Medical Center
Debra Kitchens	MCCG
Renee Morgan	OEMS/T
Bambi Bruce	Walton Regional Medical Center
Josh Mackey	GAEMS
Brandi Holton	Phoebe Putney
Jill Mabley	OEMS/T
Danlin Luo	DPH Chronic Disease
Rana Bayakly	DPH Chronic Disease
Keith Wages	OEMS
Richard Lee	OEMS
David Bean	EMS Consultants
Romeo Massoud	Gwinnett Medical Center

Greg Pereira	GHOA
Fran Lewis	Grady
Sharon Queen	Walton
Ethan James	Georgia Hospital Association
Laura Garlow	Wellstar Kennestone Hospital
Jim Sargent	North Fulton Hospital
Scott Maxwell	M & M Inc.
Michael Colman	Grady

WELCOME, INTRODUCTIONS AND CHAIRMAN'S REPORT

Dr. Dennis Ashley states that the Commission had a tragic loss. Mr. Mike Watts who was the lead to the TCC passed away on September 1, 2011. Dr. Ashley holds a moment of silence in honor of Mr. Watts.

Dr. Ashley states that Mr. Jim Pettyjohn and he had the opportunity since the last Commission meeting to meet with Governor Nathan Deal and his staff, and bring the Governor up to date on all the things that the Commission is doing, with a lot of attention to the regionalization and the Communication Center. The Governor was very pleased with the progress, and we received very good feedback concerning the direction the Commission is headed. The Governor realizes that we need sustainable funding and he has agreed to help us with that, but like many of the legislature he does not have a magic bullet and is open to suggestions. Dr. Ashley states that we need to continue to have an open mind and be thinking of ways to do that. Dr. Ashley states that they also met with the Lt. Governor Casey Cagle, Senator Greg Goggans, and Senator Renee Unterman, and they were very happy with our progress especially the regionalization, combining resources and getting the right patient to the right place at the right time, and working with the Communication Center to build a system. This was something the Lt. Governor had pushed two years ago, with a new access project for all Georgians regardless of where they are.

Dr. Ashley states that the bi-monthly Medical Directors meeting with all the trauma centers has been going very well. The last meeting centered on TQIP which is the Trauma Quality Improvement Project that all trauma centers will have now. We will be the first state to come on board, and the American College of Surgeons Performance Improvement Committee at the national level, is very interested in Georgia, because we are the first state to come onboard. Because we are the first state to do this, a subcommittee of that group joined in on the conversation, and is working with us to design and develop state reports. We are working on those reports and Dr. Ashley states that he will get more information back to everyone on how the state reports will work.

Dr. Ashley announces that on Thursday November 3, from 8 am-12 pm MCCG is holding their Trauma Symposium and it will be dedicated to traumatic brain injury. Dr. Ashley states that everyone is invited, and it is free of charge. Dr. Ashley would like anyone who plans on attending to RSVP.

Dr. Ashley establishes quorum. Mr. Alex Sponseller confirms quorum, and Mr. Jim Pettyjohn confirms no one is on the conference phone line.

APPROVAL OF THE MINUTES OF THE 11 August 2011 MEETING

The draft minutes of the 11 August 2011 meeting were distributed to the Commission prior to the meeting via electronic means and are also available to meeting attendees in printed form.

MOTION GTCNC 2011-09-01:
I move that the minutes of the 11 August meeting of the Georgia Trauma Care Network Commission distributed and presented here today to be approved.

MOTION BY: **Ms. Linda Cole**
SECOND BY: **Dr. Leon Haley**

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DISCUSSION:
Ms. Elaine Frantz states that a correction needs to be made to the minutes on page 14 the third paragraph. The meeting of the first RTTDC is scheduled for November 3.

Motion has been copied below:

ACTION: The motion ***PASSED*** with no objections, nor abstentions. *(Approved minutes will be posted to www.gtcnc.org*)

ADMINISTRATIVE REPORT REVIEW

Mr. Jim Pettyjohn summarized the administrative Report including presentations to be made today, and subcommittee reports to be provided.

- The Division of Driver Services supplies Super Speeder Revenues every month. Regarding the $200.00 fine part our receivables are up for July 2011 over July 2010. In 2011 we had 1.37 million dollars and in 2010 it was 1.27 million dollars. We are also up in collections for the same period $971,000 verses $482,000. The reinstatement fee which is the Lions share of Senate Bill HB 60, and the largest amount of money coming to the Commission, receivables were down for 2011 over July 2010, 1.4 million verses 1.6 million, but the collections are up for the same period, so there are less opportunities but we are getting more back, $456,000 verses $292,000. The total collections for July 2011 were 1.4 million and in July 2010, $774,000. *(Graft attached to Administrative Report and posted to the GTCNC website)*

- Judy Geiger's report on the Trauma Commission's contract and accounts payable process. The Commission wanted us to work with DPH on this process and we were successful in doing that. *(Process Attached to Administrative Report.)*

- Judy Geiger's 2012 Expenditure Report to date. *(Attached to Administrative Report)*

- Last week Mr. Pettyjohn sent out the FY2012 Trauma Centers contracts. We have a goal of uncompensated care funding. Last year for our uncompensated care services we used survey data from calendar year 2008, and also started auditing our survey data. We audited 2008 and found changes. We went back and changed the amount in last years contract to cover services in 2009. The difference in this years contract is that instead of saying that we are paying for uncompensated care services to cover calendar year 2009 when we already did that, we are stating that we are granting the trauma centers funding according to uncompensated care data submitted for calendar year 2009. That is the transition year and will be easier for the trauma centers. They will not have to go back and find that data again, it is already there. Next physical year 2013 we will be using calendar year 2010 to determine our uncompensated care distribution, and we will be funding for services during calendar year 2010. When we audit next year we will be auditing 2010 and if we have to change the distribution we will be changing the distribution for 2010 the same year we are funding it.

- FY2011 Uncompensated Care Program distribution. The checks have been written and are being sent out. *(Distribution Document attached to Administrative Report and posted to the GTCNC website)*

- eBroselow Safe Dose mobile phone app that is also for the I-pad goes live September 19th through September 25th. This app is downloaded for free during this time with the requirement that EMS participate in three surveys, how they use the app, the effectiveness of the app, and any recommendations to improve it. Georgia is the first state to do this.

Trauma Communications Center Update

The untimely death of Mr. Mike Watts has been sad and devastating. Mr. Mike Watts was working with Mr. Pettyjohn and Mr. Scott Sherrill to build a team with the TCC. Mike left us a wonderful legacy; he had worked his contacts in the area, and had found several people that were interested in becoming agents. Mr. Scott Sherrill with GTRI has been extremely important in helping to get the TCC Center together. Mr. Sherrill has been working with SAAB to assure that we have the software placed properly on the server. We had a delay with SAAB coming to provide training on that, but they will be coming September 10th. Mr. Pettyjohn will be moving down to the TCC in Forsyth for the last week of September as well as the month of October to build a team of staff. Mr. Pettyjohn hopes that out of that team a leader will surface, and he can work with that person to become the supervisor of the TCC. That is one idea, and the other is to go back and re-visit the folks that interviewed for Mike's position. Mr. Pettyjohn thinks he will delay the opening of the TCC from October 1st to November 1st. Mr. Lee Oliver from MCCG has offered his resources in helping us develop policies, procedures, and job descriptions, as well as Mr. Ben Hinson and his lead person at his dispatch center. Mr. Pettyjohn states that while he is working at the TCC he will be meeting with these people and leveraging all of these contacts and assets, and he will provide a report to the Commission by email as well as in November at the Commissions next meeting.

Mr. Scott Sherrill states that the system at the TCC has been physically implemented. The rack of equipment that we will be using, radio antennas, and the software is up and running within the facility and can be accessed via the internet with appropriate permissions. Mr. Sherrill states that he would refer to the software as being in a beta format, it has dummy data that we would need to be able to populate as we talk to the participating hospitals, and perform thorough testing on it. As Mr. Pettyjohn mentioned we delayed SAAB coming from Sweden for the training as a result of the situation with Mr. Watts, and the personnel changes. They have been rescheduled the week of October 10th. There are some infrastructure issues at the TCC itself that should also be resolved by that point of time. When SAAB arrived for their initial installation a card that was ordered for us by GTA for the phone system was not available, it is now available and in place. They are increasing the bandwidth for the TCC, and that should be completed next week. The system itself, the training, and the infrastructure we need should all be in place for the training week of October 10th. Mr. Sherrill states that SAAB has gone above and beyond the letter of the contract in terms of things they have provided for us as we have looked at and identified potential additional functionality.

FY 2012 Budget and Strategic Planning Update & Contracting Process

Ms. Judy Geiger is pleased to report to the Commission that the 2012 approved budget with 2% reductions was entered by the September 1st deadline into budget tools. Budget tools are OPB's budgeting system to enter the reductions in order to create the budget report that will be presented to the governor. *(Attached to Administrative Report budget documents page 11-15.)* Budget documents will be available at each Commission meeting and also posted to the GTCNC website. The GTCNC supplies an even more detailed version.

Ms. Geiger goes over the contracting process as far as what DPH was going to provide for administrative services. After the August 11th Commission meeting we received an email from DPH, and the contract specialist Mauri Smith. This email stated that DPH would provide all services except for contracts, procurement and grant writing services. What resulted was that Mr. Pettyjohn, Ms. Lauren Noethen, and Ms. Geiger went on a fact finding mission and had a meeting with the Department of Administrative Services, which is the state agency responsible for the guidelines for procurement. *(Attached to the Administrative Report page 6-7 meeting document)* Ms. Leslie Lowe, DOAS Assistant Commissioner of Procurement who was present at the meeting stated that hospital trauma centers, physicians, and the EMS allocations, as well as the other current contracts that the Commission has are exempt from procurement. Ms. Lowe checked with her legal staff, and they said they do not even want to see them. In essence DPH cannot charge us for something they did not provide to the Commission in the first place. The second issue concerning the contracts writing was that basically what DPH was providing in the past was a contract shell, and the contract specialist would customize this shell for the Trauma Commission contract. Mr. Pettyjohn felt very strongly about being able to bring this process in house, and bypass using DPH contracts process for development. Mr. Pettyjohn worked with Mr. Alex Sponseller to develop the Trauma Commission contract shell. They were successful and created a 25-page shell, and the contracts were emailed out to the hospitals this week. The next phase after the contract has been developed is to come up with an in house process of how to take the executed contracts and get them entered into PeopleSoft, to be able to pay the invoices.

(Attached to Administrative report pages 8, Georgia Trauma Commissions Contracts (GRANTS) Process documents) The only part of the process that DPH will be involved in will be the buyer, and the buyer is the person that actually enters the purchase order into PeopleSoft. The Commission's state employees will perform all other actions and tasks. Ms. Geiger states that Mr. Jeff Bailey, with the contracting firm Cherry Technologies, and is the TGM Implementation Manager, is to work with the state accounting office to set up agencies to map out from beginning to end how to enter a purchase request into PeopleSoft and get it approved. There are several different activities involved, 1) Requestor, 2) Program Approver, 3) Budget Approver, 4) and the Buyer that actually enters the purchase order into PeopleSoft. We discussed the possibility of the Trauma Commissions state employees being able to develop this process 100%. Ms. Geiger had a follow-up conversation with Mr. Bailey on that subject after the meeting, and Mr. Baily apologized but he is working with 8 other agencies right now in developing their mapping, and it would be January before he could address our issues pertaining to getting us set up. Ms. Geiger states that since this is all new we would have to see how much it expedites being able to execute contacts into PeopleSoft, but Ms. Geiger truly believes that this is the route to take. If we were to try and bring everything in house with Lauren Noethen, Jim Pettyjohn and she, we would still be missing one piece. Ms. Geiger states either she would have to give up her budget approval and give that to the DPH budget office and she would become the buyer, or DPH is the buyer. It is a difficult decision because you have your checks and balances, and we do not have enough employees. Ms. Geiger recommends that we see how this grants contacts process works first, and we will because the contracts will be executed in October, and in November entered into PeopleSoft. If after that we still wish to pursue bringing everything in house that meeting can take place hopefully as soon as January. The contacts process leads into how are we going to pay invoices. *(Attached to Administrative Report page 9-10, Invoice Payment Process.)* Ms. Geiger states that this process has been streamlined by only involving one person to pay the accounts payable invoices in Public Health, and one person to pay the contract invoices in Public Health. Ms. Geiger states that she will be following up with each check run and doing queries in PeopleSoft and updating the detailed expenditure sheet with the budget to insure that payments are made in a timely manner.

Ms. Geiger states that the OPB the Office of Planning and Budget has a web based system called Horizon where they require each agency to enter their strategic plans, including goals and strategies. *(Attached to the meeting minutes instructions for access to the Horizon Website.)* This is also a way for the OPB to make the states agency's strategic plans public. Anyone can look at this website. The deadline for entering that information was also September 1st and we completed it and submitted it on September 1st.

Ms. Geiger states that the zero-based budgeting is official and the Trauma Commission's budget program has been selected to participate in the zero based budgeting process. Ms. Geiger has a meeting tomorrow with the Commissions OPB analyst Ms. Paula Brown, as well as Ms. Alice Zimmerman who is the strategic planning coordinator for the OPB, to receive guideline on developing performance measures which is the first step of the zero based budgeting process. Once that information is gathered Mr. Pettyjohn, the Commission, and she will have to work on developing those performance measures. These measures will definitely have to be reviewed and approved. This is something that will be put into the governor's 2013 budget reports. The performance measures are all subject to audit, so it is very important that we know what we are putting out there.

Dr. Ashley wants to know when we will have to have all that completed.

Ms. Geiger states that the initial performance measures need to be completed and entered into budget tools by October 3rd.

Mr. Pettyjohn states that the deadline is October 3rd, but we have documentation back from OPB that yes these will be draft, they will be discussed, and they will need to be approved, and they can be changed. We will keep the Commission informed on this process.

Dr. Ashley wants to know if this document is something that is looked at before the governor does his budget to decide where he might want to distribute his money for the following year?

Ms. Geiger replies that the whole idea of zero based budgeting is to have the performance measures and to be able to tie these measures to the dollars being spent. When the legislator's look at each budget program they can see the amount of money they spent and what was accomplished.

Dr. Ashley wants to know if it includes every line item in the Commissions budget or is it in big chunks?

Ms. Geiger reply's that she has heard that it is by activity, which is a very vague term. The meetings with OPB tomorrow will help clarify some of those questions.

Trauma Registry Data Presentation

Ms. Rana Bayakly presents the Trauma Registry Data, which includes:

- Data Analyzed
- Severity and length of stay,
- Mechanism, Severity, and LOS
- Severity LOS, and disposition.

Dr. Ashley wants to know if we will have the ability to know how long it took on a transferred patient to get them transferred? The Trauma Commission is under accountability pertaining to all these things we are doing, is it going to work, is it going to make a difference? If we can get a severe patient to the trauma center in less time than they usually get there that is a positive database.

Ms. Bayakly replies that the hope is to link the data to other EMS and once the linkage is complete they are hoping to be able to answer that question. Ms. Bayakly they are hoping to apply for an EIS Officer, which is an Epidemiologic Intelligent Service person. If they are successful in obtaining this person who is a PHD epidemiologist, or an MD, with a MPH, that person can help to link us to the two data sets, the EMS and the Trauma Registry. If this takes place we would be able become successful in December of this year. *(PowerPoint of this presentation attached to the meeting minutes.)*

RTAC VI Plan (action required)

Mr. Rich Bias states that in preparation for this meeting Mr. Pettyjohn sent out two documents to Commission members around the end of August, the Trauma Regionalization EMS Region VI July 2011 Summary that was prepared by the RTAC and approved by the Region IV EMS Council, and the Region VI BIS (Benchmark Indicator Scoring) Assessment. *(Documents attached to meeting minutes)* Mr. Bias states that in this presentation he is going to be focusing on the process of this plan. Starting in January after the Commissions retreat in Rome we had a basic blueprint of how we might go forward. In Region IV we established a stirring committee, which included Lawanna Mercer-Cobb Director of the regional office in Augusta, Regina Medeiros and Courtney Terwilliger. *(Attached to the meeting minutes Power Point Presentation Region VI Regional Trauma Advisory Committee Plan)*

MOTION GTCNC 2011-09-02:
I move to approve the first Regional Trauma Plan as presented today.

MOTION BY:	**Ms. Linda Cole**
SECOND BY:	**Ms. Kelli Vaughn**

DISCUSSION: None

Motion has been copied below:

ACTION: The motion ***PASSED*** with no objections, nor abstentions. *(Approved minutes will be posted to www.gtcnc.org*

Reports

RTAC V

Ms. Debra Kitchens states that the Region V RTAC is moving along, they had their first stakeholders meeting on August 15th, their second meeting on September 5th, and their third meeting is scheduled for October the 5th. We have been having a great turnout and are averaging about sixty people per meeting. Our plan at this point we are for the most part following what Region VI has done, with some differences. We hope to have all of our bugs worked out on our plan by October 5th, and then we will them take it to the Region VI EMS meeting on October 12th, and present it for approval. After that we would present it at the next Trauma Commission meeting.

RTAC IX

Ms. Elaine Frantz states that Region IX has visited all the hospitals their region, and also in South Carolina. The invitations were sent out yesterday to about 100 people, all the EMS counsel members, all of the CEO's in the hospitals in the region, and South Carolina, nursing leaders, and community leaders. Our RTAC meeting is scheduled for October 28th. That will be the first meeting, and at that point Ms. Frantz's trauma chief expects her to present a plan. We have also scheduled the first RTTBC course, which is on November 3rd.

Dr. Ashley states that Mr. Ben Hinson who presents the EMS Subcommittee report could not be here today, but we will catch up on that at our next meeting. Mr. Pettyjohn keeps information pertaining to the EMS Subcommittee posted to the GTCNC Website, so we can keep track of what is going on. Dr. Ashley states that there are no major motions coming from the EMS Committee that he is aware of at this time.

DPH OEMS, Office of Trauma and Public Health

Mr. Keith Wages states that they are still working on the transformation from the Department of Community Health to the Department of Public Health, and at it is going well. Mr. Wages states that Ms. Brenda Fitzgerald their new Commissioner is doing a fabulous job, and of course Dr. Pat O'Neal has provided great support. The transition of the scopes of practice educational standards, are moving along well for the EMS community. We have been very pleased with the support that we have received from the educators as well as the EMT's themselves who are taking the updates to update their licenses. We have a rules and regulations revision going forward right now, which is basically implementing criminal background checks, and we are pleased to have that authority based on the statue that was passed. Mr. Wages states that Dr. Jill Mabley is working on pre-hospital protocols to revise the states recommended protocols, and hopes to have this project completed by the end of the year. Mr. Wages states that at the next Commission meeting he hopes to be able to tell everyone that they have a new program director in Region 9, Brunswick Savannah Region, and we are very excited about that.

Ms. Rene Morgan states that they have done two site visits, one was a re-designation visit, and the other an upgrade and those were Children's facilities, and they are pending approval. Ms. Morgan states that they have not set a firm date for Kennistone, but are in the final stages of their designation process, and will have a date set within the next few weeks. Ms. Morgan is also going to follow-up with Wills and Emanuel, and hopefully before the end of the year have those completed. They have had several new facilities that have contacted them, and are looking into the process.

LAW REPORT

Mr. Alex Sponseller goes over the question that was asked as to how do the RTAC plans gel with EMTALA. Mr. Sponseller thinks the TCC and the trauma plan is a mechanism on how we can decide to transfer a patient. The fact that you have a mechanism to transfer a patient and a faster ability to do that does not take away the fact that the hospitals still have to comply with the federal law. The purpose of EMTALA is to prevent hospitals from

dumping indigent patients onto other hospitals, and or to transfer them before they are stabilized. If the patient has been stabilized the hospital can transfer them to another facility. There is a certain long list of things a hospital has to document to be able to transfer a patient. When you are looking at the inter-facility transfer procedure it only seems viable that you would follow those steps anyways. The physician would have to certify that the best facility to be transferred to outweighs staying at the current facility. The TCC and the trauma plan is basically just a mechanism of saying, "this is the right facility to send the patient to", and the physician that would be treating the patient at the first facility would say, "they have to go to the second facility because that is the best place to send that patient". Under EMTALA if you go through the steps to document that decision then you have satisfied the statue. Mr. Sponseller states that he would be happy to take any specific inquires, and compose an official letter of advice.

Mr. Rich Bias thinks that the question that Courtney Terwilliger raised about whether or not the ambulance is owned and operated by a facility extending the zone of applicable ability rule had been changed in the last couple of years.

Mr. Sponseller states that there are EMS that are not hospital owned and they are not really bound to the EMTALA law, but still to the state law. The regulations actually say that if the EMS is in transit and contacts a hospital that does not necessarily mean that they are coming into that hospitals emergency department, and EMTALA would be triggered. Mr. Sponseller states that ten years ago if it was a hospital owned EMS service as soon as they picked up that patient they would have to bring that patient to that hospital. In 2003 the regulations were changed and now they can bring that patient to a different facility that might be closer or more appropriate. Mr. Sponseller states that he would be happy to provide a detailed letter to that affect.

Mr. Bias states that the only element that he is worried about concerning EMTALA and the transfer center is whether or not it is from hospital to hospital, and the hospital is requesting that the transfer center assist. EMTALA requires that the physician accept the admission, so it cannot simply be the transfer center saying take that patient there, the hospital still have to do all that, and there will not be a shortcut. Mr. Bias thinks that the they will just have to work that out in their policy the expectation that once the TCC calls if the hospital shows up on that data resource screen as being available, they better be. This was the only gap that Mr. Bias saw, in that you do have to have a physician accept that patient.

Dr. Ashley states that after much discussion what they have decided they are likely to do is the following procedures: 1) The facility would call the TCC, and the TCC would say yes it is a trauma system patient. 2) The facility would them connect the ER to the transfer center. 3) The ER doctor proceeds to stabilize that patient as best as possible, while this phone call takes place. 4) The transfer center policy at the trauma centers would be to get the two physicians speaking to one another very quickly. 5) The patient's forms could be faxed to the facility that the patient is being transferred to, while the patient is being taken out the door to the facility. Dr. Ashley states that this procedure has not been fully approved yet. They are in the process of writing this out line by line, as they discuss it. Dr. Ashley states that the Commission will probably ask Mr. Sponseller to review this process or make recommendations on who should review it. The AG's could review it, just to make sure that we are ok.

Mr. Bias states that the next step to consider for MCCG is using the health information exchange that you are setting up with Region IV, it is already live, and the corporation starts next month. The reason Mr. Bias is pointing this out is MCCG is a host, and that would make it available to the other hospitals, so that rather than them faxing a piece of paper they could be using this information exchange network that has critical medical records information.

Dr. Ashley states that advise sounds good and is good to know, but wants to know how Mr. Bias is going to deal with that issue that was just described.

Mr. Bias replies to that question stating that they have not laid it all out yet, but he would expect it to be dealt with exactly as Dr. Ashley described it. Mr. Bias states that the flip of that is not EMTALA at all, but the real question is whether or not there is enough confidence in the system that the EMS services would not be liable for taking a patient to lower level facility as opposed to automatically taking that patient to a higher-level facility. Part of the whole process of this TCC facility is to get the patient to the appropriate level of care, and not have

the patients all go to the highest level in the region, so that the resources are distributed. Mr. Bias is somewhat concerned that without a plan that is very specific and very concrete that there could be lawsuits from the EMS.

Dr. Ashley wants to know how Mr. Bias is going to deal with that?

Mr. Bias states they have to do the next steps of the plan.

Ms. Linda Cole states that two years ago Mr. Pettyjohn and she met with Dr. Richard E. Wild, Chief Medical Officer CMS Region 4, Atlanta, who is involved with the medical review of the EMTALA cases in the Southeast region. They took the framework of the white paper to him, Dr. Wild reviewed it, and at that time did not feel that there were any EMTALA implications. Ms. Cole states but as we are getting more detailed she wonders if it wouldn't be worth having him review the regions IV RTAC plan to see if there is anything that gives him pause.

Dr. Ashley asks Mr. Sponseller if he thinks they should consult Dr. Wild.

Mr. Sponseller states regardless of your plan you still have to comply with EMTALA. He thinks the as far as the way the plan is written it implies that you would do all that, but it would be better if you made clear in the plan that you have to comply with EMATALA.

Dr. Ashley states that his opinion the plan is compliant with EMTALA, but to make people feel more comfortable it would be nice to show Dr. Wild our plan, and have him confirm that it is.

Old business: None

New business: Dr. Leon Haley makes the announcement that they are going to be holding an open house for the new trauma resuscitation area at the emergency department of Grady Memorial Hospital on Friday October 21, at 10 am. This will be an open house for an invited group of folks, including the Trauma Commission. Then we will have a general open house for EMS providers and some other folks. The construction is scheduled to finish at the end of September, and we will go operational on November 16th. The Commission will be receiving separate invitations.

Dr. Ashley mentions that at the November Commission meeting the new Commission members will be seated, and Ms. Kelli Vaughn and Mr. Richard Bias will be rotating off, and the Commission will be acknowledging there accomplishments and hard work for the Commission at that time.

NEXT MEETING Thursday 17 November 2011, MCCG, Weaver Boardroom

Meeting Adjourned: 12:38

Minutes crafted by Lauren Noethen

Instructions for Viewing the GTCNC Strategic Plan in Horizon

Go to http//:horizon.opb.state.ga.us

On the top right side of the home page, click on the Horizon Menu

A drop down box appears and you can select different reports

Click on Strategic Plan -Goals and Strategies

A prompt will come up for budget year, and Agency

Use the drop down box to select 2012 for the year and Georgia Trauma Care Network Commission Agency

Once the data populates on your screen, you can import the report into Excel format

The report does not print out well, and you have to scroll from left to right to see an entire Goal and Strategies

Trauma Registry Part III

Presented By: Trauma Registry Team

September 15, 2011

Georgia Trauma Care Network Commission

Atlanta, Georgia

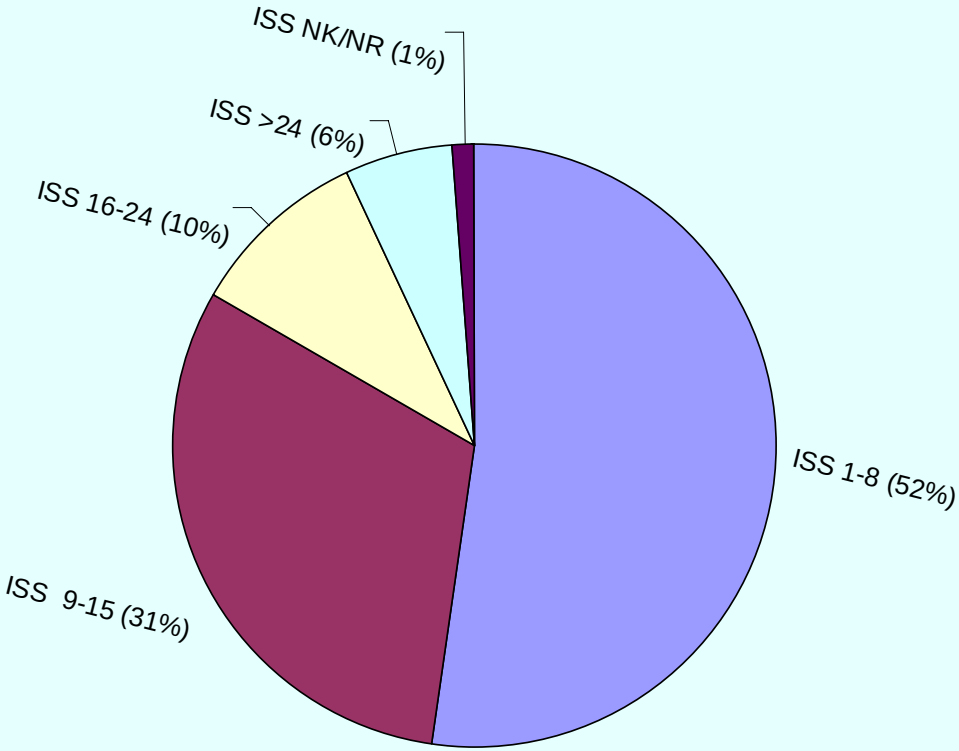
Presentation Outline

- Data Analyzed
- Severity and Length of Stay (LOS)
- Mechanism, Severity, and LOS
- Severity, LOS, and Disposition

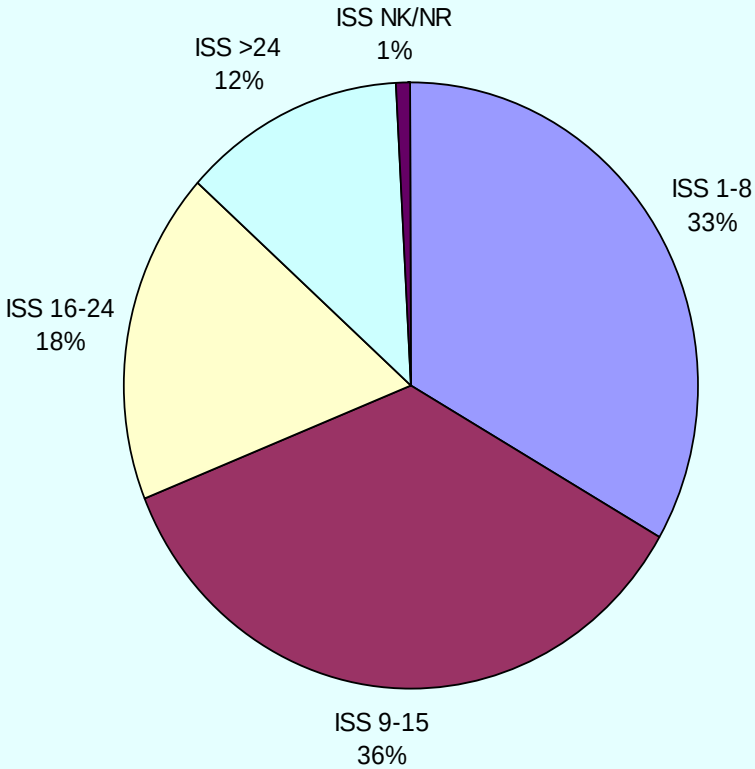
Data Parameter

- Data Years 2004 – 2009 (12,671 cases)
  - Provide stability
  - Include trauma patients < 16 years of age
  - Exclude Dead on Arrival (DOA)
  - Exclude Adverse Effect from Mechanism of Injury
  - Analysis based on the July 5, 2011 data

Overall Injury Severity Score



<16 years of age

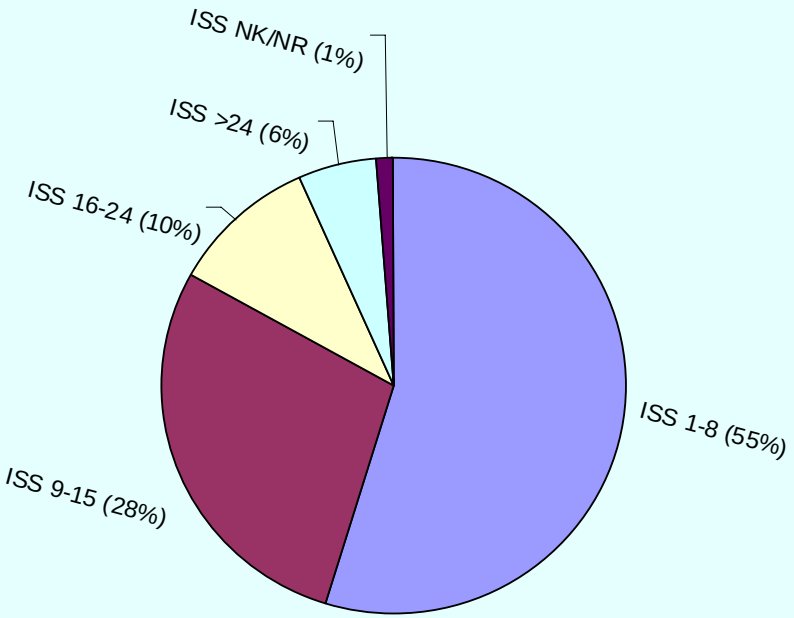


≥16 years of age

Source: Georgia Trauma Registry 2004-2009, Age <16, As of July 5, 2011

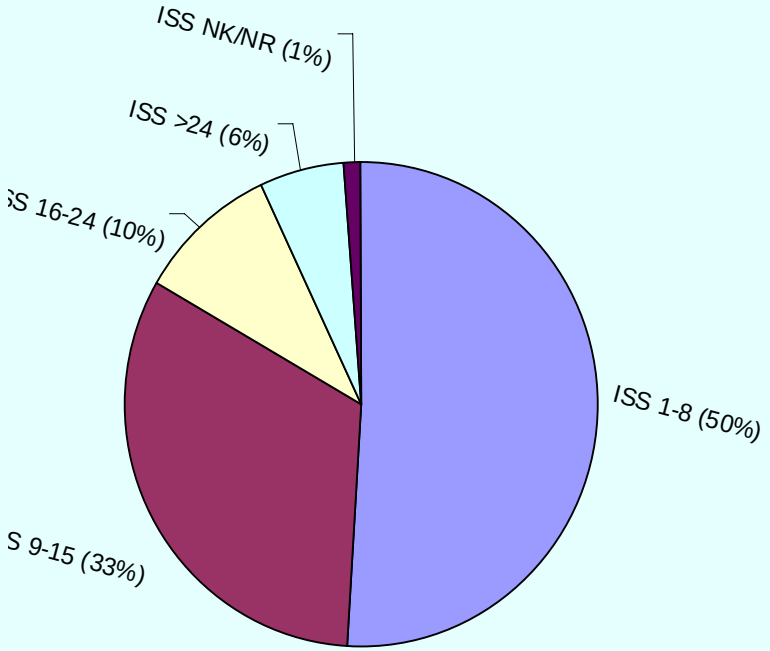
Overall Injury Severity Score

Females



4,600 Trauma Cases

Males



8,069 Trauma Cases

Source: Georgia Trauma Registry 2004-2009, Age <16, As of July 5, 2011

Overall Length of Stay

Less than 16 Years of Age

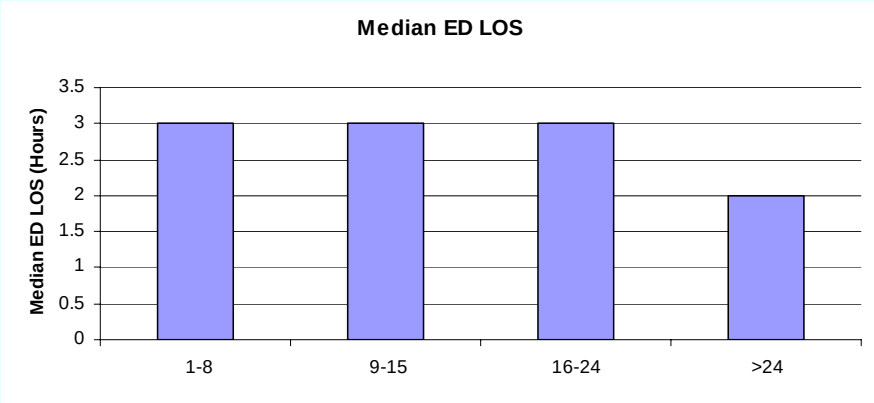
	Male	Females
Hospital (Days)	1	1
ICU (Days)	2	2
ED (Hours)	3	3

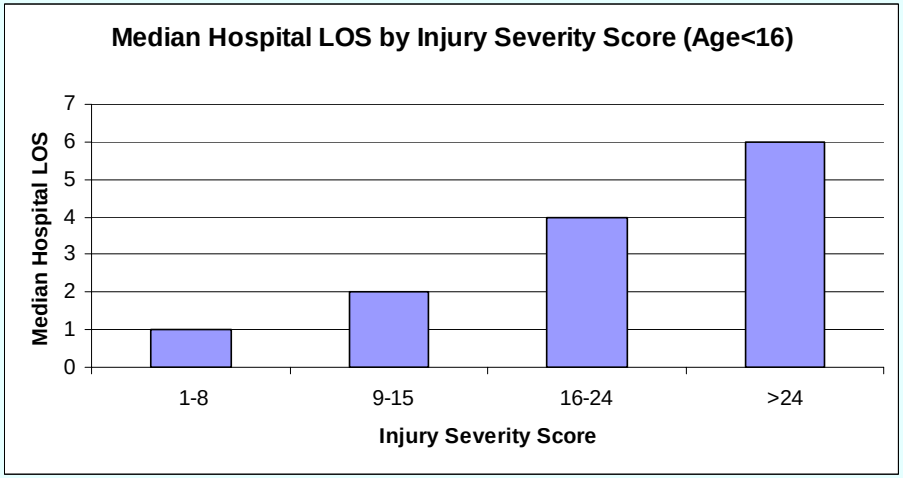
More than 16 Years of Age

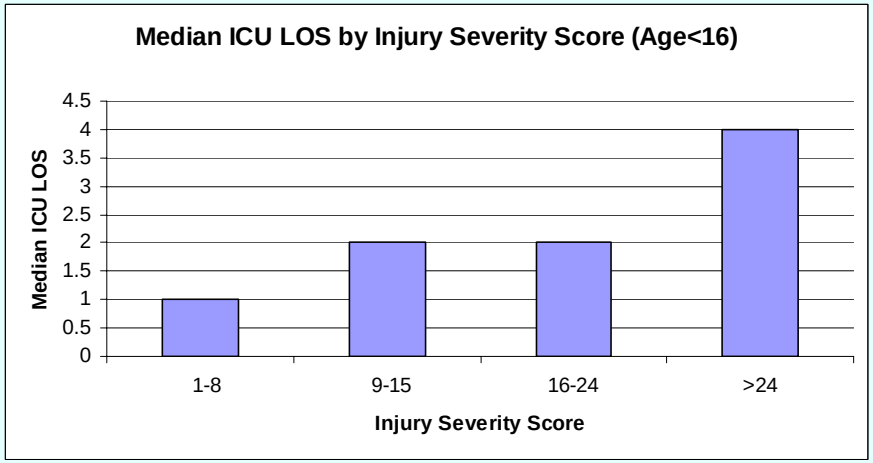
	Male	Females
Hospital (Days)	4	5
ICU (Days)	3	3
ED (Hours)	4	5

Source: Georgia Trauma Registry 2004-2009, Age <16, As of July 5, 2011

LOS by Severity by Hospital Department

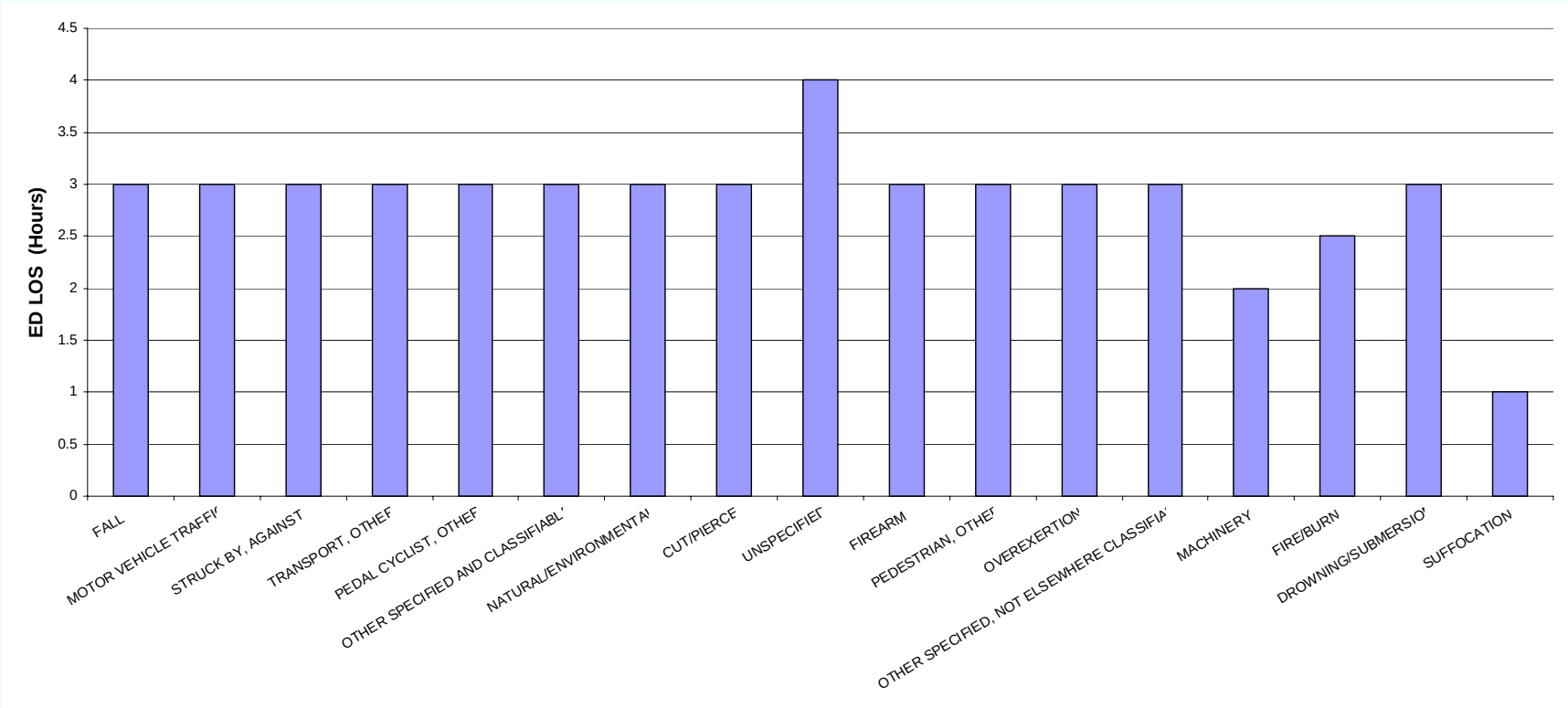






Source: Georgia Trauma Registry 2004-2009, Age <16, As of July 5, 2011

ED Length of Stay by Mechanism



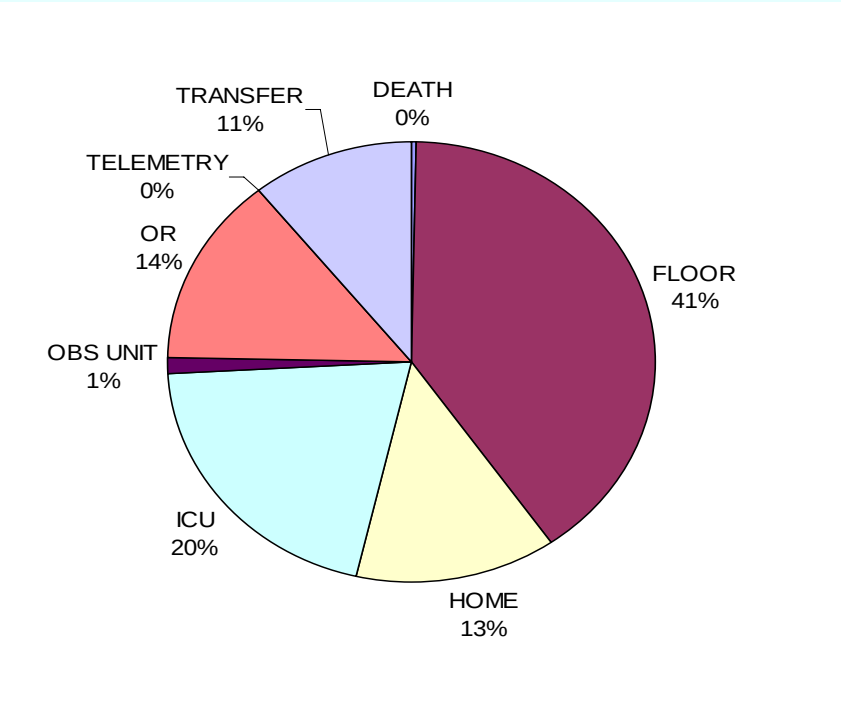
Source: Georgia Trauma Registry 2004-2009, Age <16 As of July 5, 2011

GA Trauma Registry Central Site

ED LOS by Mechanism and Severity

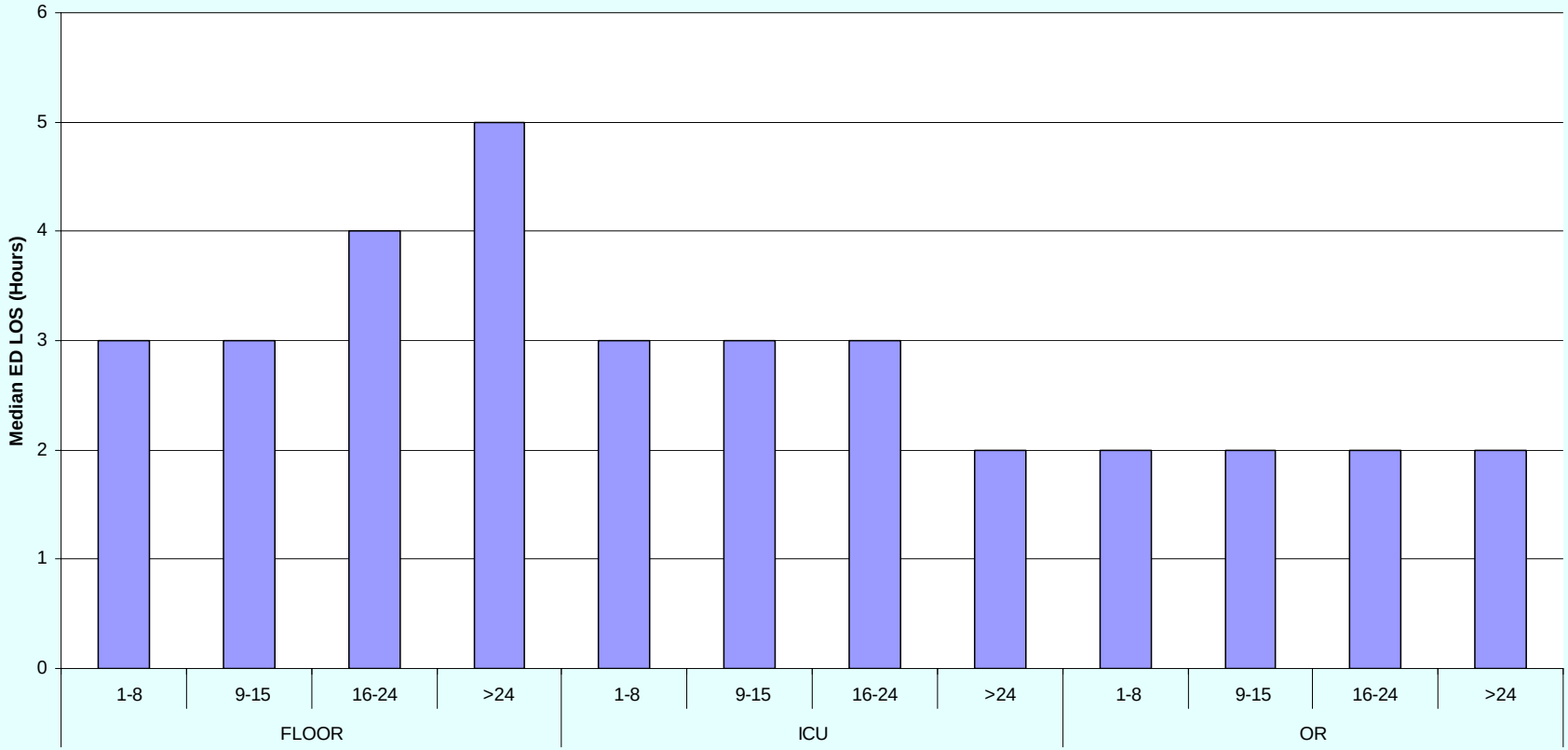
Source: Georgia Trauma Registry 2004-2009, Age <16, As of July 5, 2011

ED Disposition



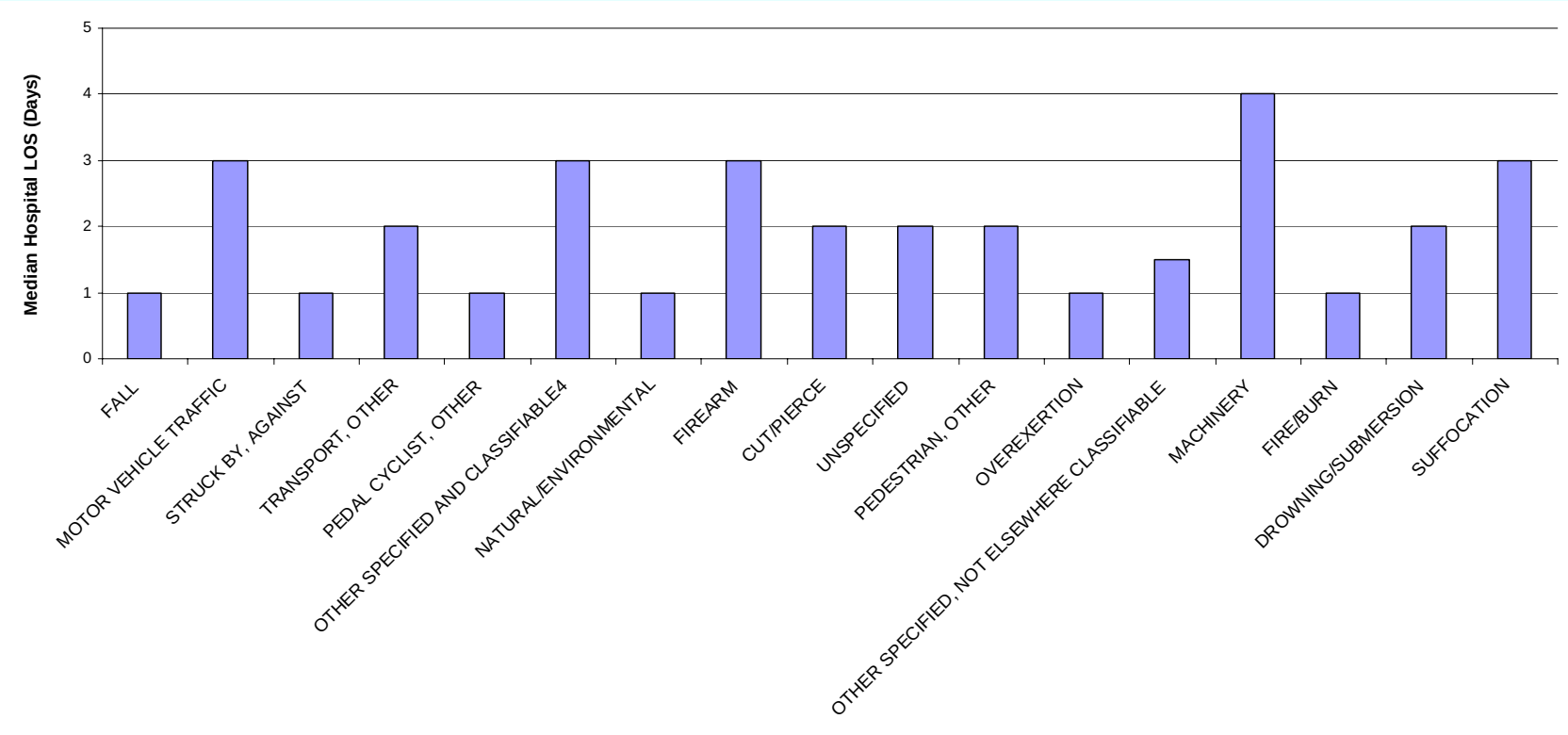
Source: Georgia Trauma Registry 2004-2009, Age <16, As of July 5, 2011

ED LOS by Severity and Disposition



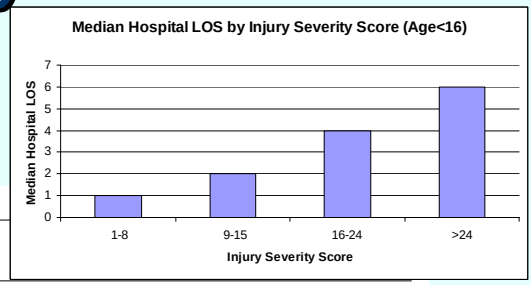
Source: Georgia Trauma Registry 2004-2009, Age <16, As of July 5, 2011

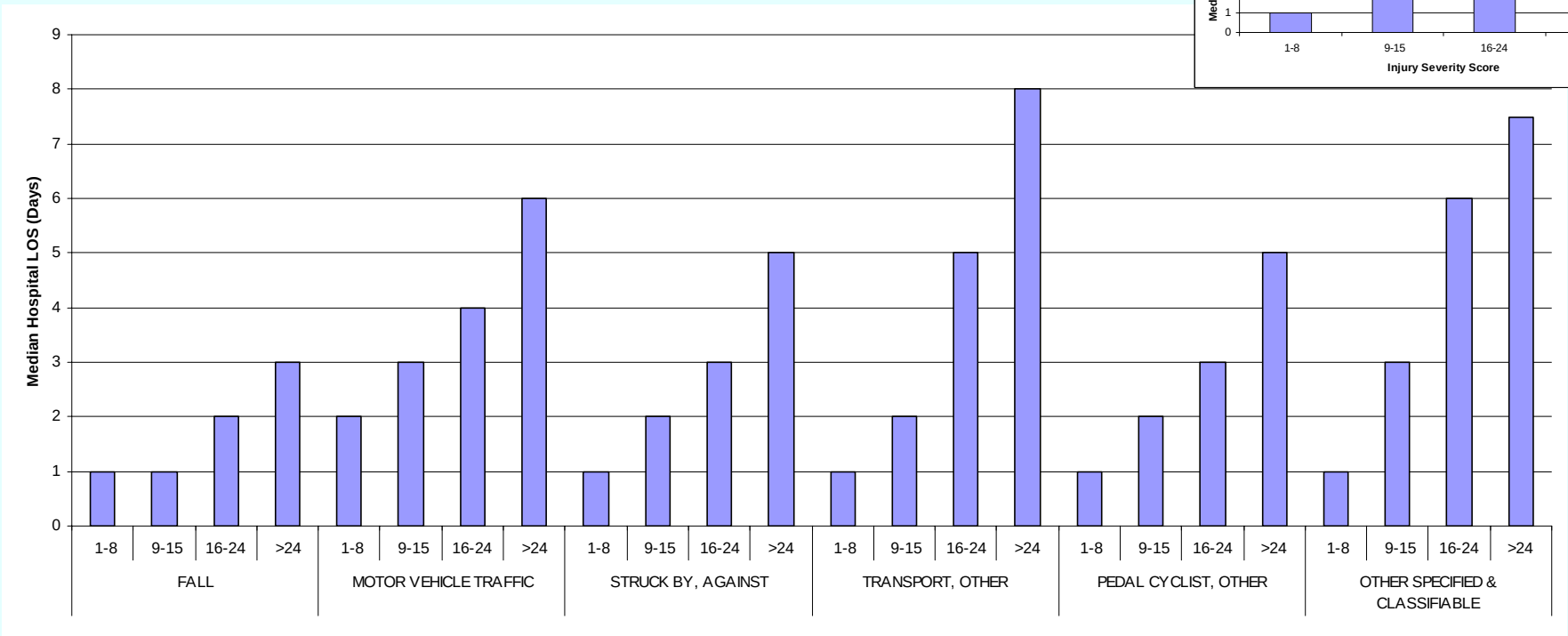
Median LOS at Hospital by Mechanism



Source: Georgia Trauma Registry 2004-2009, Age <16, As July 5, 2011

Median LOS at Hospital for the Top 6 Mechanism and Severity



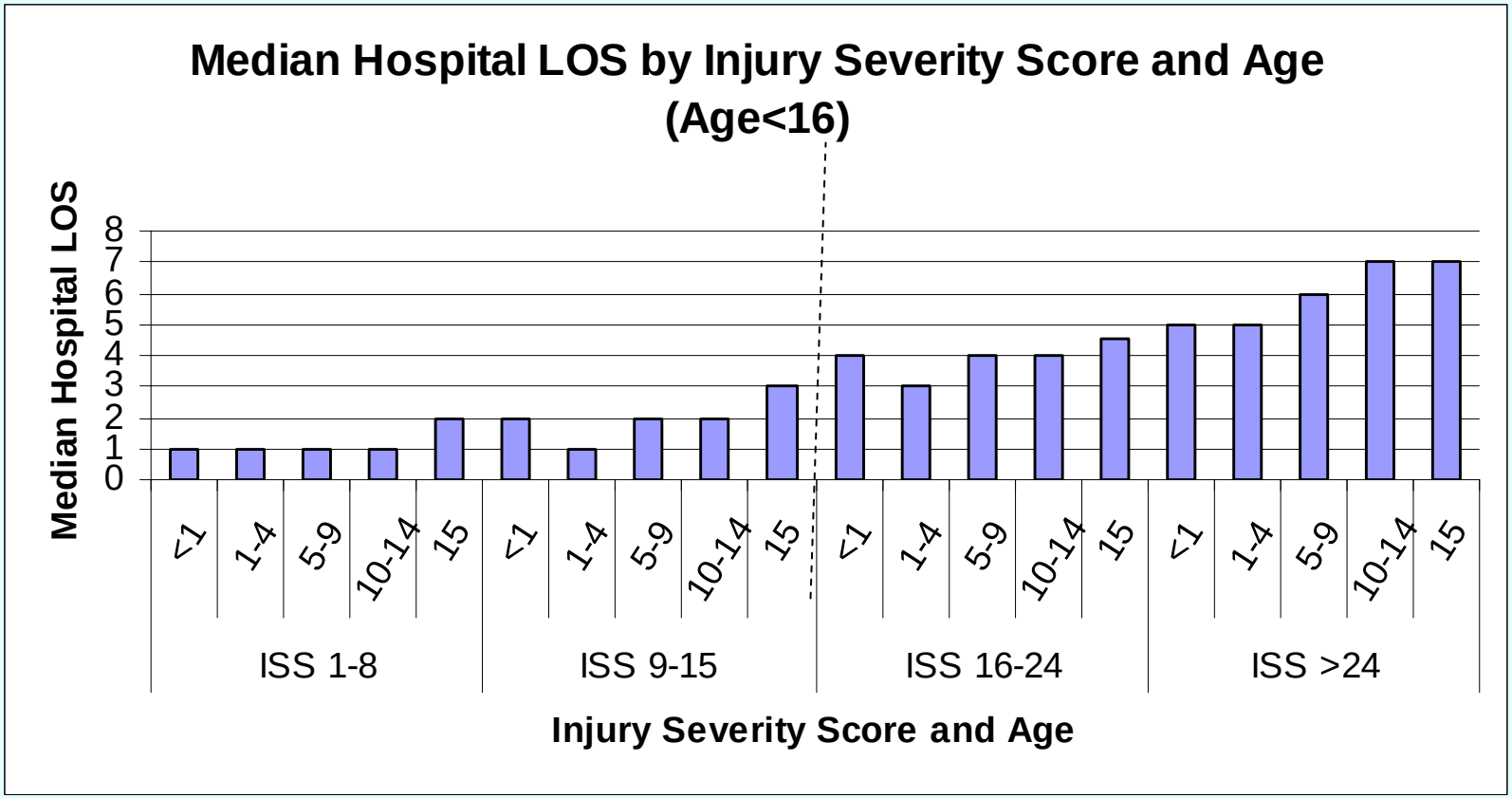


39% 24% 8.7% 8.4% 5.2% 4.2%

Source: Georgia Trauma Registry 2004-2009, Age <16, As of July 5, 2011

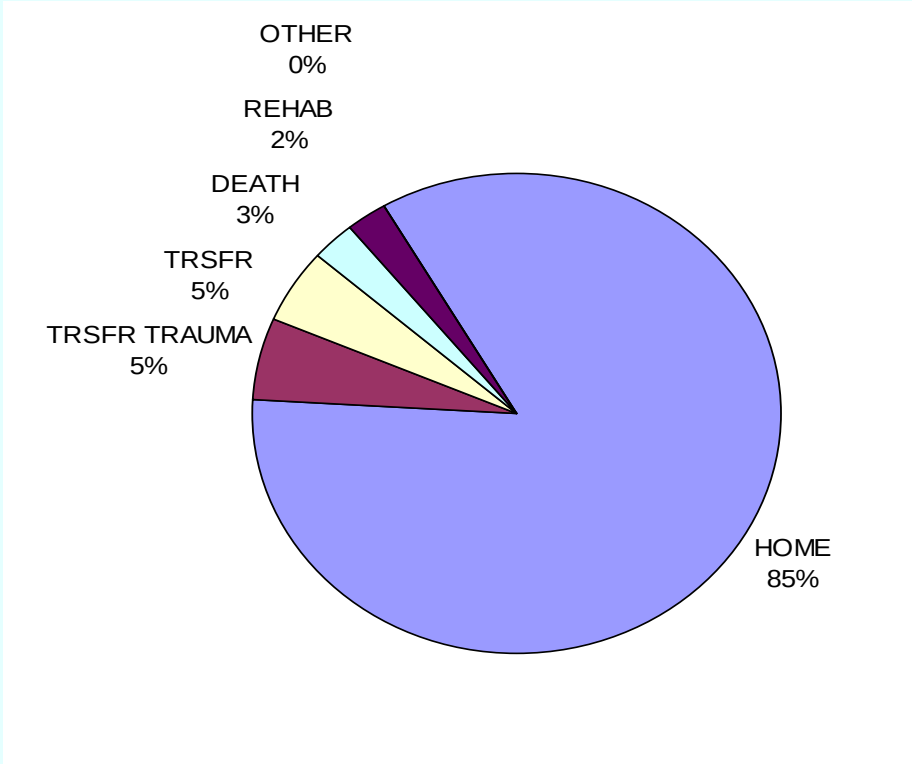
GA Trauma Registry Central Site

Median LOS at Hospital by Age Group and Severity



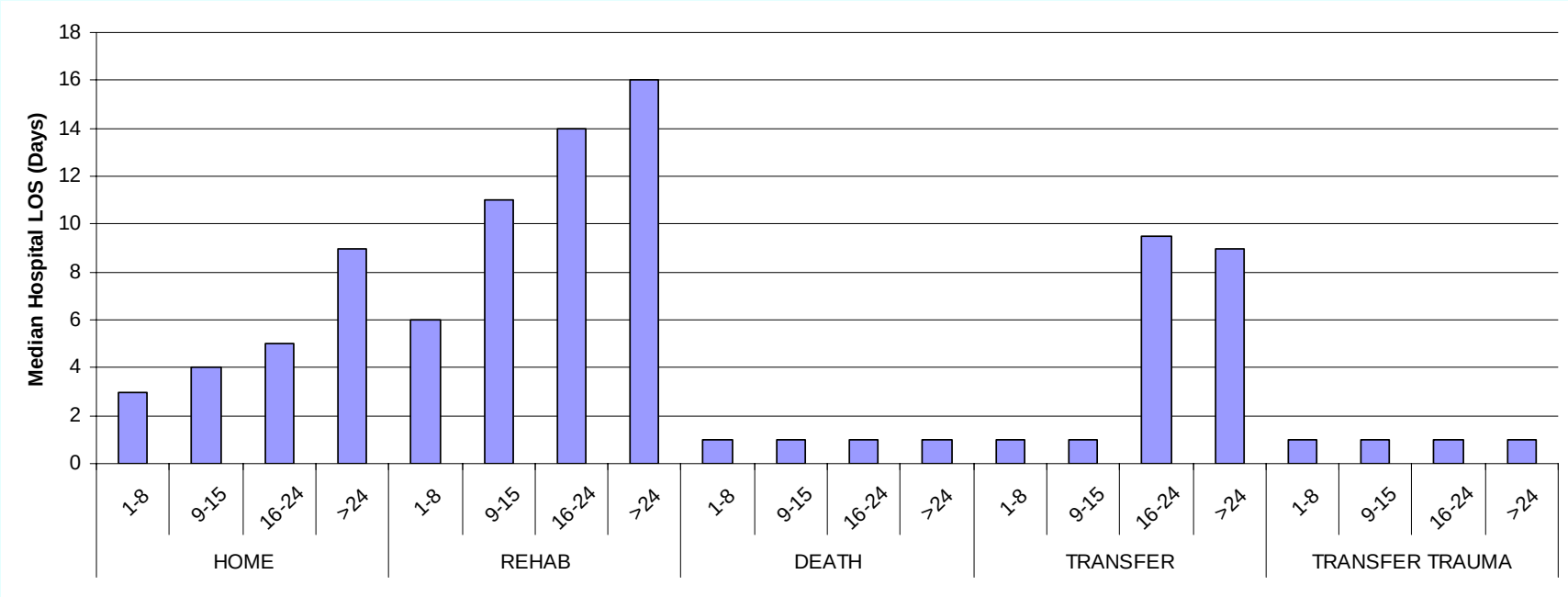
Source: Georgia Trauma Registry 2004-2009, Age <16, As of July 5, 2011

Hospital Disposition



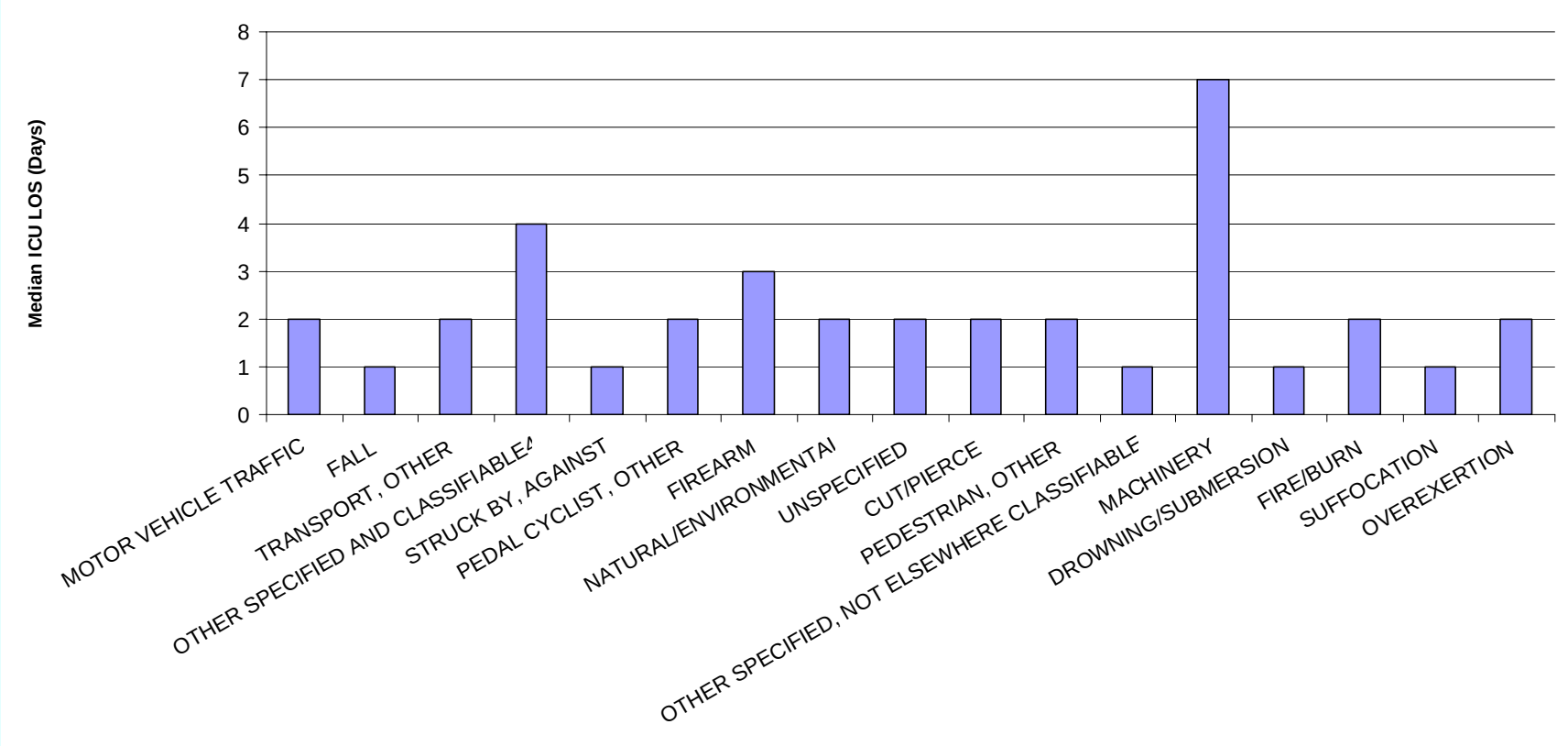
Source: Georgia Trauma Registry 2004-2009, Age <16, As of July 5, 2011

Median LOS at Hospital by Severity and Disposition



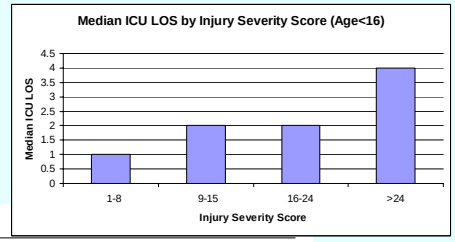
Source: Georgia Trauma Registry 2004-2009, Age <16, As of July 5, 2011

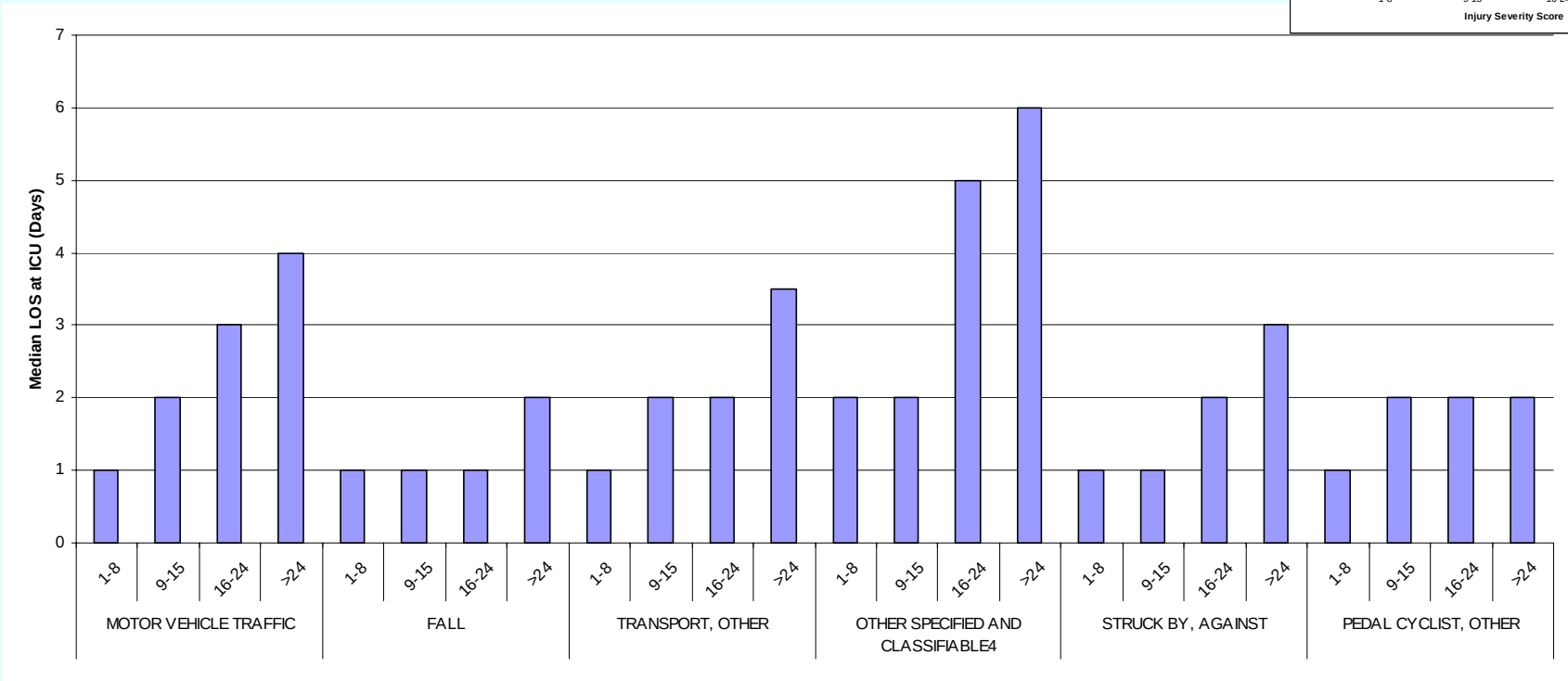
Median LOS at ICU by Mechanism



Source: Georgia Trauma Registry 2004-2009, Age <16 As of July 5, 2011

Median LOS at ICU by Mechanism and Severity



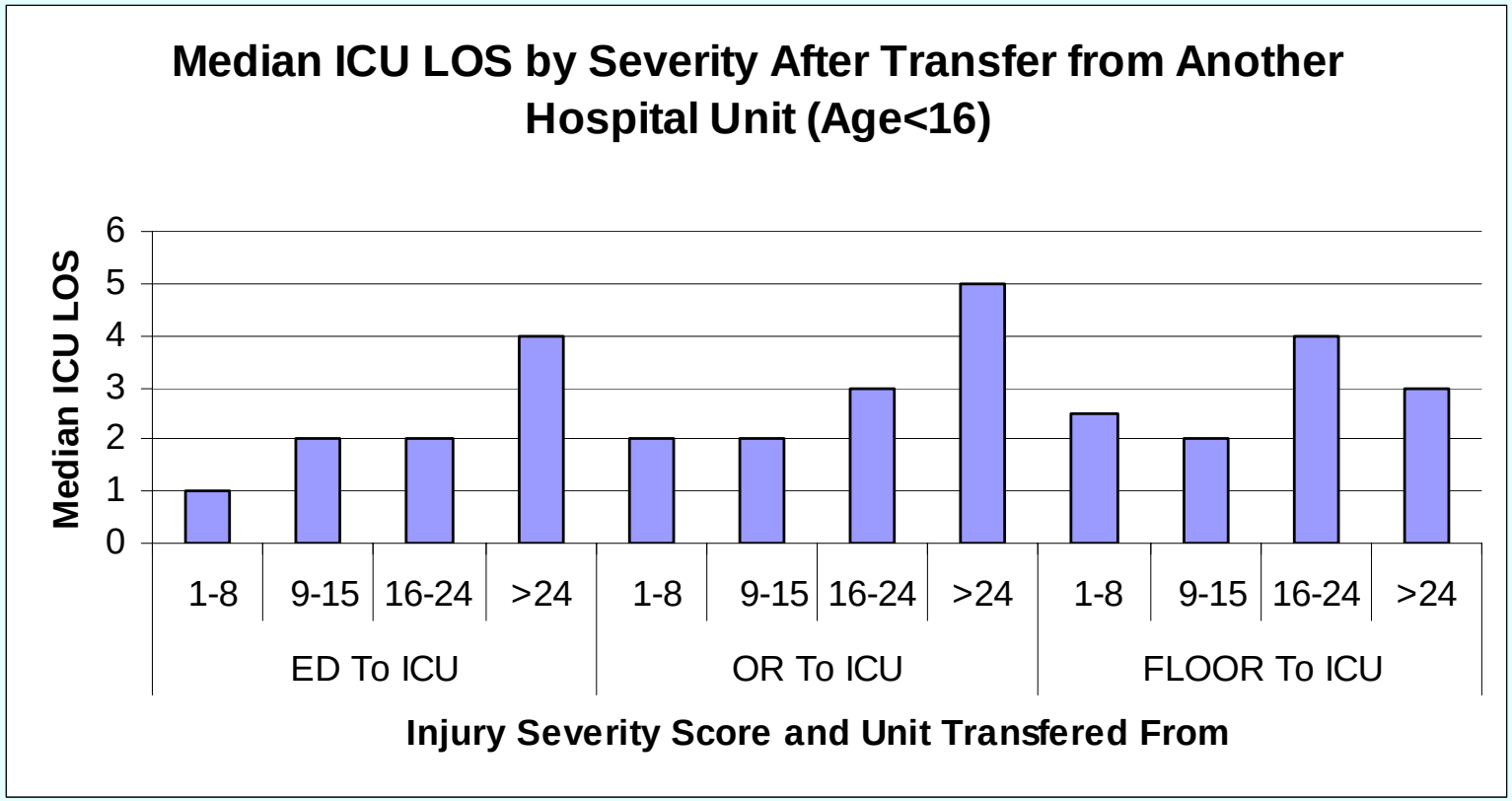


46.5% 16.6% 11.1% 6.0% 5.9% 3.9%

Source: Georgia Trauma Registry 2004-2009, Age <16, As of July 5, 2011

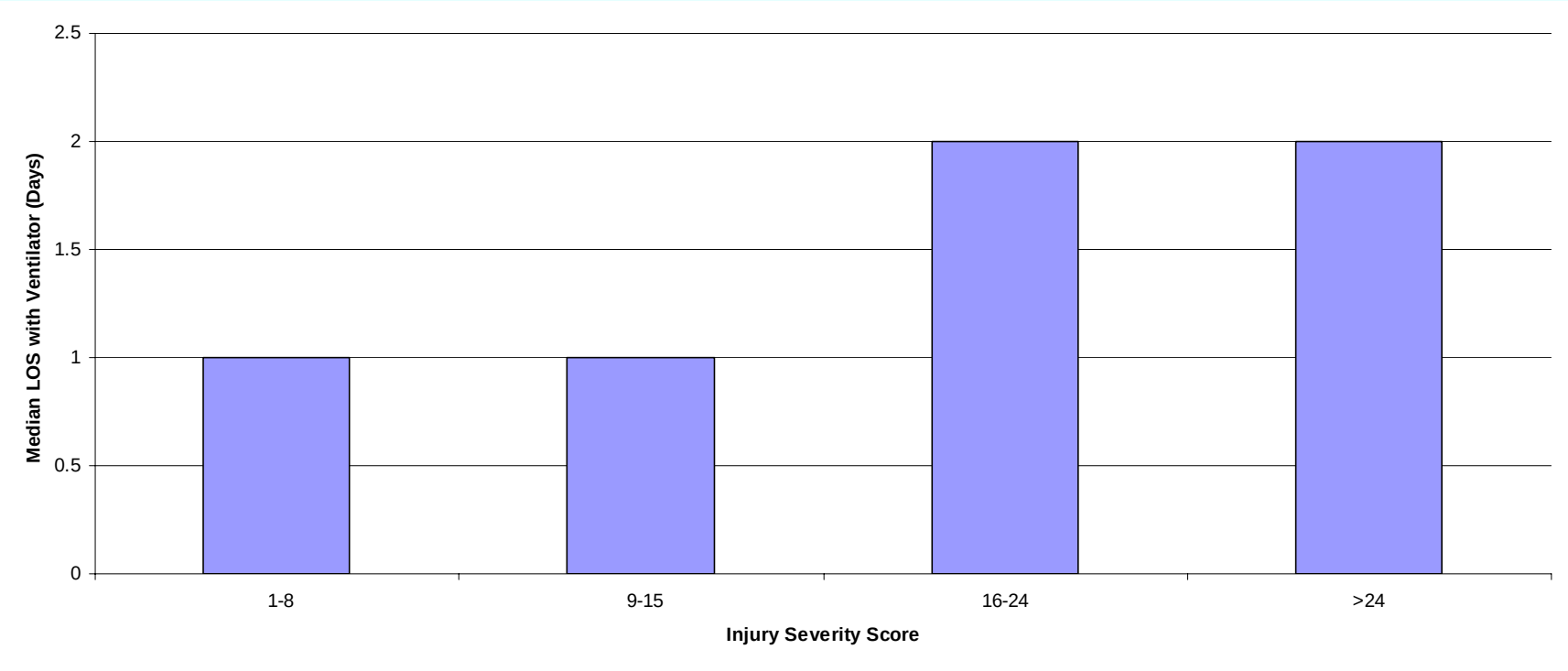
GA Trauma Registry Central Site

Median LOS at ICU by Severity After Transfer from Another Hospital Unit



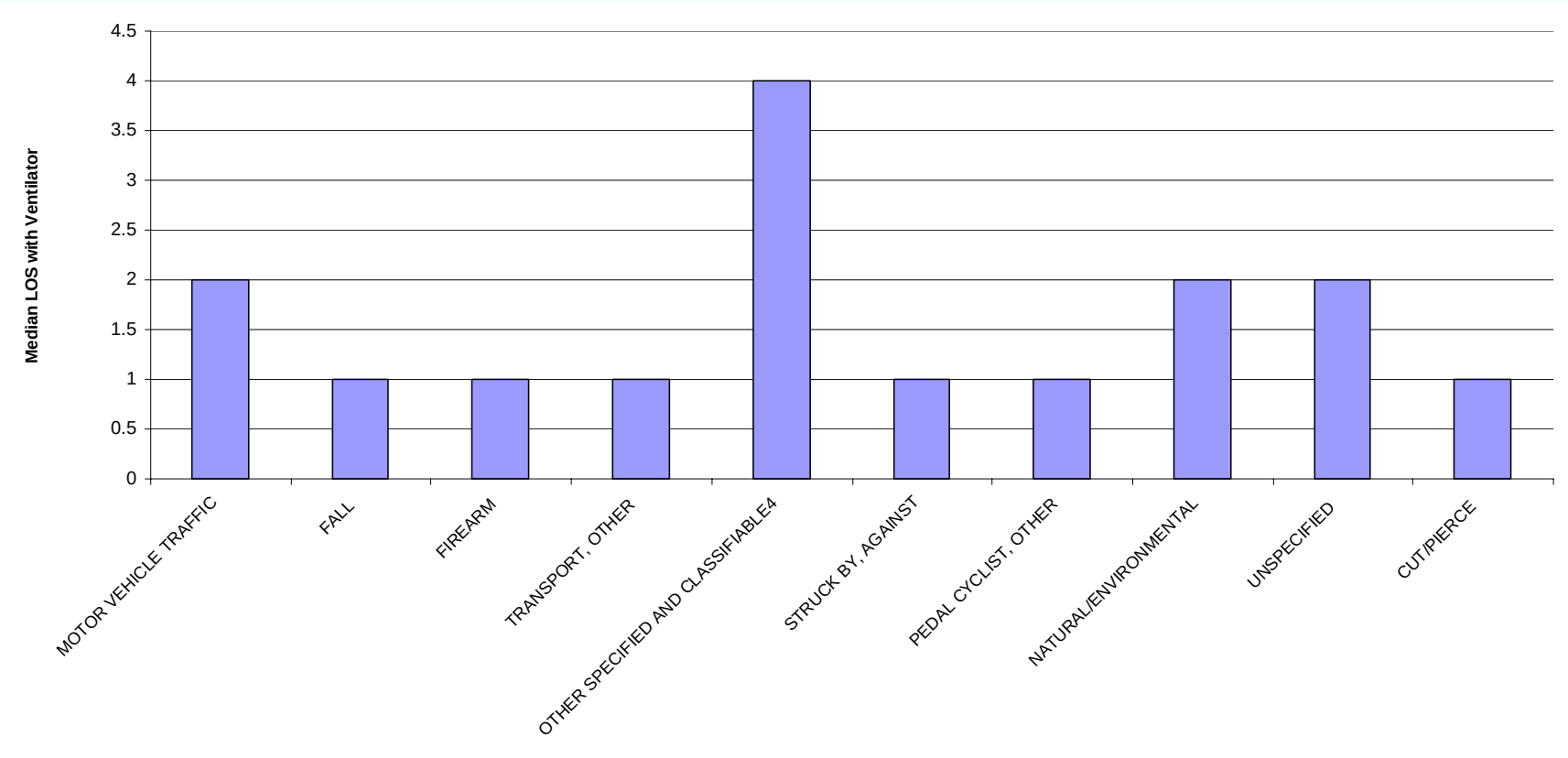
Source: Georgia Trauma Registry 2004-2009, Age <16, As of July 5, 2011

Median LOS on Ventilator by Severity



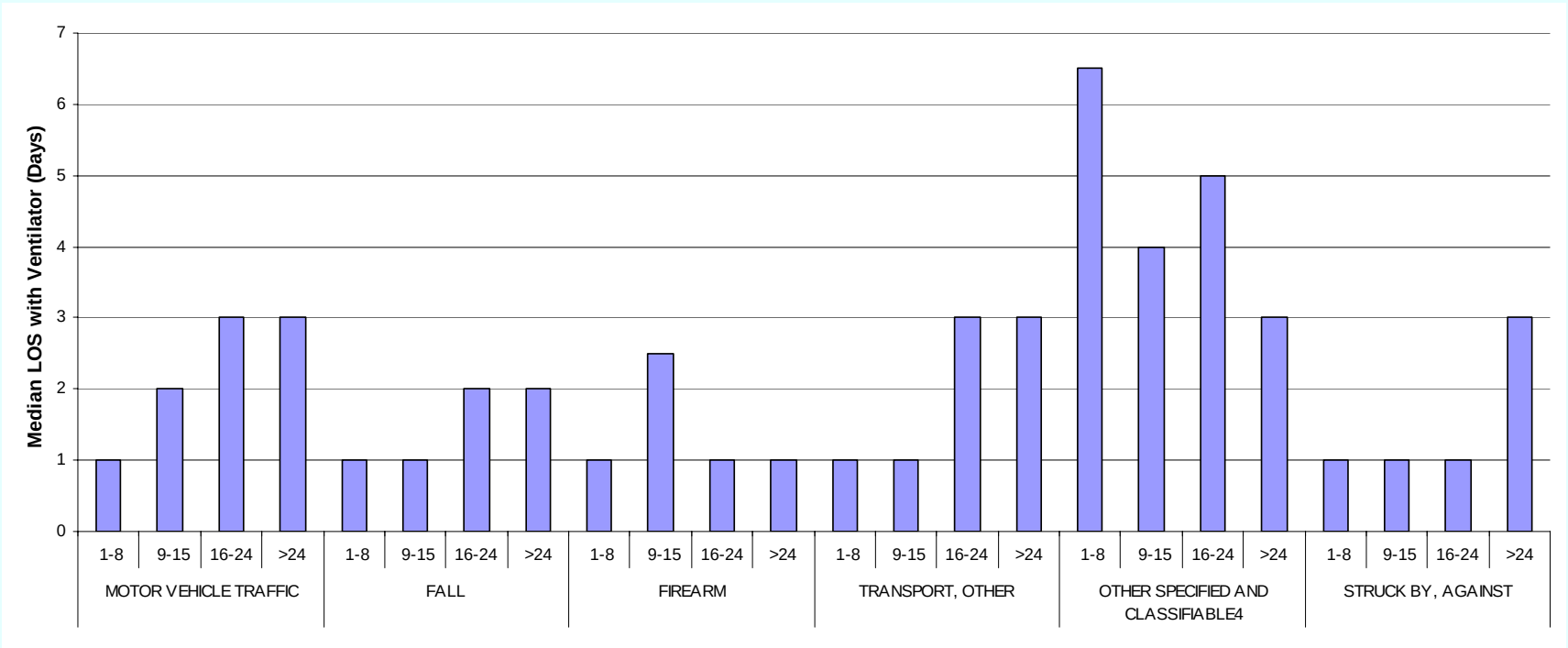
Source: Georgia Trauma Registry 2004-2009, Age <16, As of July 5, 2011

Median LOS on Ventilator by Mechanism



Source: Georgia Trauma Registry 2004-2009, Age <16, As of July 5, 2011

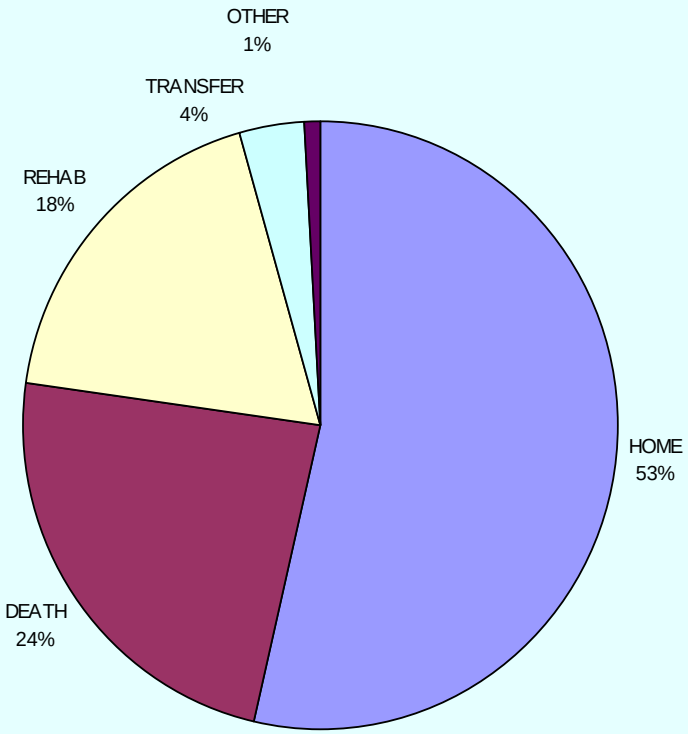
Median LOS on Ventilator by Mechanism and Severity



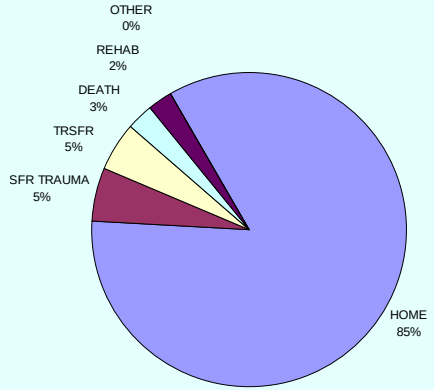
52.4% 10.8% 9.0% 8.2% 7.9% 3.2%

Source: Georgia Trauma Registry 2004-2009, Age <16, As of July 5, 2011

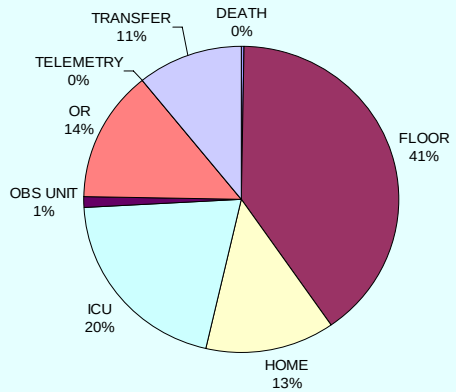
Ventilator Disposition



Hosp Disp

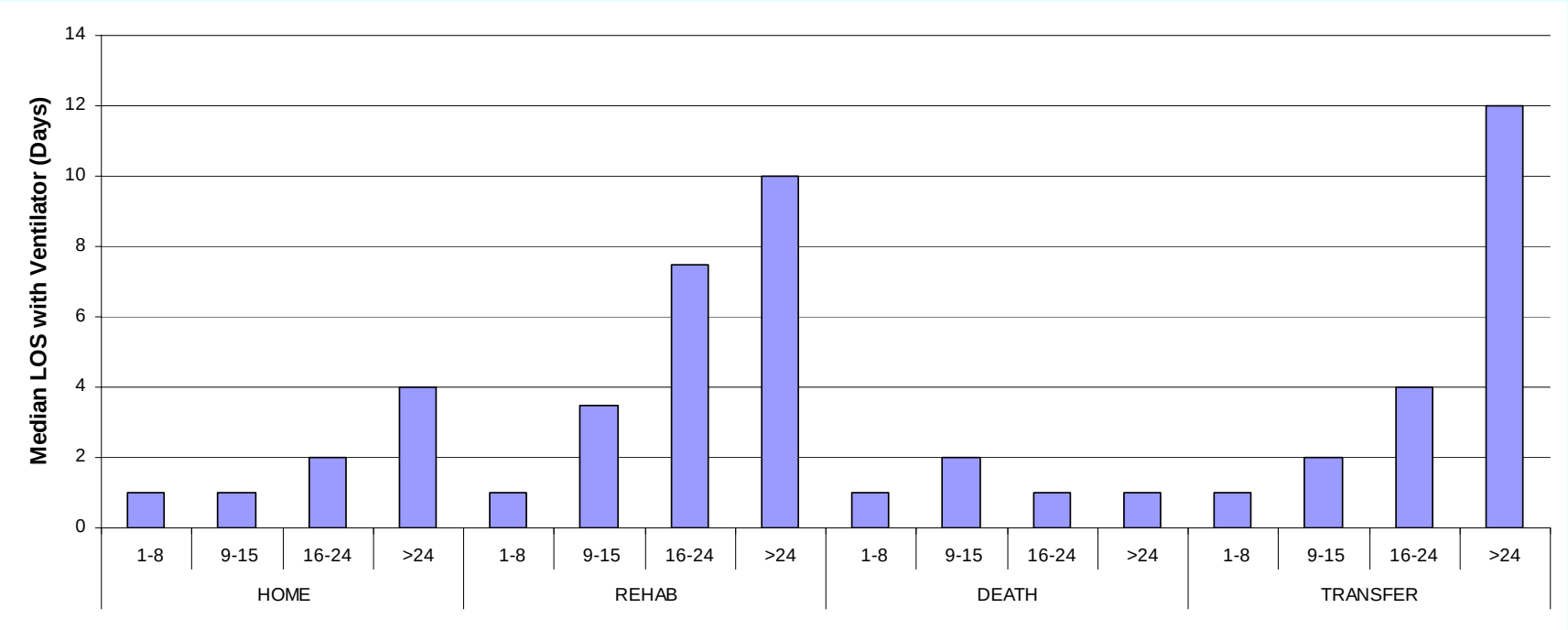


ED Disp



Source: Georgia Trauma Registry 2004-2009, Age <16, As of July 5, 2011

Median LOS on Ventilator by Severity and Disposition



Source: Georgia Trauma Registry 2004-2009, Age <16, As of July 5, 2011

Rana Bayakly
Danlin Luo
Renee Morgan
Dr. Pat O'Neal
Marie Probst

TRAUMA REGIONALIZATION

EMS REGION VI

JULY 2011

EXECUTIVE SUMMARY

Traumatic injuries represent a serious health concern for Georgia. The all injury death rate in Georgia is eight percent higher than that of the national average. Motor vehicle crashes (MVC), which account for the majority of injuries in the state, are the leading killer of children, teens and young adults (ages 5 to 34) among the top ten causes of death for all ages. The CDC has estimated the total crash-related death cost in Georgia in one year to be $1.55 billion dollars, $17 million of that total in medical costs alone. Studies have shown that many of these deaths are preventable and that the implementation of a trauma system in other states has reduced deaths and improved outcomes from traumatic injury. While trauma patients account for a small percent of the total emergency system response, trauma accounts for a large percent of total years of potential life lost. An inclusive trauma system incorporates all emergency response resources into a system to match the needs of the trauma patient with the appropriate emergency and trauma care resources.

As a result, Georgia is working towards a state-wide trauma system. In order to meet this goal, the Georgia Trauma System will be comprised of integrated regional systems and plans. Each region will represent a trauma service area which will accommodate overlapping and traditional patient catchment areas and incorporate state-wide EMS Regional infrastructure. The Region VI plan will organize existing resources to provide a comprehensive trauma care system to care for patients from the moment of injury through rehabilitation. This plan will address both urban and rural concerns. Rural trauma care is complicated by issues associated with geographic isolation including but not limited to, time from injury to discovery, extrication issues, distance to immediate healthcare as well as local heath care resource availability. The development, implementation, and operation of a trauma system is a complex process which requires concerted efforts from all heath care providers. Coordination of system activities, data-driven planning, a well defined infrastructure and stable funding are critical to the success and cost effectiveness of the system.

The pages that follow describe the essential components of the Region VI Trauma Plan and Regional Trauma Advisory Committee.

MISSION, VISION AND GOALS

Mission: The mission of the Region VI Trauma plan and committee is to reduce the burden of trauma through injury prevention efforts focused on injury data and statistics specific to Region VI. To ensure the right patient gets to the right hospital with the resources necessary to provide appropriate definitive care in the shortest amount to time and when injured, that victims of trauma receive care across the continuum from pre-hospital through rehabilitation that is of the highest quality to ensure the best possible outcome.

Vision: The Region VI plan and committee will provide leadership regarding the care of trauma patients within the region and across regional and state boundaries where appropriate.

Goals:

- Reduce the number of preventable deaths
- Improve outcomes from traumatic injury
- Reduce medical costs through appropriate use of resources.

Objectives:

- Provide oversight and guidance for system evaluation, education and training programs, and public education and prevention strategies.
- Monitor availability of resources, assure compliance with system standards, and work in conjunction with the State Office of EMS & Trauma (OEMS&T) to develop a process for review of trauma care.
- Evaluate trauma patient outcomes at a system level.
- Ensure that resources within Region VI and those appropriate resources surrounding Region VI are fully incorporated into the Trauma Plan to enable access to care when needed.
- Analyze the impact and results of the system and make recommendations for change as appropriate to assure quality outcomes.

ADMINISTRATIVE COMPONENTS

REGIONAL TRAUMA ADVISORY COMMITTEE

The Region VI Trauma Advisory Committee (RTAC) is established to act as a local resource for input to and support of the Georgia State-wide Trauma Plan. It is the aim of the committee to assist in the reduction of human suffering and cost associated with morbidity and mortality that result from trauma. The RTAC will be instrumental in analyzing local trauma care trends and in promoting regional injury prevention activities and quality improvement actions in an effort to reduce the incidence of trauma and when injury occurs deliver appropriate and timely trauma care across the continuum. The duties of the RTAC are as follows:

1. To promote cooperation and to support communication among trauma care providers, organizations and hospitals;
2. To provide a forum to discuss and resolve issues between trauma care providers;
3. To promote education, public awareness and prevention activities regarding regional trauma;
4. To identify and analyze trends and patient care outcomes based on trauma registry and TCC data;
5. To implement and oversee quality improvement activities within the system to achieve the highest level of trauma care that meets ACS standards: and,
6. To facilitate and encourage hospitals within the region to seek designation at the appropriate resource level.

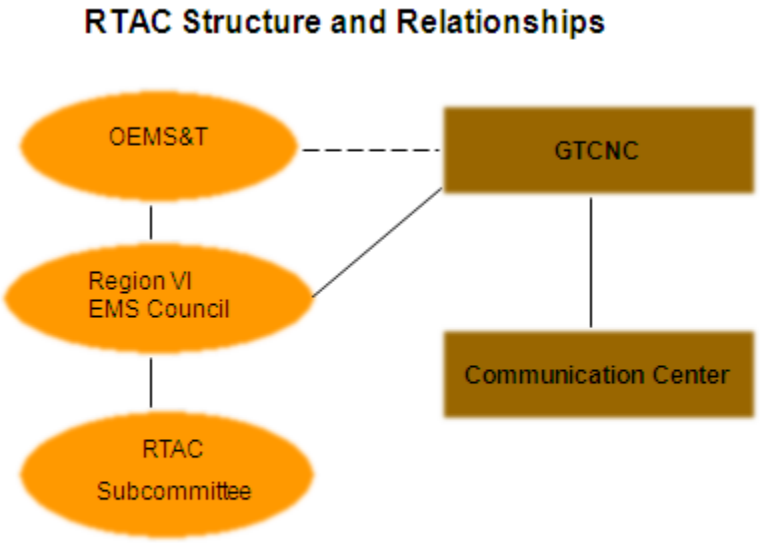
AUTHORITY, STRUCTURE AND FUNDING

The RTAC is a committee of the Region VI EMS Council who is responsible to the Office of EMS and Trauma (OEMS&T) under the Department of Public Health. There is collaboration between the Regional Trauma Advisory Committee (RTAC), Region VI EMS Council, OEMS & T and the Georgia Trauma Care Network Commission (GTCNC). The GTCNC established the Regional Trauma Care Network Planning Framework in September of 2009. This framework is used as a guide to develop and implement regional trauma plans. The GTCNC reviews and approves regional trauma system plans

in conjunction with the OEMS&T. The GTCNC also manages and distributes financial resources for the trauma system.

The Georgia OEMS&T, under the department of Public Health, will be the authoritative structure for the regional plan, with the Region VI EMS Council as the regional authority. Figure 1 demonstrates the RTAC structure and reporting relationships.

Figure 1



RTAC MEMBERSHIP

All RTAC members are appointed by the Region VI EMS Council Chair. There will be a minimum of 15 members appointed. The RTAC functions under the rules and regulations of the Region VI EMS Council and their bylaws. This includes setting a quorum for meetings and removal of committee members for attendance or other issues identified in the bylaws. The members of the RTAC will be central to the success of the regional plan and state-wide trauma system development. The membership shall be active and will require contribution and interaction of all the members.

The membership of the RTAC will be made up of stakeholders who are representative of the demographics of the region and the various components of the trauma system. The initial RTAC will consist of members with staggered terms of appointment.

RTAC Executive Committee (Term - 2 years with option to renew)

The RTAC chair will preside at all RTAC meetings and will be responsible to sign any/all agreements and/or documents necessary on behalf of the RTAC. The chair will set the meeting agenda and facilitate meeting discussion. He/she must be a full voting member of the Region VI EMS Council.

The Vice- chair shall perform the duties of the chair when the chair is absent from a meeting. The Vice-chair is not required to be a member of the Region VI EMS Council.

The secretary will call the role and determine if a quorum is present. They will maintain all minutes of the meetings and distribute to the general membership. They will review and maintain copies of all organizational correspondence and assist in the dissemination of information to the general membership.

The Permanent Member at Large will be a representative of the Level I Trauma Center in the region.

RTAC General Membership (Term - 2 years with option for renewal)

Hospital Members (minimum of 3) – members from this group should be from senior hospital management. At least one member will be from a rural hospital who is a designated or non-designated participating hospital.

EMS Members (minimum of 3) – at least one member will be from an urban 911 EMS service area, at least one member will be from a rural 911 EMS service area and at least one member must provide direct patient care.

Physician Members (minimum of 3) – one member will be a rural physician who is actively providing trauma care at a designated or non-designated participating hospital. One member must be a trauma surgeon from the highest level designated center in the region.

Nurse Members (minimum of 2) – nurses serving on the RTAC will preferably have knowledge of both pre-hospital care as well as hospital care and ideally will have experience in trauma related educational activities or injury prevention activities.

EMSC Representative (1) – There will be a member from EMSC appointed to RTAC to oversee and make recommendations on pediatric trauma care.

At Large Members– the following areas will be considered for At Large membership, others may be included as needed; Law Enforcement, Emergency Management , Injury Prevention, Business and Industry, Public Health to include epidemiologist, Emergency Preparedness, Fire Service, Government Officials and previous trauma patients and/or family members.

OPERATIONAL AND CLINICAL COMPONENTS

TRAUMA REGISTRY AND TCC DATA

Rational decision-making regarding trauma care must be made based upon the understanding of the causes, treatment and outcomes of injury. Trauma registry information and TCC data includes the actual information surrounding the event as well as the hospital course and outcome. This information can be utilized by the individual hospital, as well as at the state level for epidemiology and injury control studies. The trauma registry and the TCC provide the mechanism to collect data and to evaluate trauma care systems, patient care quality improvement, resource utilization, medical research and education on the hospital, regional and state level.

PREHOSPITAL CARE

In 2009 the State of Georgia contracted with the American College of Surgeons, Committee on Trauma to provide a comprehensive study of trauma care in Georgia. The group recognized that " EMS is often the critical link between the injury-producing event and definitive care at a trauma center"…."the pre-hospital care component of the larger emergency healthcare system. It is a complex system that not only transports patients, but also includes public access, communications, personnel, triage, data collection, and quality improvement activities."

In a study done in Georgia several years ago this "critical link" was identified when the study showed that 89% of all critical trauma patients were delivered into the system by EMS. Figure 2.

EMS – The Critical Link

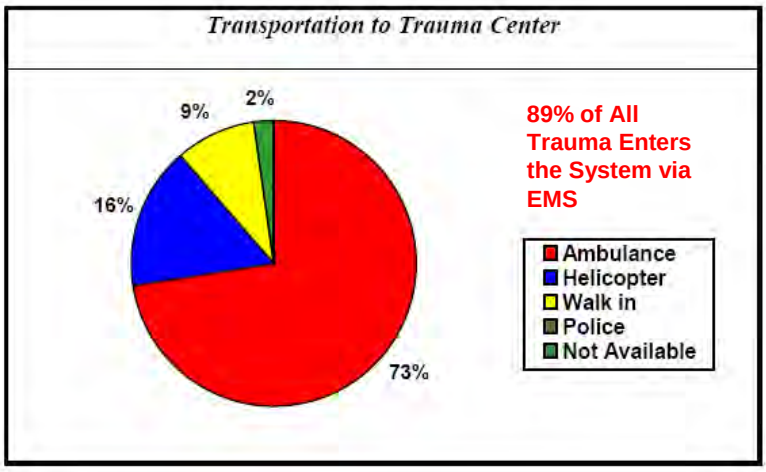


Figure 2

However, EMS is not definitive care. No trauma patient is "saved" in the back of an ambulance. These patients are saved by a fully functioning system that includes a well-equipped, well trained, EMS component working hand-in-hand with physicians and nurses who are trained and dedicated to this task. To achieve the best outcome for these patients the patient must be transported to the appropriate hospital in an expeditious manner.

This section of the plan addresses the pre-hospital component of a comprehensive regional trauma plan. To insure the best possible outcome for all trauma patients several things must occur. These include:

1. Identification of Resources and planning for the best use of these, often scarce, resources within Region VI and those appropriate resources outside the region
2. Patient triage and selection of the "most appropriate" facility. Use of the Trauma System entry Criteria (TSEC) criteria and the CDC Field Triage Decision Scheme
3. Standardized protocol for of care developed using the American College of Surgeons, Committee on Trauma guidelines
4. Development of evidence based decision making tools for determining the method of transport
5. Standardized training for all 911 EMS professionals using PHTLS and/or ITLS to include
    - Pediatric training
    - Geriatric training
    - Obstetrical training

IDENTIFICATION OF RESOURCES

East Central Georgia's Region VI is comprised of 13 Counties. Appendix A of this document provides a view of Region VI and its relationship in the State of Georgia. EMS resources within this region consist of ten different 911 EMS agencies. These include:

GROUND AMBULANCES (GEORGIA)

1. Gold Cross EMS – which provides 911 coverage in the geographical areas of Richmond, Columbia and Jefferson Counties
2. Augusta Fire Department also operates two ambulances within Richmond County as a co-provider of 911 services
3. Burke County EMS – which provides 911 coverage in the geographical area of Burke County
4. Emanuel County EMS – which provides 911 coverage in the geographical area of Emanuel County
5. Jenkins County EMS – which provides 911 coverage in the geographical area of Jenkins County
6. Lincoln County EMS – Which provides 911 coverage in the geographical area of Lincoln County
7. McDuffie County EMS – which provides 911 coverage in the geographical area of McDuffie County and Glascock County
8. Screven County EMS – which provides 911 coverage in the geographical area of Screven County
9. Warren County EMS – which provides 911 coverage in the geographical area of Warren County
10. Wilkes County EMS – which provides 911 coverage in the geographical area of Wilkes County and Taliaferro County.

AIR AMBULANCE (GEORGIA)

1. AirMed EMS operates two helicopters based in Richmond County
2. MCG LifeNet operates one helicopter based in Richmond County
3. Omni Flight operates one helicopter immediately south of Region VI in Vidalia, GA and one aircraft east of Region VI in Springfield GA.
4. AirEvac operates one helicopter immediately south of Region VI in Vidalia GA and one aircraft immediately east of the Region in Statesboro, GA

NON-911 AMBULANCES (GEORGIA)

1. Capital City Ambulance Service
2. SouthStar Ambulance Service

Patients enter the trauma system from South Carolina as a bordering state to Region VI. As such it is important to include resources from the neighboring county who transport patients to the trauma center.

GROUND AMBULANCES (SOUTH CAROLINA)

1. Aiken County EMS – provides primary 911 coverage for Aiken County, SC
2. Palmetto Ambulance – Provides back-up 911 coverage for Aiken County through mutual aid agreement
3. South Star Ambulance – Provides back-up 911 coverage for Aiken County through mutual aid agreement
4. Capitol City Ambulance – Provides back-up 911 coverage for Aiken County through mutual aid agreement
5. Aiken Rescue Squad – Provides back-up 911 coverage for Aiken County through mutual aid agreement

AIR AMBULANCES (SOUTH CROLINA)

1. MCG Lifenet details above
2. Airmed details above
3. Omni Flight – operates a helicopter from Medical University of South Carolina in Charleston, SC

NON-911 AMBULANCES (SOUTH CAROLINA)

1. Capitol City Ambulance
2. Palmetto Ambulance
3. South Star Ambulance
4. Regional Ambulance

5. Aiken Rescue Squad
6. Belevedere Rescue Squad
7. Jackson First Alert

A more complete listing of the resources operated by these services in Region VI is available in Appendix B

PATIENT TRIAGE AND SELECTION OF THE "MOST APPROPRIATE" FACILITY

The Center for Disease Control (CDC), working with the American College of Surgeons, Committee On Trauma (ACSCOT), has developed the Field Triage Decision Scheme: The National Trauma Triage Protocol for use in identifying the most severely injured patients. The Georgia Office of EMS and Trauma has adopted this as part of the State's Pre-Hospital treatment Protocol. The GTCNC has developed the "Trauma System Entry Criteria (TSEC)" using this nationally accepted protocol. This TSEC will be used to assist in determining the appropriate patient destination. It is essential that the State approved protocol be used as the standard by which all decisions are made. To use a variety of methods would invite confusion and not allow appropriate study of patient outcomes.

The CDC Field triage Decision Scheme: The National Trauma Triage Protocol is listed in Appendix C

THE TRAUMA COMMUNICATION CENTER

To assist the EMS provider in identifying the appropriate trauma patients for transport to a designated trauma center the Georgia Trauma Commission established the Trauma Communication Center (TCC). This center is staffed with professionals who will have the ability to instantaneously identify the "status" and "capability" of each participating hospital in the system. These staff members will provide guidance to the EMS professional and notification to the Trauma Center that the patient is enroute. This center will also be able to direct the EMS provider to a non-designated participating hospital that can provide the definitive care based on resource availability if the patient's condition and injuries makes this destination appropriate.

The TCC will be located in Forsyth, Georgia and will be operational in September. It is recognized that some EMS services within Region VI could have difficulty connecting to the communication center. Appendix B, which lists EMS resources, identifies the number of ambulances that do not have cell phone capability. Some services may be able to use their 911 dispatch as a "bridge" to the TCC others may not have this capability. The RTAC will need to address this limitation and develop a clear

communications plan to ensure connectivity from the field to the TCC. It is also important to note that the EMS professional caring for the patient and Medical Control will have the final decision as to patient destination.

STANDARDIZED PROTOCOL

The 2009 ACS study stated: "The EMS system medical director must have statutory authority to develop protocols, oversee practice, and establish a means of ongoing quality assessment to ensure the optimal provision of pre-hospital care. … the EMS system medical director must work closely with the trauma system medical director to ensure that protocols and goals are mutually aligned. The EMS system medical director must also have ongoing interaction with EMS agency medical directors at local levels, as well as the state EMS for Children program, to ensure that there is understanding of and compliance with trauma triage and destination protocols" The development of these protocols is essential for the optimal performance of the system. Without this standardization it will be difficult, perhaps impossible, to adequately study outcomes and make improvements to the system. It may be necessary to modify these protocols based on time and distance from the trauma center. These protocols should be reviewed annually based on patient outcomes and current science.

DEVELOPMENT OF EVIDENCE BASED DECISION MAKING TOOLS FOR DETERMINING THE METHOD OF TRANSPORT

Region VI is a large area. The distance from the southern end of our region and the Level One Trauma Center is over 100 miles. The ACS study points out: "Periodic assessment of dispatch and transport times will also provide insight into whether resources are consistent with needs. Each region should have objective criteria dictating the level of response (advanced life support [ALS], basic life support [BLS]), the mode of transport, and the disposition of the patient based on the location of the incident and the severity of injury. A mechanism for case-based review of trauma patients that involves pre-hospital and hospital providers allows bidirectional information sharing and continuing education, ensuring that expectations are met at both ends"

Data on each trauma admission that looks at the amount of time from the initial injury to the arrival of the patient at definitive care will be reviewed. Patient "hand offs" from EMS to definitive care will be evaluated to insure that the trauma patient is moved through the system in a rapid and efficient manner. In addition, times spent in community hospitals before transport and transport times comparing both ground and helicopter transportation will be evaluated. It is essential that open and professional conversations occur between all levels of providers. If we are to improve the "system" we must think of it as a system of care and be willing to address limitations of both the system and individual components of the system.

Resources availability will be evaluated when developing decision tools. The EMS provider is faced today with an increasing constraint on destination decisions. Trauma, Stroke, STEMI, and pediatric patient populations are quickly moving toward a

regionalization approach to care. This will increase the transport time for most if not all providers in Region VI. The ACS study: "Ensure that each region has an established plan for back-up EMS coverage at the local level when the patient's condition requires primary transport to a distant trauma center or specialty care facility" The study also addresses the "home rule" or local government control status of Georgia as it relates to EMS back up coverage. This political concept will not be an easy issue to address. EMS Directors and Governmental leaders must be willing to increase resources where possible and share resources when needed.

STANDARDIZED TRAINING FOR ALL 911 EMS PROFESSIONALS

According to the ACS, "It is critical that trauma system leaders work to ensure that pre-hospital care providers at all levels attain and maintain competence in trauma care. However, trauma care knowledge and skills need to be continuously updated, refined, and expanded through targeted trauma care training such as Pre-hospital Trauma Life Support®, Basic Trauma Life Support®, and age-specific courses. Mechanisms for the periodic assessment of competence, educational needs, and education availability within the system should be incorporated into the trauma system plan.

The Region VI RTAC will review the current education standards of EMS and if needed address any gaps in order to develop a robust training needed will program to insure that all of our EMS providers are competent in providing trauma care.

STEPS TO ACCOMPISH EMS GOALS

EMS leaders must be willing to change some long held policies. They must be willing to immediately transport trauma patients to the appropriate centers. In some cases this may be to a local hospital where needed lifesaving procedures, not available to the EMS provider, need to be performed. To do this we will need to develop more human resources or be willing to "float" services across imaginary lines (county boundaries). These changes will not be easy and will take much planning and discussion. The EMS subcommittee of the Trauma Commission has discussed utilizing funds to provide EMT-B courses in rural areas to help "back fill" the 911 zones when immediate transport is required. The Trauma Commission has provided money to train Medical First Responders to insure a quicker response to rural areas distance from an EMS station. The Region VI Council should support this initiative.

Pre-hospital providers must embrace the trauma interfacility transfer as a "true emergency" situation and not just a "hospital transfer". In some cases the local 911 provider does not make "hospital transfers" which means that the hospital must call a non-911 service to make the transfer. This often means this provider must travel long distances to make this happen. For pre-hospital, long distance = long times.

EMS must be trained, understand and follow the CDC trauma triage guidelines as well as be adequately trained in PHTLS or ITLS. The pediatric components must also be utilized to insure that this very important aspect of our responsibility is met. Goals should be set to insure that within three years all of the providers in Region VI have taken and successfully completed one of these courses. Money needs to be provided by the trauma commission to provide these classes. To reach this goal 7 classes would need to be provided annually. Instructors should avail themselves of the training materials available from the CDC. The EMS instructors in Region VI will work with the Trauma Center to develop training materials for these courses. Review of the State Trauma Protocols will be done annually in conjunction with the OEMS&T. If changes are made, providers will have training regarding the changes. EMS leadership will have to develop tools to evaluate and insure compliance with these changes. The GAEMS has obtained a two year grant from the State Office of Rural Health to work on protocol development and compliance. As this project begins we should take advantage of this opportunity.

We have much to do, but we have great resources to work with. Highly trained and motivated people working together will improve the trauma care for the citizens of this Region.

HOSPITAL CARE

HOSPITAL COMPONENT

The regionalization plan is being developed as an inclusive system which allows all hospitals to have a role in providing trauma care. The goal is to assure that all trauma patients receive optimal care, given available resources and the needs and locations of the patient are matched with the resources of the system.

Figure 3 shows the continuum of hospital participation in the Georgia Trauma System:

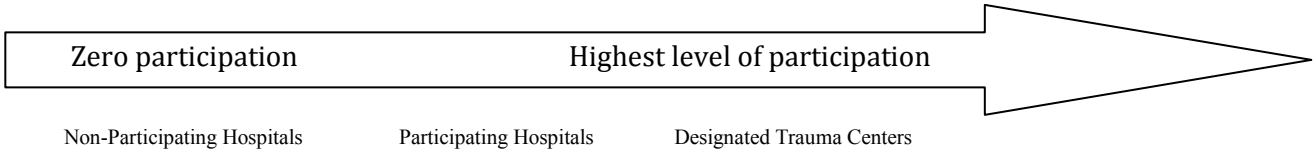


Figure 3

Hospitals will participate in the Georgia Trauma System on a voluntary basis, either as state-designated Trauma Centers or as non-designated participating hospitals. Georgia Trauma Centers are designated by the State Office of EMS and Trauma (OEMS&T) using standards based on the American College of Surgeons Trauma Center Verification Standards. (Appendix D)

The Region VI EMS Council, with recommendations from the RTAC will determine the optimal number and location of Level I, II, III and IV trauma centers based on

geography and population density to allow optimal care of trauma patients and to manage patients locally as much as possible. These recommendations will be forwarded to the OEMS&T for final approval.

Level III and IV Centers are generally located in areas that do not have adequate Level I or II resources. Level III and IV Centers must have good working relationships with the nearest Level I or II Trauma Center, for Region VI that is the Level I Center located in Augusta.

There should be Pediatric and Burn Resources identified. Depending on geography, pediatric and burn centers in adjacent states may be the most appropriate resource. Region VI has both a Pediatric and Burn specialty center located in Augusta. The Georgia Health Sciences Children's Medical Center and the Joseph M. Still Burn Center.

Trauma Centers participating in the Georgia Trauma System may determine at any time whether their status is "system-open" (have adequate resources currently available and are able to receive Trauma System patients based on system operations protocols) "system-caution" (lack some primary resource availability but are able to receive Trauma System patients based on System operations protocols) or "system-closed" (have to receive patients per System routine protocols). All Trauma C enters are able to broadcast their status as system-open, system-caution, or system-closed at will. A Trauma Center status record is s system performance point reviewed by the RTAC. Non-designated participating hospitals will accept patients according to service-line availability and will self-determine open, caution and closed status independently.

Each participating hospital will have a point of contact designated 24/7 who is responsible for status determinations. The RTAC will review status records of participating hospitals as a performance improvement point. Each participating hospital must actively participate in Plan development and the regional performance improvement plan.

Trauma Center Participation

Trauma centers are de-facto participants in the Georgia Trauma System and thus the regional plan. The OEMS & T has defined in policy the process for Trauma Center Designation, re-designation and regulation. As a condition of designation, Trauma Centers will participate in regional trauma system planning and performance improvement. Appendices E and F contain all relevant information on the designation of Trauma Centers in the Georgia Trauma System. Appendix E provides detailed information on Trauma Program administration and Trauma and specialty Center designation, re-designation and status level changes. Appendix F is a Hospital Resources Checklist for Georgia Trauma Center Designation.

Non-designated Participating Hospital

Non-designated participating hospitals are acute care community hospitals with emergency departments that have varying capabilities to receive and treat low acuity

trauma patients. These hospitals will not receive Trauma System patients in transfer and their level of participation will be determined on a hospital by hospital basis in collaboration with the RTAC. The Trauma Communication Center (TCC) will not recommend transport of Trauma System patients to non-designated participating hospitals. These hospitals participate in the Georgia Trauma System by signing a letter of commitment indicating conditions of participation.

The advantage of Trauma System participation to non-designated hospitals is access through the Resource Availability Display (RAD) to all other participating hospitals service line availability and assistance in transfer of trauma patients to the appropriate level and located trauma center. Non-designated participating hospitals will also participate in regional trauma development activities, have access to known data and be publically identified as a participant in the state trauma system.

Inter-facility Transfer Guidelines (Appendix G) will be established and used to assist the practitioner in identifying the types of injured patients who may benefit from early transfer to a specialty care service at another hospital within the system. These are intended to be guidelines and are not hospital specific. The goal is to identify patients who require transfer early so that the necessary arrangements can be made for transfer where optional care can be provided without unnecessary delay. The TCC will assist any non-designated participating hospital with transfer options.

The American College of Surgeons Committee on Trauma has developed criteria for consideration of transfer. Figure 4 outlines the criteria for consideration of transfer (Resources for Optimal Care of the Injured Patient 2006)

A. Critical Injuries to Level I or highest regional trauma center

1. Carotid or vertebral artery injury
2. Torn thoracic aorta or great vessel
3. Cardiac rupture
4. Bilateral pulmonary contusion with PaO2 to FIO2 ratio of < 200
5. Major abdominal vascular injury
6. Grade IV or V liver injuries requiring >6U RBC transfusion in 6 hours
7. Unstable pelvic fracture requiring >6U RBC transfusion in 6 hours
8. Fracture or Dislocation with loss of distal pulses

B. Life-threatening injuries to Level I or Level II trauma center

1. Penetrating injury or open fracture of the skull
2. GCS score < 14 or lateralizing neurologic signs
3. Spinal fracture or spinal cord deficit
4. >2 unilateral rib fractures or bilateral rib fractures with pulmonary contusion
5. Open long bone fracture
6. Significant torso injury with advanced comorbid disease (such as coronary artery disease, COPD, type 1 diabetes mellitus, or immunosuppression)

Figure 4

Education and Training

All designated trauma centers must meet the professional education and training requirements specified by the American College of Surgeons Committee on Trauma. Level I and II trauma centers can enhance the competence and skill of personnel at Level III and IV centers by providing regular multidisciplinary education and care reviews for personnel at these centers.

COMMUNICATIONS COMPONENT

The communications component is vital to the operation of the Georgia Trauma System as the link between all components of the system. The Communications component will provide:

1. Essential information regarding the status of pre-hospital capabilities and Trauma Center and non-designated participating hospital resource availability on a constant basis;

2. Access to Trauma System information i.e., regional protocols and trauma system entry criteria;

3. A linkage between injury scene and definitive hospital care for the rapid exchange of the injured patient care needs and the required resources; and,

4. Support for system-wide data collection to ensure system compliance for regional performance improvement activities.

Georgia Trauma Communication Center

The Trauma Communication Center (TCC) coordinates Trauma System activities by maintaining and providing information on Trauma Center status and, when appropriate, on pre-hospital capabilities. This information is used to ensure that patients meeting TSEC criteria have access to definitive trauma care at an appropriate level of state-designated Trauma Center. The TCC is continually staffed by personnel with specific and in-depth knowledge of trauma system design, function, and protocols. While use of the TCC is not mandatory, it is a resource that will provide quick access to real time resource availability.

The TCC operates through statewide guidelines and region-specific protocols established by the RTAC, Regional EMS Council, OEMS&T and the GTCNC. The TCC **ONLY** provides information and recommendations about patient destination as per pre-established regional protocols for system function. The TCC serves as an information resource for EMS providers, trauma centers and non-designated participating hospitals. The general functions of the TCC are to:

1. Provide information on system entry criteria based on statewide guidelines as requested by system stakeholders and providers;

2. Assign a unique system I.D. number for each patient meeting TSEC;

3. Collect brief pre-hospital database information;

4. Maintain available resource information and the functional status of all system trauma centers and non-designated participating hospitals at all times and, when appropriate, knowledge of system's pre-hospital capabilities;

5. Provide information regarding secondary **triage** status of the patient based on statewide guidelines and approved regional protocols;

6. Establish dependable communication link between field EMS provider and receiving facility;

7. Record and enter pre-hospital data for the **Trauma System Communication Database**;

8. Arrange inter-facility transfers of TSEC patients between trauma centers and non-designated participating hospitals; and,

9. Coordinate communication for optimal resource utilization using pre-established statewide guidelines and regional protocols for medical surge during mass casualty incidents or public health emergencies in collaboration with the Department of Public Health Division of Preparedness and Response and the Georgia Emergency Management Agency.

The data collection capabilities attributed to the TCC in the list above and the description of the RAD below are based upon an information system currently under development. This information is subject to change based upon selection of the information system and software design.

Resource Availability Display (RAD)

The RAD is the point of communication between hospitals and the TCC. A RAD terminal at each participating hospital provides the TCC with a continuous and real-time functional status display of all participating hospital's capabilities.

Trauma centers and non-designated participating hospitals have distinct display options for resource availability. Trauma centers will use the RAD to display overall status as either "system-open", "system-caution", or "system-closed". These status labels will inform TCC destination recommendation to EMS providers based on regional protocols and EMS provider discretions. Non-designated participating hospitals will make RAD updates based upon the availability of specific service lines at the hospital. All information should be accurate and timely. Such availability updates will enable the TCC to make informed patient transfer recommendations.

Participating hospitals are responsible for updating their respective resource displays. The TCC maintains a consolidated system-wide available resource database. All hospital status changes will be automatically communicated to the central system monitoring

station at the TCC and to all other participating hospitals. All participating hospitals can view all other participating hospitals' resources status updates through the RAD. A record of participating hospitals' resource status over time will be available to each RTAC for regional performance improvement activities.

PERFORMANCE IMPROVEMENT

Trauma system evaluation is achieved through a comprehensive Performance Improvement Plan (PIP). The purpose of the plan is to review system performance as related to patient needs, system resources, medical care and cost. Trends in care and outcomes must be identified and appropriate system adjustments made to improve the quality and timely availability of trauma patient care. Ongoing evaluation of the trauma care system is essential throughout the continuum of patient care.

Performance improvement emphasizes a continuous multidisciplinary effort to measure, evaluate, and improve both the process of care and the outcomes. The trauma care providers, EMS, Hospital, TCC and others will gather detailed data regarding services rendered to the trauma patients. Specific data related to system performance will be submitted to the Region VI RTAC for analysis. The RTAC will provide a quarterly report of the data which then can be utilized to identify opportunities for improvement.

In order to deliver the best possible care for the injured patient, both system and individual hospitals must develop PI plans and there must be close cooperation between these programs.

The performance improvement program of the RTAC will establish and monitor performance improvement benchmarks and indicators based on data-driven, nationally established guidelines for regional trauma system outcomes. This oversight includes the development and evaluation of process improvement measures from all aspects of trauma system care, including injury prevention, pre-hospital, acute, and rehabilitation services. As of June 2011, this process is in its earliest stages and primary efforts are focused on further developing the Regional Trauma System Planning Framework Goals and Aims which are:

1. Develop a matrix of what and how success will be measured
2. Identify current mortality rate for Region VI – determine what is target rate and when
3. Establish how this section impacts education and training
4. Incorporate data from the Trauma Registry for performance improvement
5. Incorporate data from the Trauma Communications Center for performance improvement
6. Perform an annual review of system performance as related to patient needs, system resources, medical care, and cost

Prior to engaging in the development of the above goals, members of the Region VI RTAC used the Trauma System Self-Assessment Supplemental Tool to complete a self-assessment of the current status of the Region VI trauma system based on national benchmarks and indicators published in the Model Trauma System Planning and Evaluation document, compiled by the US Department of Health and Human Services Administration (2006). The results of this assessment were used as the foundation for the matrix of what and how success will be measured in this region, in combination with a review of trauma systems literature, published guidelines from the Resources for the Optimal Care of the Injured Patient compiled by the American College of Surgeons Committee on Trauma (2006), and recommendations by regional trauma care expert-members of this task force.

The American College of Surgeons Committee on Trauma [ACS-COT (2006)] has identified determinants of trauma system performance which augment the concepts identified in the Model Trauma System Planning and Evaluation document (2006). These include important *system* variables such as 1) efficacy of care; 2) safety of care; and 3) cost of care, as well as *patient* variables such as 1) survival; 2) quality; and 3) ease of recovery. Thus, these concept variables were also incorporated into the performance improvement matrix in addition to the benchmarks and indicators identified by Model Trauma System Planning and Evaluation document where appropriate.

A significant portion of the system and patient performance improvement indicators identified by our task force represent beginning efforts by the Region VI Trauma Advisory Council (RTAC) to meet the "next step" indicators for those self-assessment items in the Model Trauma System Planning and Evaluation document that were rated lowest by task force members during the self-assessment exercise. It is the intent of the RTAC Performance Improvement Task Force that progress towards these and all other indicators will be evaluated annually, and that the indicators will be updated as each benchmark is met by the developing and maturing Region VI trauma system.

During the development of this performance improvement matrix, indicators from other national and regional trauma system guidelines were also incorporated into this document. These include but are not limited to the CDC Guidelines for Field Triage of Injured Patients (2009), the Minnesota Trauma System Performance Improvement Plan, the Birmingham (AL) Regional Emergency Medical Services System Regional Trauma System Plan, and the New Mexico Trauma Strategic Action Plan.

As the Region VI trauma system performance improvement process evolves and matures, this task force will further define the following concepts, using the Minnesota Trauma System Performance Improvement Plan as the primary basis for our model:

1. Standing membership and regional representation structure
2. Recurring task force responsibilities and oversight
3. Specific patient population to assessed across all care entities
4. Data collection and information sources
5. Scope of review and key task force activities

6. Documentation and reporting activities

Likewise, the document upon which these goals and concepts are recorded is expected to evolve and mature, and will likely be followed by multiple revised versions.

Aim 1: Develop a matrix of what and how success will be measured

In accordance with the directive set forth by the Regional Trauma System Planning Framework document, data-driven performance improvement efforts will utilize data from at least three data sets, including, but not limited to 1) pre-hospital data; 2) the hospital trauma registry; and the 3) Trauma System Communications Database

TABLE 3. SYSTEM VARIABLES:

SYSTEM ENTITY	ACS-COT CONCEPT: Efficacy	ACS-COT CONCEPT: Safety	ACS-COT CONCEPT: Cost	HRSA QUALITY INDICATOR ACTION
Injury Prevention	Baseline data is currently needed. Agree-determine what is being done now- Percent annual reduction in patients with injury diagnosis codes within Region 6	Number of annual community education programs aimed at injury prevention and safety within Region 6	Determine cost and feasibility of TV adds, newspaper ads, radio spots, bill boards, mailers, teen education in high schools	Indicator# 304.1: An annual report on the status of injury prevention efforts within the Region 6 catchment area will be prepared and distributed to all stakeholders within the region. Content of this report will be determined by available injury statistics data.
Pre-hospital	Data to determine	Educate pre-hospital providers and have	Ensure appropriate	Indicator 302.6: Universal trauma

	if all pre-hospital agencies are utilizing the trauma triage criteria	'standardization' of trauma treatment. Mandate this education among pre-hospital providers to ensure best practice.	level of care- often determined by pre-hospital agencies for trauma patients thus perhaps reducing cost and eliminating denials Develop transfer or transport relationship with trauma center EXAMPLE: Insurance carrier denials or percent of accounts paid within 90 days	triage criteria have been developed for use by all pre-hospital care providers within the Region 6 catchment area. OR: (Pick) Indicator 305.2: All-hazards training is a routine part of trauma system training.
Hospital	Standardize trauma assessment for ER staff. This effort should provide cleaner data for TRACS. Decision tree for trauma patients determining	Encourage outlying hospitals to participate in the state trauma system by developing more Level II / III/ IV centers statewide. Increase awareness of and determine facility capabilities with regards to providing care for trauma patients.	Transfer agreements with trauma centers. Participation in data collection which is then reported to state trauma.	Indicator 307.2: The designated trauma centers engage in review of patient care outcome data to evaluate each center's performance against national norms. This process will be designation-specific – for example, Level II centers will compare their data

	appropriate level of care.			against national norms for other Level II centers.
Rehabilitation	Definitely need baseline data with regards to numbers of trauma patients requiring rehab and injury specific outcomes	Develop plan to engage rehab facilities in trauma system plans/data collection/collaboration efforts	Need more information with regards to percentage of trauma pts requiring rehab services and the average cost	Indicator 308.1:Rehabilitation centers and outpatient rehabilitation services are integrated into the regional trauma system plan.

TABLE 4. PATIENT VARIABLES:

PATIENT ENTITY	ACS-COT CONCEPT: Survival	ACS-COT CONCEPT: Quality	ACS-COT CONCEPT: Ease of Recovery
Injury Prevention	Determine percentage of injuries that were preventable or possibly preventable. Determine sectors of public that might need more education with regards to trauma prevention.	Percent annual reduction in injury severity as measured by ISS within Region 6	
Pre-hospital	Mortality Morbidity	Response time Time to definitive care	

		Patient satisfaction	
Hospital	Mortality Morbidity	Unplanned re-admissions Length of stay Patient satisfaction Complications	Time to inpatient rehabilitation consult Monthly percentage of inpatient rehabilitation consultations for eligible patients
Rehabilitation		Length of stay Patient satisfaction	Functional independence measure Post-injury employment (Parks, 2010)

INJURY PREVENTION AND OUTREACH

One of the major goals of any trauma system is the development of programs to prevent unnecessary injures and deaths due to trauma. The goal of these programs is to reduce behavioral and environmental risks by mobilizing communities through citizen involvement and expanded partnerships. Education and awareness strategies are often employed to encourage individuals to protect themselves from harm. Effective prevention requires a multifaceted approach including;

1. Review of research and data to accurately describe the burden of traumatic injury;
2. Sharing all injury data from multiple sources so that interventions may be target areas of highest risk;
3. Development and implementation of strategies to decrease individual risk factors and environmental risks ;and,
4. Collaboration and coordination at the community level to increase local ability to address needs.

The injury prevention goals for Region VI are as follows:

1. Identify current injury prevention programs within Region VI

2. Review injury data and define areas that are not currently addressed

Injury prevention resources

The Department of Community Health provides mini grants for county care seat distribution for low income families. Participants from Region VI include the following counties: Wilkes, Lincoln, Taliaferro, McDuffie, Warren, Richmond, Glascock, Jefferson, Burke, Emanuel, Screven and Jenkins.

The Georgia Traffic Injury Prevention Institute (GTIPI) trains and certifies child passenger seat technicians. Provides care fit train the trainer programs and the PRIDE program (Parents Reducing Injury and Driver Error).

SafeKids East Center, led Georgia Health Sciences Children's Medical Center provides a multitude of injury prevention programs aimed at children.

Fire and burn safety programs are provided by the Joseph M. Still Burn Center at Doctor's Hospital in partnership with the Southeastern Firefighters Burn Foundation, The Georgia Firefighters Burn Foundation, and local fire department.

Fort Gordon provides a gun safety program. Local law enforcement participates in both the DARE and GREAT programs and the Georgia State Patrol conducts the click it or ticket program, the impaired driver simulation program and conducts numerous road blocks throughout the year.

The local Family YMCA is the host of several water safety programs.

Gaps in injury prevention efforts

1. Prevention programs seem to be focused around children and burn safety;
2. There are more resources and programs available in the urban areas and less in rural areas;
3. There is no central location or entity coordinating and implementing a plan for injury prevention in the region;
4. There is no coordination of regional injury data from which to trend and identify target area for prevention programs; and,
5. Limited funding.

Regional plan to address gaps:

1. Develop a list of what and where injury prevention resources and programs are for the region;

2. Develop and injury prevention timeline and strategy for implementation in Region VI

3. Develop an ongoing relationship with the East Central Public Health District, EMS and designated and non-designated participating hospitals to advertise and implement programs;

4. Create a resource of EMS community ambassadors by including injury prevention into their CEU licensure requirements; and,

5. Develop a mechanism to aggregate and analyze existing data sources to trend injury morbidity and mortality for the region in order to target injury prevention efforts.

INTRODUCTION

The Trauma System Self-Assessment Supplemental Tool: Benchmarks, Indicator, and Scoring (HRSA, 2006) was used to evaluate the existing resources available within Region VI in order to obtain a baseline from which to build the regional trauma plan. This review process will assist in assessing the status of trauma care and move the regional system forward in developing an inclusive and comprehensive system of trauma care.

Background

In 2006, the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA) published the Model Trauma System Planning and Evaluation tool (MTSPE). This tool was designed to provide stake-holders with direction for using a public health approach to evaluate resources in order to understand the gaps in developing regional or state-wide trauma systems.

The assessment tool utilizes a Benchmark, Indicator, and Scoring assessment process. Benchmarks (B) are global overarching goals, expectations, or outcomes. In the context of the trauma system, a benchmark identifies a broad system attribute. Indicators (I) are that tasks or outputs that characterize the benchmark. Indicators identify actions or capacities within a benchmark. Indicators are the measure components of benchmarks. Scoring (S) breaks down the indicator into completion steps. Scoring provides an assessment of the current status and marks progress over time to reach a certain milestone (HRSA, 2006).

The tool utilizes the three core functions of public health; assessment, assurance and policy development, to frame the model standard which are represented by 24 benchmarks and 114 indicators.

Process

In June of 2011, Region VI trauma stake-holders met to discuss the existing trauma care delivery infrastructure. The goal was to assess the current system status in an effort to identify the gaps that needed to be addressed in the development of an inclusive and comprehensive system of care.

Task forces were developed to focus on key areas of development, Administrative, Pre-Hospital, Hospital, Performance Improvement and Injury Prevention and Outreach. Each task force was given the Model Trauma System Planning and Evaluation Trauma System Self-Assessment Tool to begin the process of identifying the resources of the existing plan and the areas for improvement. Each group completed one assessment. Consensus regarding Region VI's specific benchmark scores was obtained after review of all scores was completed.

The scoring criteria ranged from 0 – 5 and were defined as:

0 The scorer does not know enough about the indicator to evaluate it effectively
1 The indicator is not met
2 The indicator is minimally met
3 The indicator is met in a limited way
4 The indicator is met in a substantial way
5 The indicator is fully met

ASSESSMENT

<u>Section 100</u> – ASSESSMENT - Regular systematic collection, assembly, analysis and dissemination of information on the health of the community.

(Benchmark) 101 there is a thorough description of the epidemiology of injury in Region VI using both population-based data and clinical databases.

> **(I) 101.1** there is a thorough description of the epidemiology of injury mortality in Region VI using population-based data.
>
> **(S) 3** there is information and reports regarding injury mortality and epidemiology but it is fragmented and not provided specifically as a regional resource for planning. For example there is CDC data, EMS trip sheet data and registry data but not aggregate or correlated data specific to Region VI. Gaps exist in injury information for non-designated trauma centers.

(I) 101.2 there is a description of injuries within Region VI including the distribution by geographic area, high-risk population, incidence, prevalence, mechanism, manner, intent, mortality, contributing factors, determinants, morbidity, injury severity, and patient distribution using any or all of the following: vital statistics, ED data, EMS data, hospital discharge data, State police data, medical examiner data, trauma registry and other data sources.

(S) 2 as referenced in the above indicator there is a multitude of data sources but no collaborative or correlated reports used to identify specific geographic area, incidences, etc. that can be targeted for reduction and prevention.

> **(I) 101.3** there is a comparison of injury mortality using local, regional, statewide, and national data.
>
> **(S) 2** there is a some descriptive comparisons of the leading causes of injury death using local, regional, statewide and national data.

(I) 101.4 collaboration exists between EMS, public health officials, and trauma system leaders to complete injury assessment risk assessments.

(S) 1 no injury risk assessments are conducted. If they are, the information is not readily available or used.

(I) 101.5 Integration of injury into other public health risk assessments occurs at state, regional and community levels, resulting in the integration into key reports and planning documents.

(S) 1 while injury risk assessments may be completed by Public Health that information is not available or utilized to develop planning documents.

(I) 101.6 the trauma system works with EMS and the public health system to complete a regional study of the determinants of injury using existing data sources and public health tools.

(S) 1 there is no regional study of the determinants of injury

(I)101.7 the trauma system works with EMS and public health to identify special at-risk populations

(S) 1 there is no effort to describe risks to special at-risk populations such as age categories, cultural/ethnic populations, geographic variances, pediatrics, and high-risk co-morbidities.

(Benchmark) 102 there is an established trauma management information system (MIS) for ongoing injury surveillance and system performance assessment.

(I) 102.1 there is an established injury surveillance process that can, in part, be used as an MIS performance measure

(S) 2 there is a state trauma registry, but not all hospitals within the region contribute.

(I) 102.2 injury surveillance is coordinated with statewide and local community health surveillance.

(S) 2 injury surveillance occurs in isolation from other health risk surveillance and is reported separately. There is no collaboration or sharing of information.

(I)102.3 trauma data are electronically linked from a variety of sources.

(S) 1 trauma data exists but in separate databases that are not linked to one another. There is no collaboration or coordination between databases.

(I) 102.4 there is a process to evaluate the quality, timeliness, completeness and confidentiality of data.

(S) 1 there is a limited process at the state level for review of trauma registry data only. There is no written policy to evaluate the quality, timeliness, completeness, and confidentiality of the regional data collected.

(I) 102.5 there is an established method of collecting trauma financial data from all health care facilities and trauma agencies including patient charges as well as administrative and system costs.

(S)1 There is no established method of collecting trauma financial data at this time.

(Benchmark) 103 a resource assessment for the trauma system has been completed and is regularly updated.

(I)103.1 the trauma system has completed a comprehensive system status inventory that identifies the availability and distribution of current capabilities and resources

(S)1 the state had an evaluation done by the American College of Surgeons.

(I)103.2 the trauma system has completed a gap analysis based on the inventories of internal and external system status as well as system resource standards.

(S)1 there are no current resource standards on which to base a gap analysis

(I)103.3 there has been an initial assessment (and periodic reassessment) of the overall system effectiveness.

(S)1 system under development, no state-wide initial assessment has been done.

(I)103.4 the trauma system has undergone a jurisdiction wide external independent analysis

(S) 1 no external examination of the trauma system or individual components has occurred although this is in process now.

(Benchmark) 104 an assessment of the trauma system's emergency preparedness has been completed including coordination with the public health, EMS system, and the emergency management agency.

(I) 104.1 there is a resource assessment of the trauma system's ability to expand its capacity to respond to mass casualty incidents (MCI's) in an all hazards approach.

(S)2 an assessment of the ability of some components of the trauma care system to respond to a mass casualty incident has been included in all hazards planning.

(I) 104.2 there has been a consultation by external experts to assist in identifying current status and needs of the trauma system to be able to respond to mass casualty incidents.

(S) 3 in addition to the involvement of at least some individual trauma centers, at least one other component of the trauma system has been analyzed by external reviewers, for example, pre-hospital, communications, information systems, and others.

(I) 104.3 the trauma system has completed a gap analysis based on the resource assessment for trauma emergency preparedness.

(S) 1 there is no resource standards on which to base a gap analysis

(Benchmark) 105 the system assesses and monitors its value to its constituents in terms of cost-benefit analysis and societal investment.

(I) 105.1 the benefits of the trauma system, in terms of years of productive life lost (YPLL), quality adjusted life years (QALY), disability adjusted life years (DALY), and so on, are described.

(S) 1 there is no cost data available to the system to compare to quality of life indicators

(I) 105.2 cases that document the societal benefits are reported on so that the community sees and hears the benefit of the trauma system to society.

(S) 1 No effort is made to gather, catalogue, or report cases that document the societal benefit of the trauma system so that the community sees and hears the benefit of the trauma system to society. Such cases, for example, document descriptive information

(I) 105.3 an assessment of the needs of the media concerning trauma system information has been conducted

(S) 1 there is no routine contact with the media.

(I) 105.4 an assessment of he needs of public officials concerning trauma system information has been conducted.

(S) 1 there is no contact with public officials

(I) **105.5** an assessment of the needs of the general public concerning trauma system information has been conducted.

(S) **1** there is ho routine or planned contact with the general public

(I) 105.6 an assessment of the needs of health insurers concerning trauma system information has been conducted.

(S) 1 there is no routine contact with health insurers

(I) 105.7 an assessment of the general medical community, including physicians, nurses, pre-hospital care providers, and others, concerning trauma system information, has been conducted.

(S) 1 there is no routine contact with the regional medical community.

POLICY DEVELOPMENT

<u>Section 200</u> - Policy Development. - Promoting the use of scientific knowledge in decision making that includes building constituencies; identifying needs and setting priorities; legislative authority and funding to develop plans and policies to address needs; and ensuring the pubic's health and safety.

(Benchmark) 201 Comprehensive State statutory authority and administrative rules support trauma system leaders and maintain trauma system infrastructure, planning, oversight, and future development.

(I) 201.1 the legislative authority plans, develops, implements, manages, and evaluates the trauma system and its component parts, including the identification of the lead agency and the designation of trauma facilities.

(S) 4 the Office of EMS and Trauma (OEMS&T) along with the Georgia Trauma Care Network Commission (GTCNC)is authorized to take actions to implement the trauma system and to report on the progress and effectiveness of system implementation

(I) 201.2 the legislative authority states that all the trauma system components, EMS, injury control, incident management, and planning documents, work together for the effective implementation of the trauma system (infrastructure is in place).

(S) 3 SB – 60 provides for the development of a trauma system which will include authority for system effectiveness and management within each trauma region.

(I) 201.3 administrative rules/regulations direct the development of operational policies and procedures at the state, regional, and local levels

(S) 4 there are existing statewide administrative rules/regulations for planning, developing and implementing the trauma system and its components at the state, regional, and local levels.

(I) 201.4 OEMS&T has adopted clearly defined trauma system standards (e.g., facility standards, triage and transfer guidelines, and data collection standards) and has sufficient legal authority to ensure and enforce compliance.

(S) 2 authority exists to define and adopt standards for trauma system performance and operations.

(Benchmark) 202 Trauma system leaders (lead agency, trauma center personnel, and other stakeholders) use a process to establish, maintain, and constantly evaluate and improve a comprehensive trauma system in cooperation with medical, professional, governmental, and citizen organizations.

(I) 202.1 the lead agency demonstrates that it can bring organizations together to implement and maintain a comprehensive trauma system.

(S) 3 OEMS&T along with GTCNC has organized meetings to develop and implement a comprehensive trauma system plan.

(I) 202.2 the lead agency has developed and implemented a trauma specific statewide multidisciplinary, multiagency advisory committee to provide overall guidance to trauma system planning and implementation strategies. The committee meets regularly and s instrumental in providing guidance to the lead agency.

(S) 4 there is trauma specific statewide multidisciplinary, multiagency advisory committee. Committee members and stakeholders regularly attend meetings. Collaboration and consensus are beginning.

(I) 202.3 a clearly defined and easily understood structure is in place for the trauma system decision-making process.

(S) 1 there is no defined decision making process (written policy and procedure) regarding the trauma program within the trauma system lead agency or its committee.

(I) 202.4 trauma system leaders have adopted and use goals and time specific, quantifiable, and measurable objectives for the trauma system

(S) 3 trauma system leaders are beginning the process of identifying measurable program goals and outcome-based, time-specific, quantifiable, and measurable objectives.

(Benchmark) 203 The State lead agency has a comprehensive written trauma system plan based on national guidelines. The plan integrates the trauma system with EMS, public health, emergency preparedness, and incident management. The written trauma system plan is developed in collaboration with community partners and stakeholders.

(I) 203.1 the lead agency, in concert with a trauma-specific multidisciplinary, multi-agency advisory committee, has adopted a trauma system plan.

(S) 2 there is no trauma system plan, although some groups have begun meeting to discuss the development of a trauma system plan.

(I) 203.2 a trauma system plan exists and is based on analysis of the trauma demographics and resource assessments.

(S) 1 there is no effort under way to develop a trauma system plan

(I) 203.3 there is within the trauma system plan congruence of the population demographics with system development and resource allocation priorities. Needs of specific populations (such as pediatric, burn and Native American) are integrated into the plan. Considerations should be given to age, population characteristics, and urban and rural environments.

(S) 1 there is no evidence that population demographics drive resource allocation or that this information is used to establish system priorities in developing or implementing the trauma system plan.

(I) 203.4 the trauma system plan clearly describes the system design (including the components necessary to have an integrated and inclusive trauma system) and is used to guide system implementation and management. For example, the plan includes references to regulatory standards and documents, and includes methods of data collection and analysis.

(S) 2 the trauma system plan does not address or incorporate the trauma system components (pre-hospital, communication, transportation, acute care, rehabilitation and others), nor is it inclusive of all-hazards preparedness, EMS, or public health integration.

(I) **203.5** a written injury prevention and control plan is developed and coordinated with other agencies and community health programs. The injury program is data driven and targeted programs are developed based on high injury risk areas. Specific goals with measurable objectives are incorporated into the injury plan.

(S) 1 there is no written plan for a coordinated injury prevention and control program.

(I) 203.6 the trauma system plan has established clearly defined methods of integrating with emergency preparedness plans (all hazards).

(S) 2 there is an established trauma system plan; but it is silent on emergency integration, and no evidence is present to demonstrate integrated incident management and trauma systems.

(I) 203.7 the trauma system plan has established clearly defined methods of integrating the trauma system plan with the EMS, emergency, and public health preparedness plans.

(S) 2 there is some cross reference between plans, but defined methods of working collaboratively are not developed.

(Benchmark) 204 Sufficient resources, including those both financial and infrastructure related, support system planning, implementation, and maintenance.

(I) 204.1 the trauma system plan clearly identifies the human resources and equipment necessary to develop, implement, and manage the trauma program, both clinically and administratively. (The trauma system plan integrates with the Assessment of Resources done previously).

(S) 1 there is no method of assessing available resources or of identifying resource deficiencies in either the clinical or administrative areas of the trauma system.

(I) 204.2 financial resources exist that support the planning, implementation, and ongoing management of the administrative and clinical care components of the trauma system.

(S) 3 there is current funding for the development of the trauma system within the lead agency organization consistent with the trauma system plan, but costs to support clinical care support services have not been identified (transportation, communication, uncompensated care, standby fees, and others). No ongoing commitment of funding has been secured.

(I) 204.3 designated funding for trauma system infrastructure support (lead agency) is legislatively appropriated. Although nomenclature concerning designated, appropriated, and general funds varies between jurisdictions, the intent of this indicator is to demonstrate long-term, stable funding for trauma system development, management, evaluation, and improvement.

(S) 4 consistent, though limited, infrastructure funding has been designated and appropriated to the lead agency budget.

(I) 204.4 operational budgets (system administration and operations, facilities administration and operations, and EMS administration and operations) are aligned with the trauma system plan and priorities. Examples: Full-time Equivalents (FTE's) per population to support the infrastructure; costs to improve the communication system.

(S) 1 there is no operational budgets.

(I) 204.5 the trauma system plan includes identification of additional resources (both manpower and equipment) necessary to respond to mass casualty incidents.

(S) 1 the trauma system plan does not include the identification of additional resources necessary to respond to mass casualty incidents.

(Benchmark) 205 Collected data are used to evaluate system performance and to develop public policy.

(I) 205.1 collected data are used for strategic and budgetary planning.

(S) 1 there is no central data repository that can be accessed for strategic or budgetary planning.

(I) 205.2 collected data from a variety of sources are used to review the appropriateness of trauma system policies and procedures. The format of the reports in this and other sections may be written, web-based, or other electronic media.

(S) 1 there is no written, quantifiable trauma system performance standards or performance improvement mechanisms.

(I) 205.3 the trauma management information system (MIS) is used to assess system performance, to measure system compliance with applicable standards, and to allocate trauma system resources to areas of need or to acquire new resources.

(S) 2 There is a limited trauma management information system consisting of a trauma patient registry, but no data extraction is used to identify resource needs, to establish performance standards, or to routinely assess and evaluate system effectiveness.

(I) 205.4 injury prevention programs use trauma MIS data to develop intervention strategies.

(S) 1 there is no evidence to suggest that trauma MIS data are used to determine injury prevention strategies.

(I) 205.5 education for trauma system participants is developed based on a review and evaluation of trauma MIS data.

(S) 1 there is no correlation between training programs for providers and the trauma management information system.

(Benchmark) 206 Trauma system leaders, including a trauma-specific statewide multidisciplinary, multi-agency advisory committee, regularly review system performance reports.

(I) 206.1 trauma data reports are generated by the trauma system no less than once per year and are disseminated to trauma system leaders and stakeholders to evaluate and improve system performance effectiveness.

(S) 2 some general trauma system information is available for the stakeholders, but it is not consistent or regular.

(I) 206.2 the trauma specific statewide multidisciplinary, multiagency advisory committee regularly reviews annotated trauma system data reports and system compliance information to monitor trauma system performance and to determine the need for system modifications.

(S) 3 the trauma-specific statewide multidisciplinary, multiagency advisory committee meets regularly and reviews process-type reports; no critical assessment of system performance has been completed.

(Benchmark) 207 The lead agency informs and educates State, regional, and local constituencies and policy makers to foster collaboration and cooperation for system enhancement and injury control.

(I) 207.1 the lead agency ensures communications, collaboration, and cooperation between State regional and local systems.

(S) 3 the lead agency issues a quarterly update on trauma system activities. The update is largely one-way communication to other government agencies. Routine communication usually revolves around an event (reactionary); proactive, open communication is not the norm.

(I) 207.2 the trauma system leaders (lead agency, advisory committees, and others) informs and educates constituencies and policy makers through community development activities, targeted media messaging, and active collaborations aimed at injury prevention and trauma system development.

(S) 2 limited interfaces with policy makers and the media, aimed at both injury prevention and trauma system development, have occurred. Community development activities have been limited to incident-specific response opportunities.

(I) 207.3 trauma system leaders (lead agency; trauma-specific statewide multidisciplinary, multi-agency advisory committees; and others) mobilize community partners in identifying the injury problem throughout the State and in building coalitions of personnel to design systems that can reduce the burden of injury.

(S) 1 no State lead agency exists to establish, maintain, or mobilize community partners in identifying the injury problem or in building community coalitions.

(I) 207.4 a trauma system public information and education plan exists that heightens public awareness of trauma as a disease the need for a trauma care system, and the prevention of injury.

(S) 1 there is no written public information and education plan on trauma system or injury prevention and control.

(Benchmark) 208 The trauma, public health, and emergency preparedness systems are closely linked.

(I) 208.1 the trauma system and the public health system have established linkages including programs with an emphasis on population-based public health surveillance, and evaluation, for acute and chronic traumatic injury and injury prevention.

(S) 1 there is no evidence that demonstrates program linkages, a working relationship, or the sharing of data between public health and the trauma system. Population-based public health surveillance, and evaluation, for acute or chronic traumatic injury and injury prevention has not been integrated with the trauma system.

(I) 208.2 the incident management and trauma systems have formal established linkages for system integration and operational management.

(S) 1 there is no formal established linkages for system integration or operational management between the incident management and trauma systems.

ASSURANCE

<u>Section 300</u> - ASSURANCE: Assurance to constituents that services necessary to achieve agreed on goals are provided by encouraging actions of others (public or private), requiring action through regulation, or providing services directly.

(Benchmark) 301 The trauma management information system (MIS) is used to facilitate ongoing assessment and assurance of system performance and outcomes and provides a basis for continuously improving the trauma system including a cost-benefit analysis.

> **(I) 301.1** the lead trauma authority ensures that each member hospital of the trauma system collects and uses patient data as well as provider data to assess system performance and to improve quality of care. Assessment data are routinely submitted to the lead trauma authority.
>
> **(S) 2** there is a trauma registry system in place in the trauma centers, but it is used by neither all facilities within the system nor the lead trauma authority to assess system performance.

(I) 301.2 pre-hospital care providers collect patient care and administrative data for each episode of care and provide these data not only to the hospital, but have a mechanism to evaluate the data within their own agency including monitoring rends and identifying outliers.

(S) 2 pre-hospital care providers have a patient care record for each episode of care, but it is not yet automated or integrated with the trauma management information system.

> **(I) 301.3** trauma registry, emergency department (ED), pre-hospital, rehabilitation, and other databases are linked or combined to create a trauma system registry.
>
> **(S) 1** some trauma registry and pre-hospital patient records are manually entered into a database when needed to answer system questions. There is ho rehabilitation registry.

(I) 301.4 the lead agency has available for use the latest in computer/technology advances and analytical tools for monitoring injury prevention and control components of the trauma system. There is reporting on the outcome of implemented strategies for injury prevention and control programs within the trauma system.

(S) 1 no computer/technology systems or analytical tools are available to the lead agency or other stakeholders to facilitate the monitoring of, or reporting on, the outcome of the implemented strategies for injury prevention and control within the trauma system.

(Benchmark) 302 The trauma system is supported by an EMS system that includes communications medical oversight, pre-hospital triage and transportation; the trauma system, EMS system, and public health agency are well integrated.

> **(I) 302.1** there is well-defined trauma system medical oversight integrating the specialty needs of the trauma system with the medical oversight for the overall EMS system.
>
> (S) **2** EMS medical oversight for all levels of pre-hospital providers caring for the trauma patient is provided, but such oversight is provided outside of the purview of the trauma system.

(I) 302.2 there is a clearly defined, cooperative, and ongoing relationship between the trauma specialty physician leaders (e.g., trauma medical director within each trauma center) and the EMS system medical director.

(S) 3 there is no formally established, ongoing relationship between the trauma medical director (within each trauma center) and the EMS system medical director; however, the trauma medical director and the EMS system medical director meet or visit informally to resolve problems, "to plan strategies", and to coordinate efforts.

> **(I) 302.3** there is clear-cut legal authority and responsibility for the EMS system medical director including the authority to adopt protocols, to implement a performance improvement system, to restrict the practice of pre-hospital care providers, and to generally ensure medical appropriateness of the EMS system.
>
> **(S) 4** there is an EMS system medical director with a written job description; however, the individual has no specific legal authority or time allocated for those tasks.

(I) 302.4 the trauma system medical director is actively involved with the development, implementation and ongoing evaluation of system dispatch protocols to ensure they are congruent with the trauma system design. These protocols include, but are not limited to, which resources to dispatch, for example, Advanced Life Support (ALS) versus Basic Life Support (BLS), air-ground coordination early notification of the trauma care facility, pre-arrival instructions and other procedures necessary to ensure resources dispatched are consistent with the needs of injured patients. The trauma system medical director and the EMS system medical director may be the same person. However, specific responsibility for, and oversight of, the trauma system must be ensured.

(S) 2 trauma system dispatch protocols have been adopted, but without regard to the design of the trauma system.

> **(I) 302.5** the retrospective medial oversight of the EMS system for trauma triage, communications treatment, and transport is closely coordinated with the established performance improvement processes of the trauma system.
>
> **(S) 1** there is no retrospective medical oversight procedure for trauma triage, communications, treatment, and transport.

(I) 302.6 there are mandatory system-wide pre-hospital triage criteria to ensure that trauma patients are transported to an appropriate facility based on their injuries. These triage criteria areregularly evaluated and updated to ensure acceptable and system-defined rates of sensitivity and specificity for appropriately identifying the major trauma patient.

(S) 2 there are differing triage criteria guidelines used by different providers. Appropriateness of triage criteria and subsequent transportation are not evaluated for sensitivity or specificity.

> **(I) 302.7** there is a universal access number for citizens to access the EMS/trauma system, with dispatch of appropriate medical resources. There is a central communication system for the EMS/trauma system to ensure field-to-facility bidirectional communications, interfacility dialogue, and all-hazards response communications among all system participants. Note: In some systems with limited resources, for example, rural, the available resources are at least initially, the "appropriate resources."
>
> **(S) 2** there is a universal access number (9-1-1) for quick citizen access to care. However, there is no coordinated communication system within a jurisdiction to allow for communications to occur among system participants either routinely or during all-hazards events.

(I) 302.8 there are sufficient and well-coordinated transportation resources to ensure EMS providers arrive at the scene promptly and expeditiously transport the patient to the correct hospital by the correct transportation mode.

(S) 3 there is a priority dispatch system that ensures appropriate resources arrive on scene promptly and transport patients to the hospital. A plan for transporting trauma patients from the field to the hospital has been completed.

> **(I) 302.9** there is a procedure for communications among medical facilities when arranging for interfacility transfers including contingencies for radio or telephone system failure.

(S) **2** interfacility communication procedures are generally included in the patient transfer protocols for each medical facility, but there is no system-wide procedure.

(I) 302.10 there are established procedures for EMS and trauma system communications in an all-hazards or major EMS incident that are effectively coordinated with the overall all-hazards response plan for the jurisdiction.

(S) 3 there are Statewide or regional EMS communication procedures in the event of an all-hazards or major EMS incident. These plans do not involve other jurisdictions and are not coordinated with the overall all-hazards response plan and incident management system.

(Benchmark) 303 Acute care facilities are integrated into a resource-efficient, inclusive network that meets required standards and that provides optimal care for all injured patients.

(I) 303.1 the trauma system plan has clearly defined the roles and responsibilities of all acute care facilities treating trauma and of facilities that provide care to specialty populations (e.g., burn, pediatric, spinal cord injury, and others).

(S) 1 there is no trauma system plan that outlines roles and responsibilities for all acute care facilities treating trauma and of facilities that provide care to special populations.

(I) 303.2 the trauma system lead agency should ensure that the number, levels, and distribution of trauma centers required to meet system demand are available.

(S) 1 there is no trauma system plan to identify the number, levels, and distribution of trauma centers required to meet system demand.

(I) 303.3 the trauma lead authority ensures that trauma facility patient outcomes and quality of care are monitored. Deficiencies are recognized and corrective action is implemented. Variations in standards of care are minimized, and improvements are made routinely.

(S) 3 designated trauma facilities are required to maintain a trauma registry and to use data from the registry in an ongoing performance improvement program to monitor and to improve the quality of care and patient outcomes.

(I) 303.4 when injured patients arrive at a medical facility that cannot provide the appropriate level of definitive care, there is an organized and regularly monitored system to ensure the patients are expeditiously transferred to the appropriate system-defined trauma facility.

(S) 1 there is no system to regularly review the conformity of interfacility transfers within the trauma system according to pre-established procedures.

(I) 303.5 the specific needs of unique populations, for example, English As a Second Language (EASL), socially disadvantaged, migrant/transient, remote, rural, and others, are accommodated within the existing trauma system.

(S) 1 there has been no consideration of the specific needs of unique populations, for example, EASL, in making an impact on the patient's access to care within the trauma system.

(Benchmark) 304 The jurisdictional lead agency, in cooperation with other agencies and organizations, uses analytical tools to monitor the performance of population-based prevention and trauma care services.

(I) 304.1 the lead agency, along with partner organizations, prepares annual reports on the status of injury prevention and trauma care in State regional or local areas. Note: Annual reports may be distributed electronically rather than, or in addition to printed copies.

(S) 1 no annual reports are available on the status of injury prevention or trauma care in State, regional, or local areas.

(I) 304.2 the trauma system MIS database is available for routine public health surveillance. There is concurrent access to the databases (emergency department, trauma, pre-hospital, medical examiner, and public health epidemiology) for the purpose of routine surveillance and monitoring of health status that occurs regularly and is a shared responsibility. Note: All legal requirements for confidentiality and safe-guarding of patient information must be met when sharing data between or among agencies.

(S) 1 there is o sharing of databases between emergency department, trauma, pre-hospital, medical examiner, or public health epidemiology.

(Benchmark) 305 The lead agency ensures that its trauma system plan is integrated with, and complementary to, the comprehensive mass casualty plan for both natural and man-made incidents, including an all-hazards approach to planning and operations.

(I) 305.1 the EMS, the trauma system, and the all-hazards medical response system have operational trauma and all-hazards response plans and have established an ongoing cooperative working relationship to ensure trauma system readiness to all-hazards events.

(S) 2 there have been some discussions between the EMS, the trauma system, and the all-hazards medical response system, but no formal plans have been developed.

(I) 305.2 all-hazards events routinely include situations involving natural (e.g., earthquake), unintentional (e.g., school bus crash) , and intentional (e.g., terrorist explosion) trauma-producing events that test expanded response capabilities and surge capacity of the trauma systems.

(S) 1 all-hazards training is not a routine part of the trauma system.

> **(I) 305.3** the trauma system, through the lead agency, has access to additional equipment, materials, and personnel for large-scale traumatic events. Note: The lead agency will work with other appropriate national, State, regional, and local agencies to secure these additional resources.
>
> **(S) 1** there is o surge capacity (pre-hospital, hospital, clinic, or coroner) built into the system for either smaller multi-patient events or mass casualty incidents.

(Benchmark) 306 The lead agency ensures that the trauma system demonstrates prevention and medical outreach activities within its defined service area.

> **(I) 306.1** the trauma system has developed mechanisms to engage the general medical community and other system participants in their research findings and performance improvement efforts.
>
> **(S) 1** there is no evidence that the trauma system reaches out to the general medical community at large to integrate it into trauma system improvements.

(I) 306.2 the trauma system is active within its jurisdiction with the evaluation of community-based activities and injury prevention and response programs.

(S) 2 there is no routine evaluation of medical community training/support or prevention activities accruing within the jurisdiction.

> **(I) 306.3** the effect or impact of outreach programs (both medical community training/support and prevention activities) is evaluated as part of a system performance improvement process. Note: “Evaluation” implies both informal evaluation processes and more structured research.
>
> **(S) 1** there is no effort by the lead agency to review the efforts of the trauma centers in either medical community training/support or prevention activities.

(Benchmark) 307 To maintain its State, regional, or local designation, each hospital will continually work to improve the trauma care as measured by patient outcomes.

> **(I) 307.1** the trauma system engages in regular evaluation of all licensed acute care facilities that provide trauma care to trauma patients and designated trauma hospitals. Such evaluation involves independent external reviews.
>
> **(S) 1** there is no ongoing mechanism for the trauma system to assess or evaluate the quality of trauma care delivered by all licensed acute care facilities that provide trauma care to trauma patients and designated trauma hospitals.

(I) 307.2 the trauma system implements and regularly reviews a standardized report on patient care outcomes as measured against national norms. Note: This process may include clinical and bench research.

(S) 1 there is no evidence that the trauma system engages in any review of patient care outcome data to evaluate its performance against national norms.

(Benchmark) 308 The lead agency ensures that adequate rehabilitation facilities have been integrated into the trauma system and that these resources are made available to all populations requiring them.

> **(I) 308.1** the lead agency has incorporated, within the trauma system plan and the trauma center standards, requirements for rehabilitation services including interfacility transfer of trauma patients to rehabilitation centers.
>
> **(S) 1** there is no written standards or plans for the integration of rehabilitation services with the trauma system or with trauma centers.

(I) 308.2 rehabilitation centers and out-patient rehabilitation services provide data on trauma patients to the central trauma system registry that include final disposition, functional outcome, and rehabilitation costs and also participate in performance improvement processes.

(S) 1 there is no requirement for the rehabilitation centers or outpatient rehabilitation services to contribute data on trauma patient outcomes.

(Benchmark) 309 The financial aspects of the trauma systems are integrated into the overall performance improvement system to ensure ongoing "fine-tuning" and cost-effectiveness.

> **(I) 309.1** cost data are collected and provided to the trauma system registry for each major component including prevention, pre-hospital, acute care, all-hazards response planning, and rehabilitation.

(S) 1 no cost data is collected.

(I) 309.2 collection and reimbursement data are submitted by each agency or institution on at least an annual basis. Common definitions exist for collection and reimbursement data and are submitted by each agency.

(S) 1 collection and reimbursement data are not gathered, nor do common definitions exist.

(I) 309.3 cost, charge, collection, and reimbursement data are aggregated with other data sources including insurers and data system costs and are included in annual trauma system reports. Note: "Outside" financial data means costs that may not routinely be captured in trauma center or registry data, for example, transportation, communications training, infrastructure, and the overall cost of readiness.

(S) 1 no outside financial data are captured.

(I) 309.4 financial data are combined with other cost, outcome, or surrogate measures, for example, years of potential life (YPLL), quality-adjusted life years (QALY), and disability-adjusted life years (DALY), length of stay; length of Intensive Care Unit (ICU) stay; number of ventilator days; and others, to estimate and track true system costs and cost-benefits.

(S) 1 no nonfinancial burden of disease costs and outcome measures are collected or modeled.

(Benchmark) 310 The lead trauma authority ensures a competent workforce.

(I) 310.1 in cooperation with the pre-hospital certification and licensure authority, set guidelines for pre-hospital personnel for initial and ongoing trauma training including trauma-specific courses and those courses that are readily available throughout the State.

(S) 5 pre-hospital personnel receive trauma training as part of their initial certification and licensure. Routine continuing education in pre-hospital trauma care is provided. Such additional certifications such as Basic Trauma Life Support (BTLS) and Pre-Hospital Trauma Life Support (PHTLS) are offered regularly throughout the State.

(I) 310.2 in cooperation with the pre-hospital certification and licensure authority, ensure that pre-hospital personnel who routinely provide care to trauma patients have a current trauma training certificate, for example, PHTLS, BTLS, and others, or that trauma training needs are driven by the performance improvement process.

(S) 1 there is no mechanism to ensure that pre-hospital personnel, for example, Emergency Medical Technicians (EMTs) routinely providing care to trauma patients are certified in PHTLS and BTLS or have completed other trauma training.

(I) 310.3 as part of the established standards, set appropriate levels of trauma training for nursing personnel who routinely care for trauma patients in acute care facilities.

(S) 1 there are no trauma training standards for nursing personnel who routinely are for trauma patients in acute care facilities, for example, Advanced Trauma Care for Nurses (ATCN), Trauma Nursing Core Course (TNCC), Advanced Trauma Life Support (ATLS), or any national or State-recognized trauma nurse verification course.

(I) 310.4 ensure that appropriate, approved trauma training courses are provided for nursing personnel on a regular basis.

(S) 2 there is a process to provide appropriate, approved trauma training courses for nursing personnel, but courses are sporadic and uncoordinated with needs.

(I) 310.5 in cooperation with the nursing licensure authority, ensure that all nursing personnel who routinely provide care to trauma patients have a current trauma training certificate (e.g., ATCN, TNCC, or any national or State trauma nurse verification course). As an alternative after initial trauma course completion training can be driven by the performance improvement process.

(S) 1 there is no mechanism to ensure that nurses providing care to trauma patients are certified in an ATCN, TNCC, or any national or State trauma nurse verification course.

(I) 310.6 as part of the established standards set appropriate levels of trauma training for physicians who routinely care for trauma patients in acute care facilities.

(S) 5 physicians working in acute care facilities that see trauma patients receive initial and ongoing trauma training, including updates in trauma care, continuing education, and certifications, as appropriate.

(I) 310.7 ensure that appropriate, approved trauma training courses are provided for physicians on a regular basis.

(S) **1** there is no mechanism to approve or provide appropriate trauma training courses for physicians throughout the jurisdiction.

(I) 310.8 in cooperation with the physician licensure authority, ensure that physicians who routinely provide care to trauma patients have a current trauma training certificate of completion, for example Advanced Trauma Life Support (ATLS), and others. Alternatively, physicians may maintain trauma competence through continuing medical education programs after initial ATLS completion.

(S) 1 there is no mechanism to ensure that physicians who routinely provide care to trauma patients are certified in ATLS.

(I) 310.9 conduct at least one multidisciplinary trauma conference annually that encourages system and team approaches to trauma care.

(S) **4** multidisciplinary trauma conferences are conducted at least annually.

(I) **310.10** as new protocols and treatment approaches are instituted within the system, structured mechanisms are in place to inform all personnel of those changes in a timely manner.

(S) **1** there is no structured mechanism to inform or educate personnel in new protocols or treatment approaches within the jurisdiction.

(I) 310.11 there are mechanisms within the system performance improvement processes to identify and correct systemic personnel deficiencies within the trauma system. Note: Systemic personnel deficiencies are those that cut across multiple agencies and institutions and impact the system as a whole. For example, if trauma triage protocols are not being adhered to by most pre-hospital providers from multiple agencies, then it is a systemic problem that could involve communication, training, medial direction or performance improvement issues.

(S) 1 there is no mechanism to identify, through performance improvement processes, systemic personnel deficiencies within the trauma system.

(I) 310.12 there are mechanisms in place within agency and institutional performance improvement processes to identify and correct deficiencies in trauma care practice patterns of individual practitioners (e.g., EMTs, paramedics, nurses, physicians, and others) within the trauma system.

(S) 1 there is no mechanism in place to routinely assess the deficiencies in trauma care practice patterns of individual practitioners (e.g., EMTs, paramedics, nurses, physicians, and others) within the trauma system.

(I) 310.13 there is authority for a trauma medical director and a clear job description, including requisite education training, and certification, for this position. Note: The trauma medical director and the EMS system medical director may be the same person.

(S) 1 there is no requirement for a trauma medical director, and no job description has been developed.

(Benchmark) 311 The lead agency acts to protect the public welfare by enforcing various laws, rules, and regulations as they pertain to the trauma system.

> **(I) 311.1** the lead agency works in conjunction with the pre=hospital regulatory agency to ensure that pre-hospital care is provided by licensed agencies that are in compliance with any rules, regulations, or protocols specific to pre-hospital trauma delivery (e.g., taking patients to the correct facility in accordance with pre-existing destination protocols).
>
> **(S) 3** the trauma system lead agency and the pre-hospital regulatory agency work together to resolve complaints involving pre-hospital agencies that relate to trauma system performance.

(I) 311.2 the lead agency refers issues of personnel noncompliance with trauma laws, rules, and regulations to appropriate boards or licensure authorities.

(S) 1 individual personnel performance is not monitored.

> **(I) 311.3** the lead agency enforces laws, rules, and regulations concerning the verification of trauma centers including the ability to de-designate trauma facilities for matters of noncompliance.
>
> **(S) 3** the lead agency has the authority to de-designate trauma facilities for matters of noncompliance but does not monitor facility performance.

(I) 311.4 laws, rules, and regulations are routinely reviewed and revised to continually strengthen and improve the trauma system.

(S) 3 laws, rules, and regulations are reviewed and revised on a periodic schedule (e.g., every 5 years).

> **(I) 311.5** the Office of EMS & Trauma routinely evaluates all system components to ensure compliance with various laws, rules, and regulations pertaining to their role and performance within the trauma system.
>
> **(S) 2** complaints concerning individual component performance within the trauma system go directly to the licensure agency responsible for that component.

(I) 311.6 incentives are provided to individual agencies and institutions to seek State or nationally recognized accreditation in areas that will contribute to overall improvement across the trauma system, for example, Commission on Accreditation of Ambulance Services (CAAS) for pre-hospital agencies, Council on Allied Health Education Accreditation (CAHEA) for training programs, and American College of Surgeons (ACS) verification for trauma facilities.

(S) 3 accreditation processes are strongly encouraged, and some incentives are provided, for example, extension of EMS agency review from 2 years to 3 years after CAAS accreditation.

Georgia Trauma Care
NETWORK COMMISSION

Region VI Regional Trauma Advisory Council Plan

Presentation to the GTCNC
September 15, 2011

Region VI RTAC Timeline

Georgia Trauma Care NETWORK COMMISSION

January:

✓RTAC steering committee created – Council Chair, Council Executive Director, Trauma Coordinator, EMS Leader

February:

✓RTAC steering committee presented a proposal to the Region VI EMS council for consideration and vote

✓Council agreed to participate in pilot and endorsed plan submitted by steering committee

March:

✓Letters sent from EMS Council Chair to trauma stakeholders explaining the pilot and informing them a follow up visit would take place to discuss further.

Region VI RTAC Timeline

Georgia Trauma Care NETWORK COMMISSION

April – May:

- ✓ The EMS Council Chair, the Medical Director and Trauma Program director of the Level I Trauma Center conducted meetings with various stakeholders throughout region VI (and beyond, where appropriate) to discuss the proposed RTAC plan, invite them to the first kick off meeting, and answer any questions.

- ✓ In addition, plans and preparations were made for the first of three stakeholder meetings.

Region VI RTAC Timeline

Georgia Trauma Care NETWORK COMMISSION

June:

✓ First ***Forum 2011*** held on June 2nd

✓ Presentation to explain background, present status and time line to complete tasks assigned

✓ Task Forces established and instructed on tasks to accomplish before next meeting

✓ BIS assessment assigned with instructions for completion

Region VI RTAC Timeline

Georgia Trauma Care NETWORK COMMISSION

July:

✓Second ***Forum 2011*** held on July 7th

✓Each task force presented their section of the plan for the stakeholder group to discuss and make recommendations

✓BIS assessment was completed and summary was provided for discussion as well

August:

✓Final ***Forum 2011*** held on August 2nd

✓Final plan presented to the group for a vote

✓RTAC members appointed and their first official meeting was held – they voted to approve the RTAC plan

Region VI RTAC Timeline

September:

✓ Request GTCNC approval of plan

✓ Review proposed PI matrix and modify/adopt

✓ Establish an education timeline to address pre-hospital and hospital components related to plan implementation

Region VI RTAC Next Steps

Georgia Trauma Care NETWORK COMMISSION

Develop/implement Pre-Hospital Component of the plan:

✓TSEC Criteria education and implementation
✓Develop and implement pre-hospital protocols for use of the TCC

Develop/implement Hospital Component of the plan:

✓TSEC Criteria education and implementation
✓Develop and implement transfer protocols
✓Educate hospitals on definitions of designated and non-designated participating hospitals
✓Develop and implement protocols for use of the TCC

Define plan for performance improvement:

✓Develop metrics to be used to measure progress toward implementation of plan
✓Develop metrics to evaluate success of plan

Mission

Georgia Trauma Care
NETWORK COMMISSION

- ***Reduce the burden of trauma through injury prevention efforts focused on injury data and statistics specific to region VI.***
- ***Ensure the right patient gets to the right hospital with the resources necessary to provide appropriate definitive care in the shortest amount of time***
- ***Ensure that victims, when injured, receive care across the continuum from pre-hospital through rehabilitation that is of the highest quality to ensure the best outcome.***

Vision

Georgia Trauma Care
NETWORK COMMISSION

To provide leadership regarding the care of trauma patients within the region and across regional and state boundaries where appropriate.

RTAC Goals

Georgia Trauma Care
NETWORK COMMISSION

- ✓ Reduce the number of preventable deaths
- ✓ Improve outcomes from traumatic injury
- ✓ Reduce medical costs through appropriate resource utilization

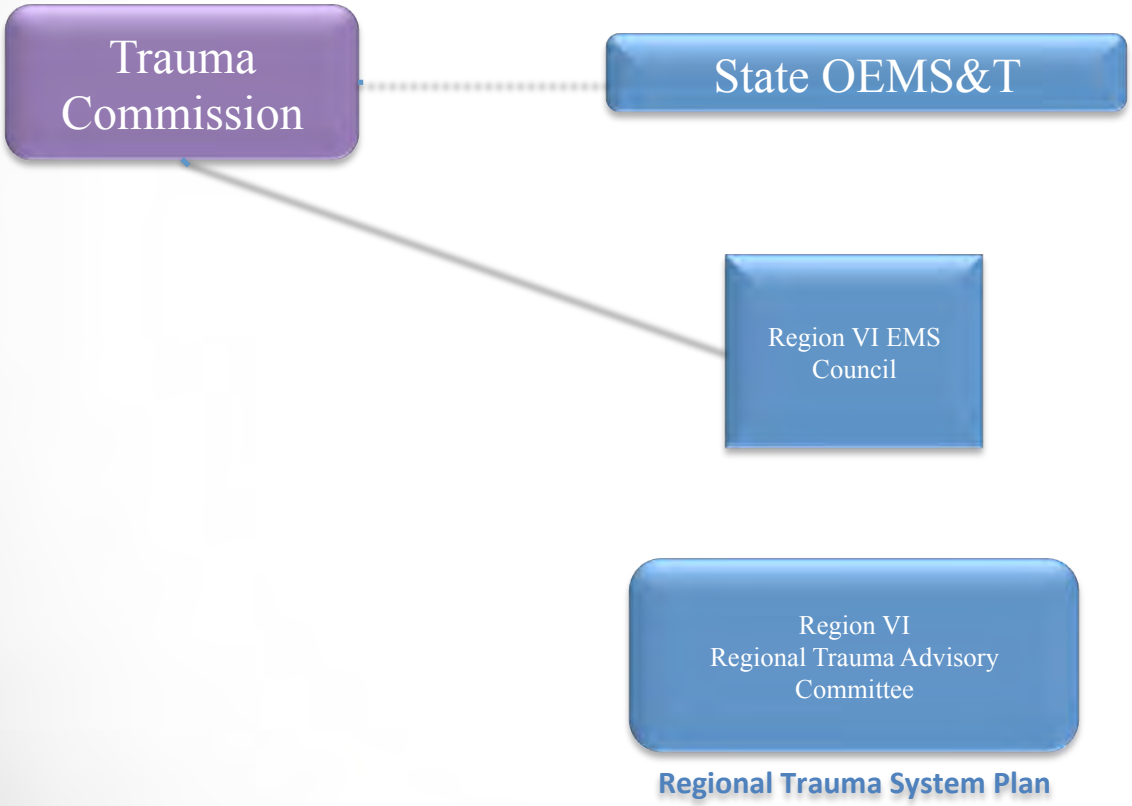
RTAC Objectives

Georgia Trauma Care NETWORK COMMISSION

- Provide oversight and guidance for system evaluation, education, and training programs, and public education and prevention strategies
- Monitor availability of resources, assure compliance with system standards, and work in conjunction with OEMS&T to develop process for review of trauma care
- Evaluate trauma patient outcomes at a system level
- Ensure that resources within Region VI and those appropriate resources surrounding region VI are fully incorporated into the Trauma Plan to enable access to care when needed
- Analyze the impact and results of the system and make recommendations for change as appropriate to assure quality outcomes

Authority and Structure

Georgia Trauma Care NETWORK COMMISSION



Regional Trauma System Plan

RTAC Duties

- To promote cooperation and to support communication among trauma care providers, organizations and hospitals
- To provide a forum to discuss and resolve issues related to trauma care
- To promote data driven education, public awareness and prevention activities regarding regional trauma
- To identify and analyze trends and patient care outcomes based on trauma registry data & TCC data
- To conduct quality improvement activities within the system to achieve the highest level of trauma care
- To facilitate and encourage hospitals within the region to seek designation at the appropriate resource level

Charge of RTAC

Georgia Trauma Care
NETWORK COMMISSION

To assist in the reduction of human suffering and cost associated with morbidity and mortality that result from trauma.

- **Analyze local trauma care trends**
- **Promote regional injury prevention activities**
- **Implement quality improvement activities**
- **Ensure access to care and efficient use of resources**

Pre-Hospital Care

Georgia Trauma Care
NETWORK COMMISSION

- Identify resources and planning for the best use of these resources within Region VI and those appropriate resources outside of Region VI
- Adopt the CDC Field Triage Decision Scheme as Trauma System Entry Criteria and implement for patient triage
- Develop and implement standardized protocols for patient care based on American College of Surgeons Committee on Trauma Guidelines
- Develop and implement an evidenced based decision making tool for determining the best method of patient transport
- Standardize training for all 911 providers participating in the regional plan

Hospital Care

Georgia Trauma Care
NETWORK COMMISSION

- **Allows all hospitals to have a role in providing trauma care as designated or non-designated participating hospitals**
- **Assure all trauma patients have access to care and receive optimal care once in the system**
- **Ensure the needs and locations of the patient are matched with the available resources of the regional system**
- **Assist in determining the number and location of Level I, II , III and IV trauma centers to allow optimal access and deliver of care**
- **Develop and implement interfacility transfer guidelines**
- **Maintain Resource Availability Display**

Performance Improvement

Georgia Trauma Care
NETWORK COMMISSION

Review system performance as related to patient needs, system resources, medical care and cost

- **Develop a matrix of what and how success will be measured**
- **Develop a method to incorporate data from Trauma Registry and TCC into PI process**

Injury Prevention

Georgia Trauma Care
NETWORK COMMISSION

- Review research and data to accurately describe the burden of traumatic injury
- Develop a method to consolidate injury data within the region in order to target “at risk” areas
- Develop and implement strategies to decrease individual risk factors and environmental risks
- Develop a method to coordinate prevention efforts across the region

RTAC Membership

RTAC Members are appointed by the Region VI EMS Council Chair, there will be a minimum of 15 members

Executive Committee Members: *(2yr term)*

- Chairperson
  - •Preside at all RTAC meetings
  - •Responsible to sign any/all agreements and/or documents
  - •Set meeting agenda and facilitate meeting discussion
  - •***Must be a full voting member of Region VI EMS Council***
- Vice Chair
  - •Perform the duties of the chair when he/she is absent from RTAC meeting
  - •Does not have to be a member of Region VI EMS Council

RTAC Membership

Executive Committee Members *(cont.)*:

- Secretary
  - •Call roll and establish if quorum is present
  - •Maintain and distribute minutes from RTAC meetings
  - •Review and maintain copies of organizational correspondence
  - •Assist in the dissemination of information to general membership

- Permanent Member at Large
  - •Representative of the highest level Trauma Center in the Region

RTAC Membership

Georgia Trauma Care NETWORK COMMISSION

Council Composition:

Hospital Members *(minimum of 3)*

- Senior hospital management
- At least 1 member from rural designated or non-designated participating hospital

EMS Members *(minimum of 3)*

- At least one from urban 911 EMS service area
- At least one member from rural 911 EMS service area
- At least one member must provide direct patient care

RTAC Membership

Georgia Trauma Care NETWORK COMMISSION

Council Composition *(cont.)*:

Physician Members *(minimum of 3)*

- At least one will be a rural physician who is actively providing trauma care from designated or non-designated participating hospital
- One must be a trauma surgeon from the highest level designated trauma center in the region

Nurse Members *(minimum of 2)*

- Will preferably have knowledge of pre-hospital and hospital care
- Will preferably have experience in trauma related educational activities and/or injury prevention activities

RTAC Membership

Georgia Trauma Care NETWORK COMMISSION

Council Composition *(cont.)*:

EMSC Representative

- Representing access for pediatric patients

At Large Members *(stakeholder areas for consideration)*

- Law enforcement
- Emergency Management
- Business and Industry
- Public Health
- Epidemiologist
- Government Officials
- Previous Trauma Patients/Families

RTAC Members

Hospital Members –

- Joan Wessman: Vice President and Chief Nursing Officer, University Health Care System ***(RTAC Chair)***
- Ralph Randall: CEO Jefferson Hospital
- Jim Cruickshank: President and CEO Trinity Hospital of Augusta

EMS Members –

- Gary Pinard: Chief, Screven County EMS
- Courtney Terwilliger: Director, Emanuel County EMS
- Dan Gates: Gold Cross EMS ground and air

Physician Members –

- Colville Ferdinand: Chief, Trauma/Critical Care GHSMC
- Robyn Hatley: Director, Pediatric Trauma GHSCMC
- Harry Wingate: Chair, American College of Emergency Physicians Section of Rural Emergency Medicine

RTAC Members

Nurse Members –

- Jane Echols: Chief Operating Officer, Wills Memorial Hospital
- Debra Burch: Hospital Nurse Practitioner, Burke Medical Center

EMSC Member –

- Natalie Lane: Pediatric Emergency Room Physician, GHSCMC

Permanent At Large Member (Level 1 Trauma Ctr Rep) –

- Sandra McVicker: CNO and interim COO, GHSU

At Large Members –

- Tanya Simpson: Assistant Vice President Burn Care Services, Doctors Hospital
- Pamela Tucker: Director, Columbia County Emergency and Operations Division
- Cathy Robey-Williams: Division Director for Emergency Services, Critical Care and Medicine, Aiken Regional Medical Center
- Elliot Price: Chair, Community Awareness and Emergency Response

Georgia Trauma Care
NETWORK COMMISSION

Questions?

Questions?

Questions? *Questions?* **Questions?**

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