# Level III/Level IV/Rural Focus Committee

- Barnsley Resort
- March 1st, 2022



## GEORGIA TRAUMA COMMISSION

# What Are Trauma Center Readiness Costs?

 Costs incurred before the first patient is seen or treated

 Nonpatient care cost which the hospital would not have to pay if it were not a trauma center

 Costs required by trauma center regulations to maintain essential infrastructure







### GEORGIA TRAUMA COMMISSION

Oversee fund dispersal into the entire Georgia trauma system, fairly and effectively







How much green does it take to be orange? Determining the cost associated with trauma center readiness

Trauma Center	Average annual readiness cost	Most significant cost	Lowest Cost
Level I	\$10,078,506	Clinical Medical Staff	Education and Outreach
Level II	\$4,925,103	Clinical Medical Staff	Education and Outreach

The significant cost of trauma center readiness highlights the need for additional trauma center funding

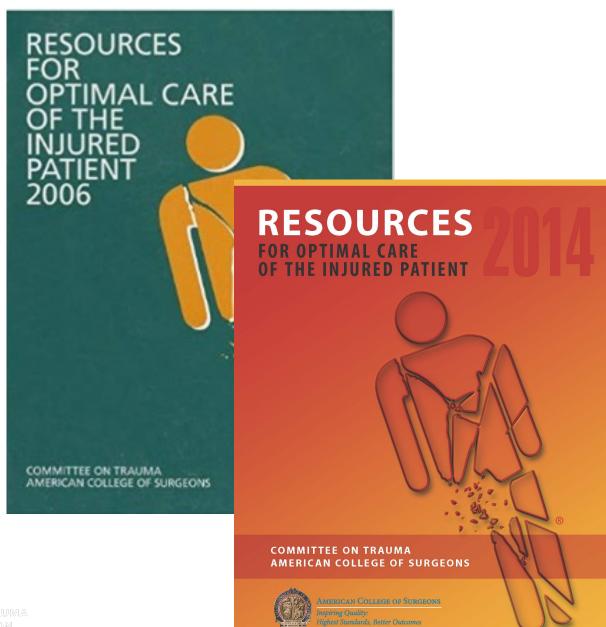
### Level III and Level IV Readiness Costs Survey

## Developing Consensus for Readiness Cost Definitions

- Based on well-developed process from Level I and II surveys
  - Level III and IV Committee Leadership workgroup
  - Survey tool adapted from Level I and II readiness cost survey
  - Webinar with trauma centers to review survey tool components
  - Developed FAQ document based on feedback

#### Limitations

- Self-reporting by each trauma center
- Resources for Optimal Care of the Injured Patient updated in 2014
- Several hospital systems were involved in acquisitions that limited access to supporting documentation





#### Methods



#### **Spring-Summer 2021**

- -Formalized Level III/IV Subcommittee
- -Readiness Cost Workgroup
- -Adapted Level I/II Survey Tool for Level III/IV
- Administrative/Program Support Staff
- Clinical Medical Staff
- Medical Subspecialists
- Education/Outreach



#### October 2021

#### Trauma centers completed surveys

- 8 Level IIIs
- 6 Level IVs
- 100% participation
- Survey data year 2019
- Total number of patients 4,868
- Level III centers 4,401
- Level IV centers 467

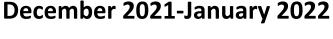
-Webinars

Fall 2021

- Readiness Cost Survey Tool Review
- Q & A
- -Modified tool based on feedback
- -Samples selected for testing



- -Centers tested on random cost components
- Level III: 66 cost components
- Level IV: 24 cost components
- -Trauma centers were asked to submit supporting documentation for the selected cost components
- -Overall, 57% of the total reported original costs of Level III and IV trauma centers were requested to test



**Validation Process** 



### **Trauma Center Readiness Costs: Summary**

Cost Category	Level III Total	Level III Mean	Level IV Total	Level IV Mean	Level III and IV Totals
Administrative/Program Support Staff	\$ 6,245,395	\$ 780,674	\$ 474,033	\$ 79,005	\$ 6,719,428
Clinical Medical Staff	7,365,251	920,656	-		\$ 7,365,251
In House OR Availability	-		-		-
Education and Outreach	109,561	13,695	15,689	2,615	\$ 125,250
Totals	\$ 13,720,207	\$ 1,715,025	\$ 489,722	\$ 81,620	\$ 14,209,929

## **Trauma Center Readiness Costs: Administrative**

Administrative	Level III Mean	#	Range (\$000's)	Level IV Mean	#	Range (\$000's)	Totals
Senior Administrator Support	\$ 17,332	7	6-36	\$ 6,245	5	1-30	\$ 176,131
Program Administrator: Trauma Director	51,147	5	19-127	8,750	1	53-53	\$ 461,677
Trauma Program  Manager/Coordinator	67,694	5	78-144	46,456	6	14-91	\$ 820,287
Participation costs for state, regional and national activities	2,999	7	0-8	2,131	4	2-8	\$ 36,779

	Level III		Range	Level IV		Range	
Program Support Staff	Mean	#	(\$000's)	Mean	#	(\$000's)	Totals
Education/Outreach Coordinator	1,325	2	5-5	-	-	-	\$ 10,597
Respiratory Therapy	109,891	8	28-231	11,793	5	3-34	\$ 949,887
Case Management, Discharge Planning, and Social Services	87,283	8	28-158	-	-	-	\$ 698,261
Physical Therapy	99,686	8	39-198	-	-	-	\$ 797,486
Occupational Therapy	109,214	8	36-198	-	-	-	\$ 873,715
Speech Therapy	114,792	8	31-220	-	-	-	\$ 918,333
Injury Prevention Coordinator	7,214	3	2-43	-	-	-	\$ 57,708
Research Coordinator	-	-	-	-	-	-	\$ 
PI Coordinator	23,271	5	0-75	-	-	-	\$ 186,171
Trauma Registrar – Employed	31,956	7	5-70	-	-	-	\$ 255,651
Trauma Registrar – Contract	-	-	-	-	-	-	\$ -
Trauma Program Secretary	7,061	2	1-56	-	-	-	\$ 56,488
Trauma Medical Director (TMD)	23,722	6	4-84	468	2	1-2	\$ 192,587
TMD Participation Costs	3,039	6	3-6	242	2	0-1	\$ 25,760
ED Liaison	6,268	2	3-47	-	-	-	\$ 50,144
ICU Surgical Liaison	2,247	3	5-8	-	<u>-</u>	-	\$ 17,979
Orthopedic Liaison	2,559	2	2-18	-	<u>-</u>	-	\$ 20,476
Neurosurgeon Liaison	1,143	1	9-9	-	<u>-</u>	-	\$ 9,144
Anesthesia Liaison	291	1	2-2	-	-	-	\$ 2,325
Registry Hardware and Software	10,292	7	6-17	2,920	6	2-4	\$ 99,862
Screening, brief intervention and referral for treatment (SBIRT)	248	1	2-2	-	-	-	\$ 1,980
Thromboelastography (TEG)	-	-	-	-	-	-	\$ -

Program Support Staff	Level III Mean	#	Range (\$000's)	Level IV Mean	#	Range (\$000's)	Totals
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referral for treatment (SBIRT)  Thromboelastography (TEG)	248	1	2-2	-	-	-	\$ 1,980 \$ -

	Level III		Range	Level IV		Range	
Clinical Medical Staff	Average	#	(\$000's)	Average	#	(\$000's)	Totals
Trauma Surgery	\$ 326,941	\$ 8	5-1,388	\$ -	-		\$ 2,615,528
Trauma Physician Extender		_	_	-	-		\$ -
Orthopedics (	166,534	7	5-548	-	-		\$ 1,332,274
Neurosurgery	80,818	4	8-344	-	_		\$ 646,548
Anesthesia	56,518	5	4-307	-	-		\$ 452,145
Radiology	57,146	1	457-457	-	-		\$ 457,167
Urology	19,886	4	2-120	-	-		\$ 159,089
Vascular	5,062	2	2-38	-	-		\$ 40,495
Emergency Medicine							
Physician Coverage	45,830	4	11-206	-	-		\$ 366,642
Emergency Medicine Physician/APP	_	-	-	-	-		\$ -
Internal Medicine	38,687	3	67-137	-	_		\$ 309,496
Cardiology	36,453	3	5-280	-	-		\$ 291,628
Gastroenterology	24,147	2	2-192	_	-		\$ 193,174
Infectious Disease	-	-	-	-	-		\$ -
Pulmonary Medicine	7,606	2	4-57	-	_		\$ 60,846
Nephrology	918	2	1-7	-	-		\$ 7,337

#### **Education and Outreach Costs**

Education and Outreach	Level III Mean	#	Range (\$000's)	Level IV Mean	#	Range (\$000's)	Totals
Injury Prevention	\$ 87	2	0-1	\$ 444	2	1-2	\$ 3,355
Community Outreach	1,183	4	0-8	314	3	1-1	\$ 11,350
Professional Education	1,952	3	1-10	369	3	0-1	\$ 17,827
Outlying Hospital Education	<u>-</u>	-	_	-	-	-	<u>-</u>

#### **Education and Outreach Costs**

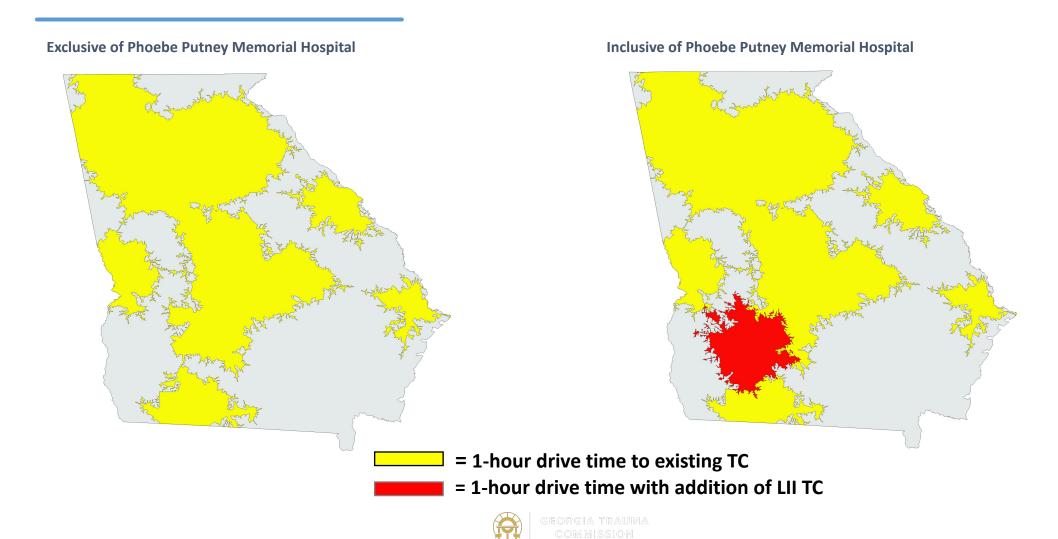
<b>Education and</b>	Level III		Range	Level IV		Range	
Outreach	Mean	#	(\$000's)	Mean	#	(\$000's)	Totals
Trauma Medical Director	1,197	3	1-4	-	-	-	\$ 9,579
Trauma Program Manager	1,176	3	1-6	398	3	0-1	\$ 11,795
Trauma Registrar	428	2	1-2	-	-	-	\$ 3,423
Maintain Current ATLS	<del>-</del>	-	-	449	3	0-1	\$ 2,695
Emergency Department	7,138	6	3-21	-	-	-	\$ 57,100
Intensive Care Unit	242	2	0-2	-	-	-	\$ 1,933
Surgery/PACU	292	1	2-2	-	-	-	\$ 2,346
Prehospital and Hospital Based Provider Training	-	-	_	641	2	1-3	\$ 3,847

### Level III/IV Readiness Costs Summary

Trauma Center	Average annual readiness cost	Most significant cost	Lowest Cost		
Level III	\$ 1,715,025	Trauma Surgeon Staff	Education and Outreach		
Level IV	\$ 81,620	Trauma Director	TMD Participation Costs		



# Access to Level I, II and III Trauma Center Within 1-Hour Drive



#### **MARCH PAWS Initiative**

**Massive Hemorrhage** 

**Airway** 

Respirations

**Circulation** 

**Head Injury/Hypothermia** 

**Pain Control** 

**Antibiotics** 

Wounds

**Splinting** 



#### **MARCH PAWS Initiative**

Emanuel Medical Center, a level IV trauma center, received grant funding from the Georgia Trauma Commission to develop a trauma care protocol adoptable by hospital and prehospital providers in rural Georgia

# MARCH PAWS Kickoff at Lake Blackshear

February 1-2, 2022

#### Participants included:

- Trauma Program Managers
- Trauma Surgeons
- Trauma Nurses
- Emergency Department Doctors
- Prehospital Professionals





#### **Level IV Consult Visits**





PTSF will deploy two site survey teams to GA to conduct consult visits for all level IV centers October 10-14, 2022



#### Rural Focused ACS Consult Visit



## ACS Consultation program offers a critical analysis of the current system status including:

- Challenges
- Opportunities
- Provides recommendations for system improvement and enhancement

### Principles that are important to the program mission include:

- Reduction of injury incidence and severity
- Rigorous performance improvement standards
- Assurance of appropriate resources for designated facilities
- Cost containment and efficacy enhancement



# Rural Focused ACS Consult Visit Framework



- Rural best practice states/regions/territories to replicate
- Risks/benefits of TC waivers for specialty services/equipment
- Acute care facility incentivization for trauma system participation
  - 1. Trauma center or;
  - 2. Non-designated, participating center
- Telemedicine models specific to trauma
- Ensuring clinical competency in live saving procedures in the rural environment
- Interfacility transport contractual arrangements
- Efficient utilization of blood in rural centers to minimize waste
- Optimal level of training/licensure of the rural medic
- Optimal size of rural regional areas for effective system integration



### Rural Focused ACS Consult Visit



Georgia's Consult will be the first ruralfocused pilot project for the ACS Dennis Ashley, MD, FACS, FCCM
Chairman
Georgia Trauma Commission
Dennis.Ashley@atriumhealth.org

Elizabeth V. Atkins, MSN, RN, TCRN
Executive Director
Georgia Trauma Commission
Liz@gtcnc.org



#### GEORGIA TRAUMA COMMISSION