

Administrator's 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



THE COMMITTEE ON TRAUMA



The Cost of Trauma Center Readiness

PA Taheri, MD, DA Butz Ph.D., L Lottenberg, MD, A Clawson, LM Flint, MD

- Surveyed 20 verified Florida Level I and II trauma centers
- 10 hospitals responded to the survey
- Focused on cost associated with:
 - Physician on-call coverage
 - Verification
 - Administration
 - Outreach
 - Prevention

The Cost of Trauma Center Readiness

PA Taheri, MD, DA Butz Ph.D., L Lottenberg, MD, A Clawson, LM Flint, MD

- Median cost of readiness for each trauma center (Level I and II combined) was \$2.7 million dollars annually
- Majority of costs was physician compensation for on-call coverage totaling \$2.1 million

The Cost of Trauma Center Readiness

PA Taheri, MD, DA Butz Ph.D., L Lottenberg, MD, A Clawson, LM Flint, MD

They noted, “the answers required some judgment by the respondents and considerable effort.”



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



Survey Purpose

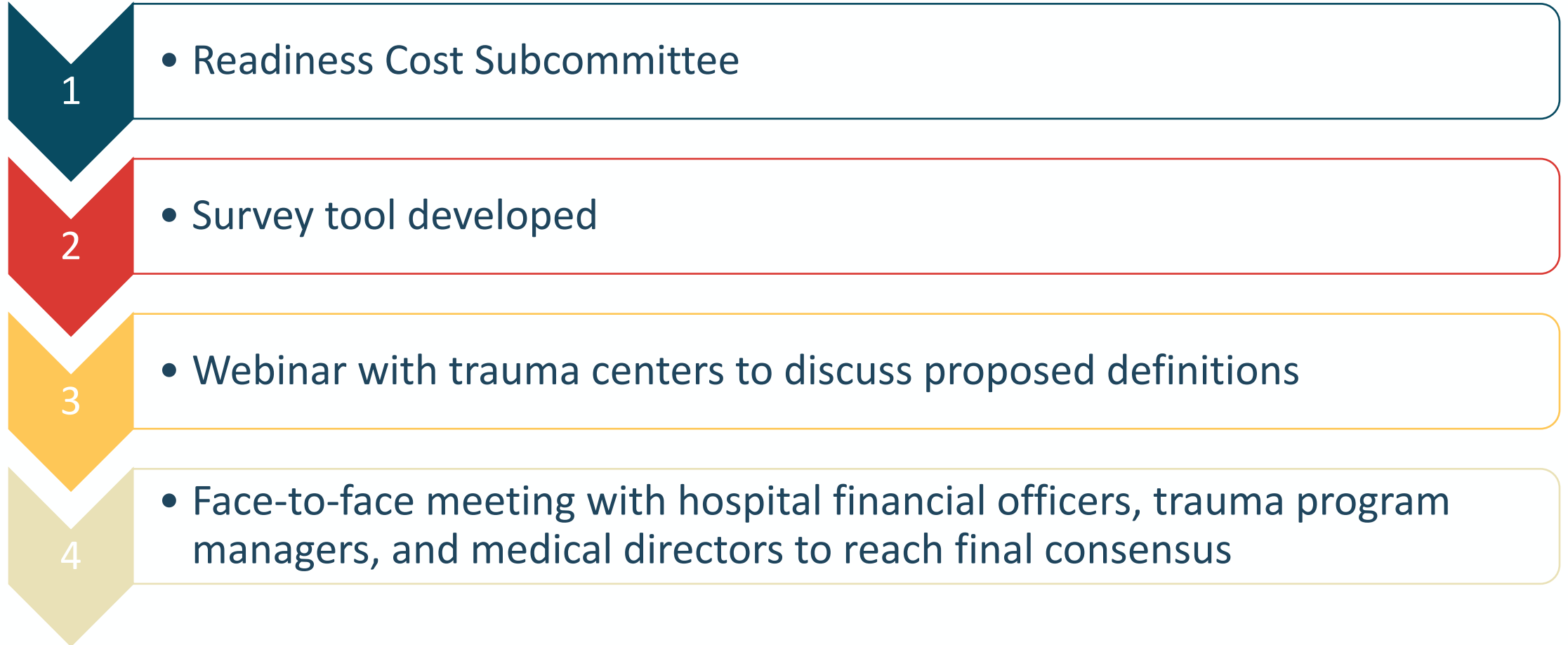
To provide an analysis of readiness cost for Georgia's trauma centers utilizing the readiness cost tool in conjunction with an independent financial review to verify consistent cost reporting



Level I and II



Developing Consensus for Readiness Cost Definitions



What Are the Costs of Trauma Center Readiness? Defining and Standardizing Readiness Costs for Trauma Centers Statewide

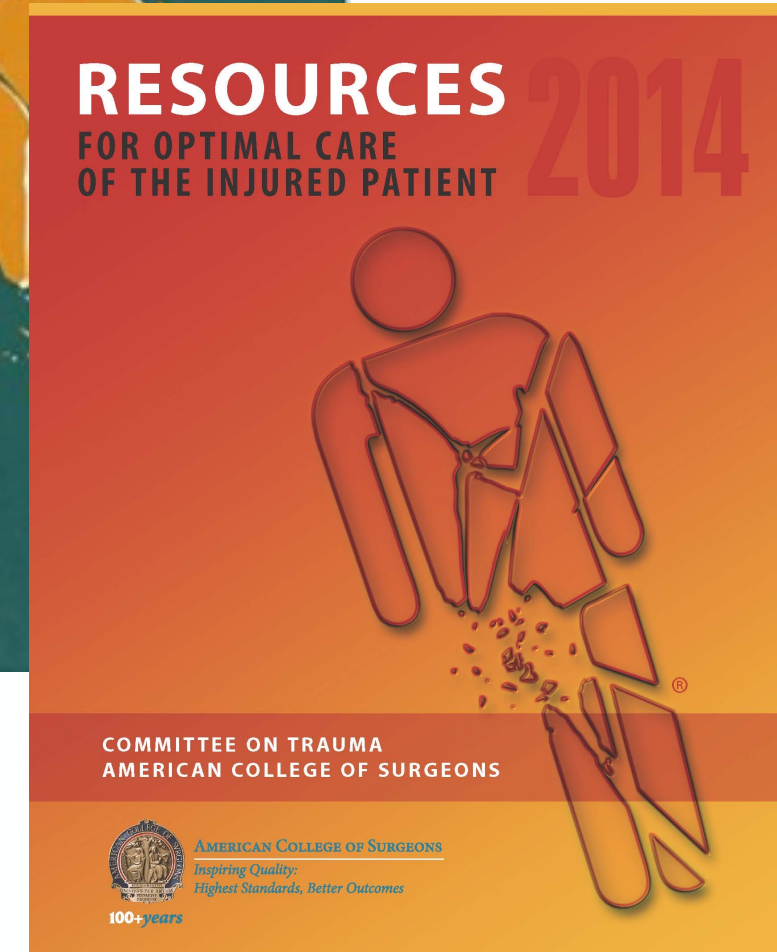
DENNIS W. ASHLEY, M.D.,* ROBERT F. MULLINS, M.D.,† CHRISTOPHER J. DENTE, M.D.,‡

2011 Survey Data

- Average annual readiness cost for a Level I trauma center was **\$6,821,064**
- Average annual readiness cost for a Level II trauma center was **\$2,333,113**

Limitations

- Self-reporting by each trauma center
- Not validated
- Resources for Optimal Care of the Injured Patient updated in 2014



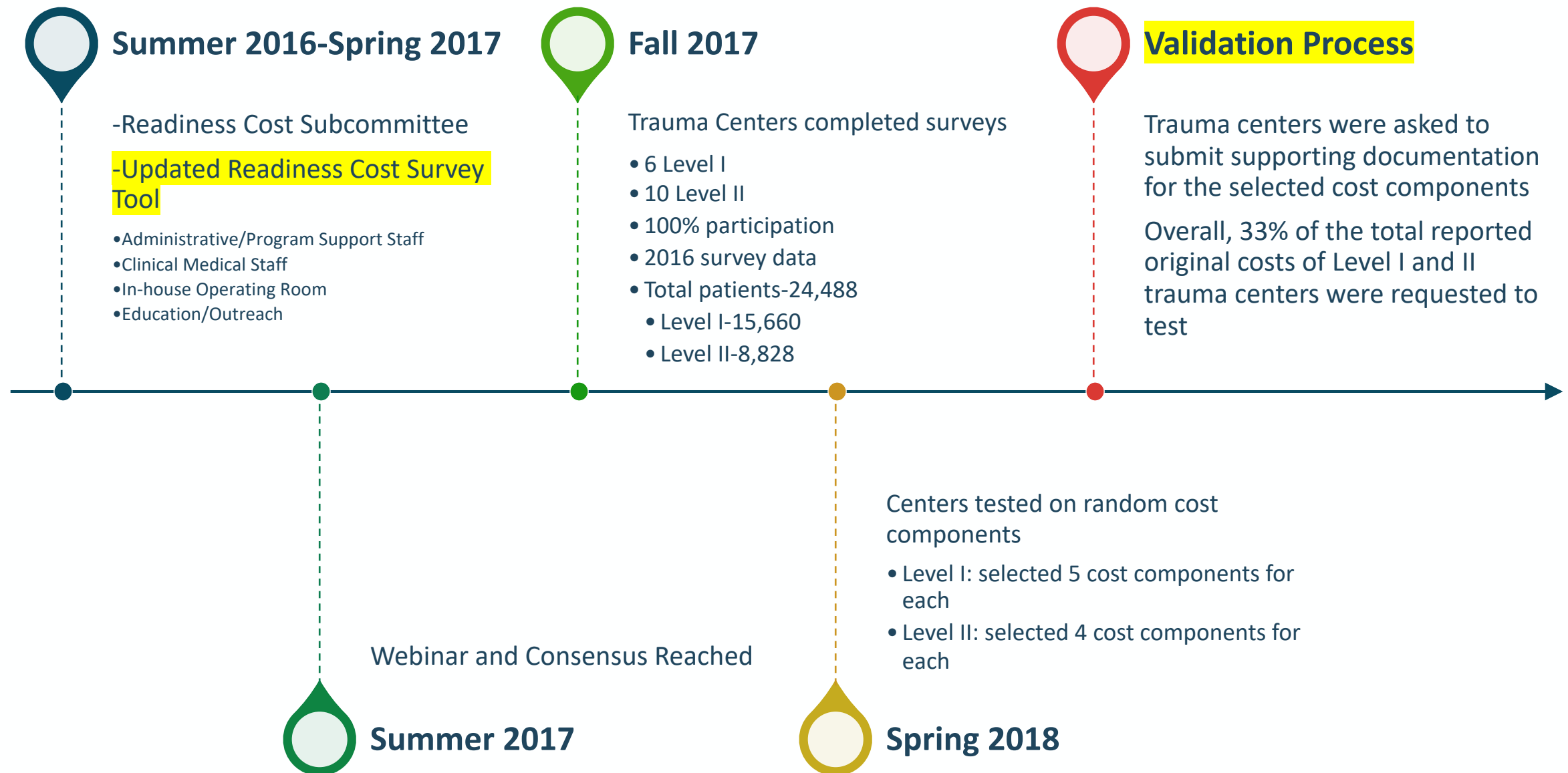
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Highest Standards, Better Outcomes*

100 years

Methods



Trauma Center Readiness Costs: Summary

Cost Category	Level I Total	Level I Mean	Level II Total	Level II mean	Level I and II Totals
Administrative/ Program Support Staff	\$21,596,099	\$3,599,350	\$13,922,471	\$1,392,247	\$35,518,570
Clinical Medical Staff	33,203,255	5,533,876	31,716,531	3,171,653	64,919,786
In-House OR Availability	4,980,890	830,148	2,521,596	252,160	\$7,502,486
Education and Outreach	690,793	115,132	1,090,426	109,043	\$1,781,219
TOTALS	60,471,035	10,078,506	49,251,024	4,925,103	109,722,061

Trauma Center Readiness Costs:

Administrative

Administrative	LI TC Mean	#	Range (\$000's)	LII TC Mean	#	Range (\$000's)	Totals
Senior Administrator Support Program	\$41,424	6	12-120	\$34,119	9	12-80	\$589,739
Administrator: Trauma Director	81,522	4	46-165	45,752	6	14-171	946,653
Trauma Program Manager	113,269	5	92-213	88,169	8	77-136	1,561,303
Trauma Coordinator	109,978	4	38-390	26,190	3	61-107	921,769
Participation costs for state, regional and national activities	7,282	6	3-10	3,547	10	1-14	79,165

Program Support Staff	LI TC Mean	#	Range (\$000's)	LII TC Mean	#	Range (\$000's)	Totals
Education/Outreach Coordinator	57,216	4	41-132	41,003	5	5-229	753,331
Case Management, Discharge Planning and Social Services	638,267	6	269-1,257	234,041	10	6-471	6,170,010
Program Support Staff	LI TC Mean	#	LII TC Mean	#	Totals		
Case Management	638,267	6	234,041	10	6,170,010		
Physical Therapy	651,115	6	255,546	10	6,462,146		
Occupational Therapy	593,093	6	242,012	10	5,978,684		
Speech Therapy	591,401	6	235,546	10	5,903,865		
TMD Participation Costs	8,983	4	8-18	1,416	7	0-6	68,062
ED Liaison	4,817	2	14-15	1,283	3	3-6	41,727
ICU Surgical Liaison	4,062	3	3-17	563	1	6-6	29,995
Orthopedic Liaison	14,370	3	9-50	9,827	3	12-57	184,486
Neurosurgeon Liaison	6,044	3	2-21	4,716	3	2-29	83,422
Registry Hardware and Software	10,821	6	5-18	11,473	10	4-20	179,654
Screening, brief intervention and referral for treatment (SBIRT)	4,650	2	1-27	930	1	9-9	37,197
Thromboelastography (TEG)	59,623	4	27-175	990	1	10-10	367,640

Clinical Medical Staff	LI TC Mean	#	Range (\$000's)	LII TC Mean	#	Range (\$000's)	Totals
Trauma/Surgical Sub-Specialists:							
Trauma Surgery	\$1,388,013	5	193-2,904	1,049,326	9	91-3,563	\$18,821,337
Trauma Physician Extender	187,141	2	179-944	94,361	4	76-503	2,066,461

Clinical Medical Staff	LI TC Mean	#	LII TC Mean	#	Totals
Trauma Surgery	\$1,388,013	5	\$1,049,326	9	\$18,821,337
Orthopedics	1,099,369	6	718,621	9	13,782,424
Neurosurgery	539,953	6	326,717	9	6,506,891
Ophthalmology	227,024	6	16,672	5	1,528,861
Oral/ Maxillofacial	50,166	3	87,011	4	1,171,102
ENT	87,121	5	38,940	7	912,129
Plastics	237,612	5	40,059	4	1,826,257
Critical Care Medicine	5,891	1	165,893	7	1,694,277
Radiology	108,086	1	72,053	4	1,369,042
Urology	46,547	4	22,066	6	499,945
Vascular	164,066	4	16,374	3	1,148,136

Outreach and Education Costs

Education and Outreach	LI TC Mean \$	#	Range (\$000's)	LII TC Mean \$	#	Range (\$000's)	Totals \$
Injury prevention	\$31,338.17	4	5-126	\$15,223	8	0-126	\$340,262
Community outreach	20,903	4	2-104	5,965	6	0-42	185,063
Professional education	13,715	4	2-60	8,911	7	2-63	171,404
Outlying hosp. education	4.250	3	3-13	-	0	0	25.500
Emergency Department Staff	20,412	4	8-57	45,834	9	7-201	580,804
Intensive Care Unit Staff	5,708	2	10-24	14,002	9	0-76	174,265
Surg/PACU Staff		0	0	11,987	5	0-95	119,867

Education and Outreach Costs

Required CME/CNE	LI TC Mean \$	#	Range (\$000's)	LII TC Mean \$	#	Range (\$000's)	Totals \$
TMD	4,157	6	2-6	2,996	10	0-8	54,897
TPM	3,886	6	0-12	1,051	6	0-3	33,825
TP Coordinator	1,527	3	0-8	646	4	0-3	15,627
Trauma Registrar	2,063	2	0-12	839	4	0-5	20,765
ED Liaison	1,762	5	0-5	201	2	0-2	12,579
ICU Liaison	1,708	3	3-5	50	1	0-0	10,750
Neurosurg Liaison	1,833	4	1-5	514	3	0-4	16,140
Orthopedic Liaison	1,870	4	1-5	825	2	4-5	19,471

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

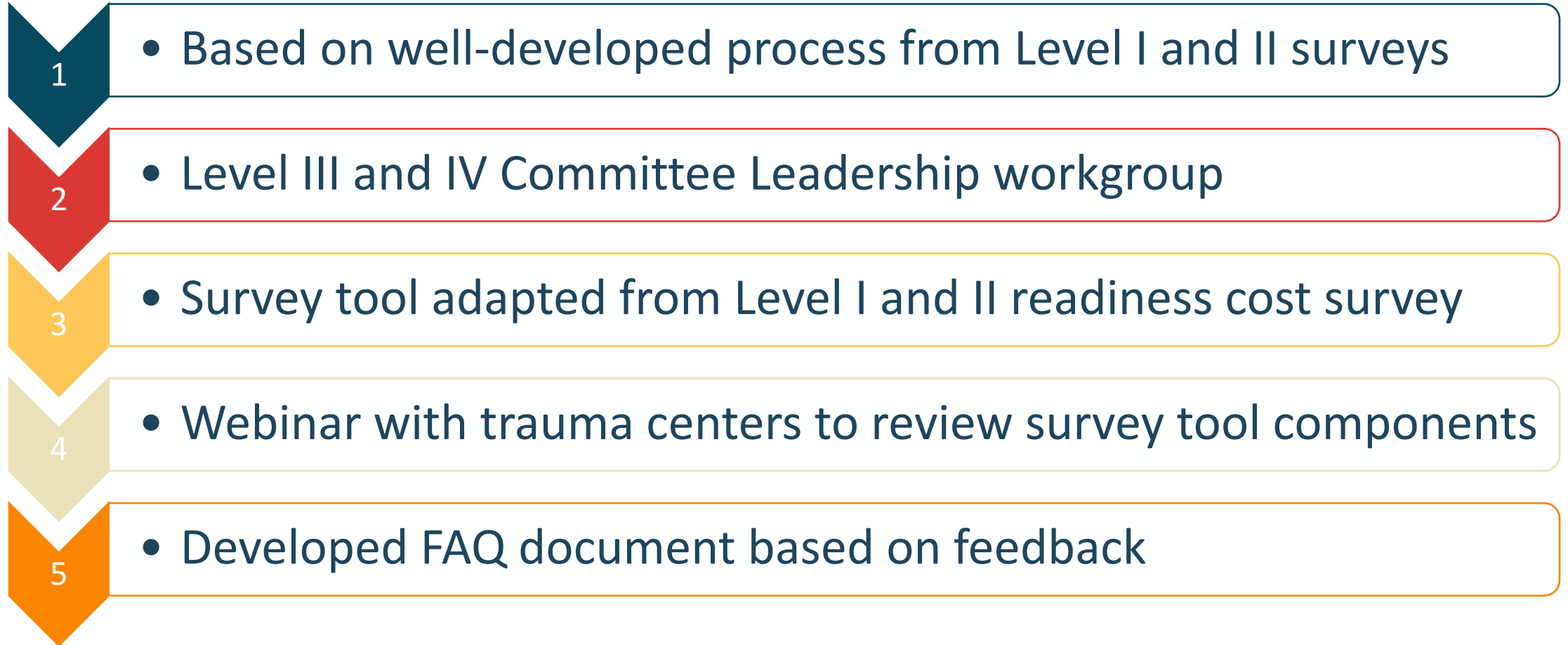
Trauma Center	Average annual readiness cost	Most significant cost	Lowest Cost
Level I	\$10,078,506	Clinical Medical Staff	Education and Outreach
Level II	\$4,925,103	Clinical Medical Staff	Education and Outreach

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

Level III and IV

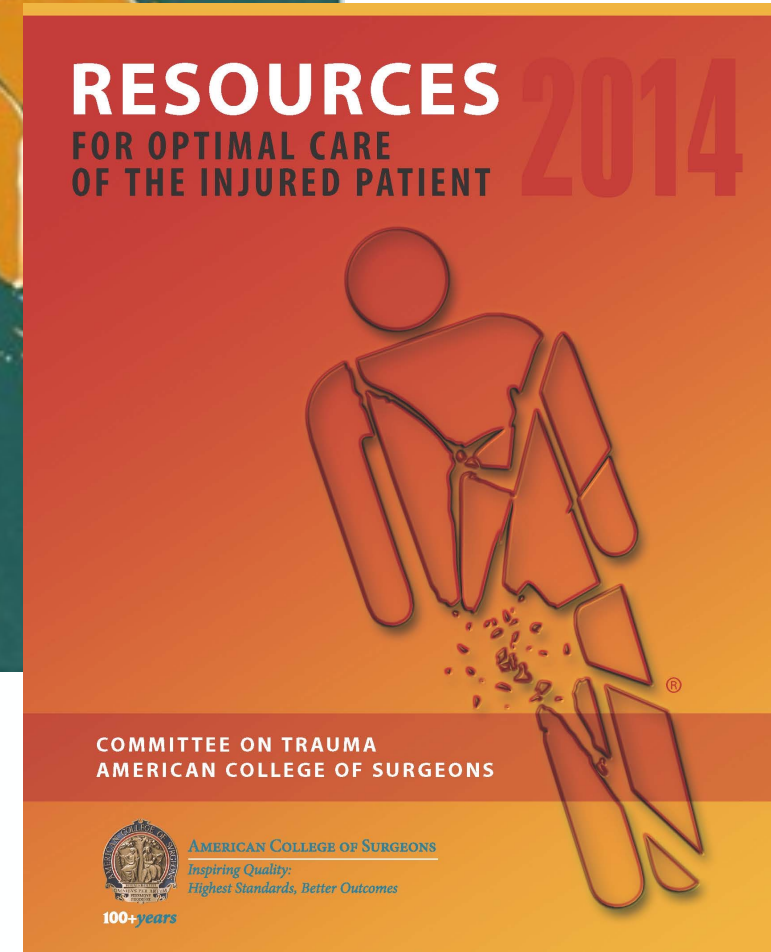


Developing Consensus for Readiness Cost Definitions



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



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Methods



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

Program Support Staff	Level III Mean	#	Range (\$000's)	Level IV Mean	#	Range (\$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	-	-	-	\$ 17,979
Orthopedic Liaison	2,559	2	2-18	-	-	-	\$ 20,476
Neurosurgeon Liaison	1,143	1	9-9	-	-	-	\$ 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
Education/Outreach Coordinator	1,325	2	5-5	-	-	-	\$ 10,597
Program Support Staff	Level III Mean	Level IV Mean		Total			
Respiratory Therapy	109,891	11,793		\$949,887			
Speech Therapy	114,792			\$918,333			
Occupational Therapy	109,214			\$873,715			
Physical Therapy	99,686			\$797,486			
Case Management, Discharge Planning, and Social Services	87,283			\$698,261			
referral for treatment (SBIRT)	248	1	2-2	-	-	-	\$ 1,980
Thromboelastography (TEG)	-	-	-	-	-	-	\$ -

Clinical Medical Staff	Level III Average	#	Range (\$000's)	Level IV Average	#	Range (\$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	-	-	-	-	-	-	-

Education and Outreach Costs

Education and Outreach	Level III Mean	#	Range (\$000's)	Level IV Mean	#	Range (\$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	-	-	-	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



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