

March 1, 2022 Committee Meeting Sign In

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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.”



GEORGIA TRAUMA COMMISSION

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



Survey Purpose

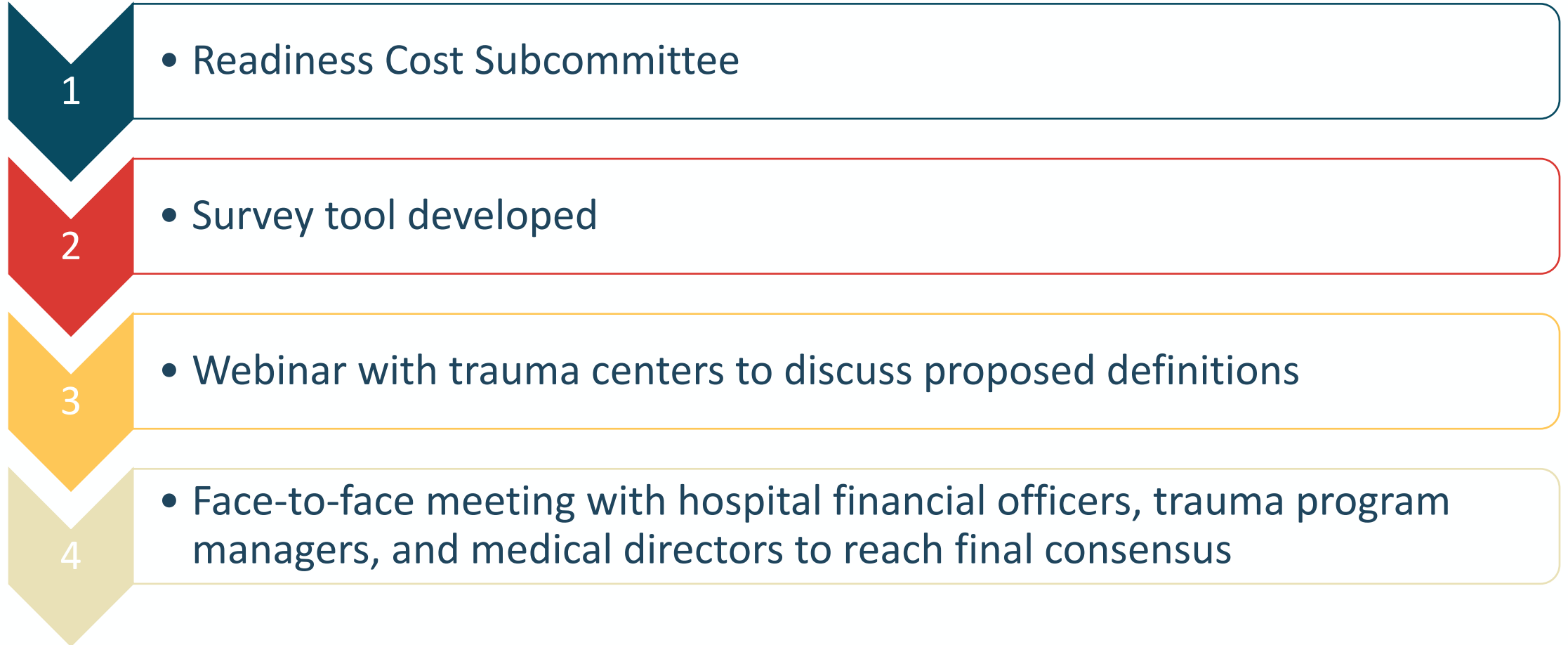
To provide an analysis of readiness cost for Georgia's trauma centers utilizing the readiness cost tool in conjunction with an independent financial review to verify consistent cost reporting



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

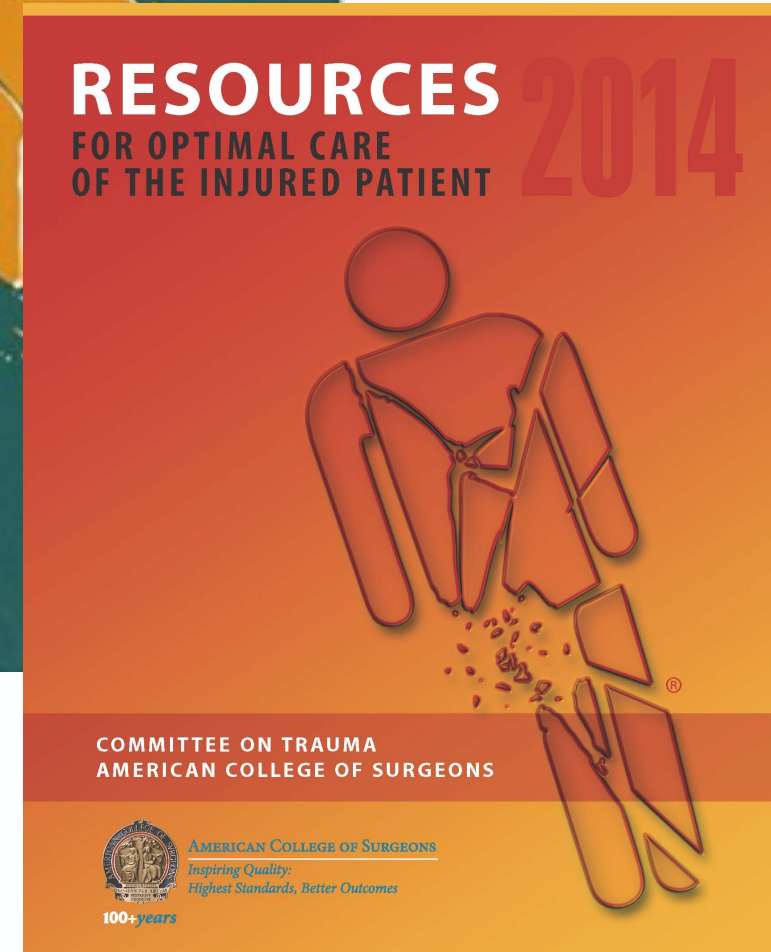
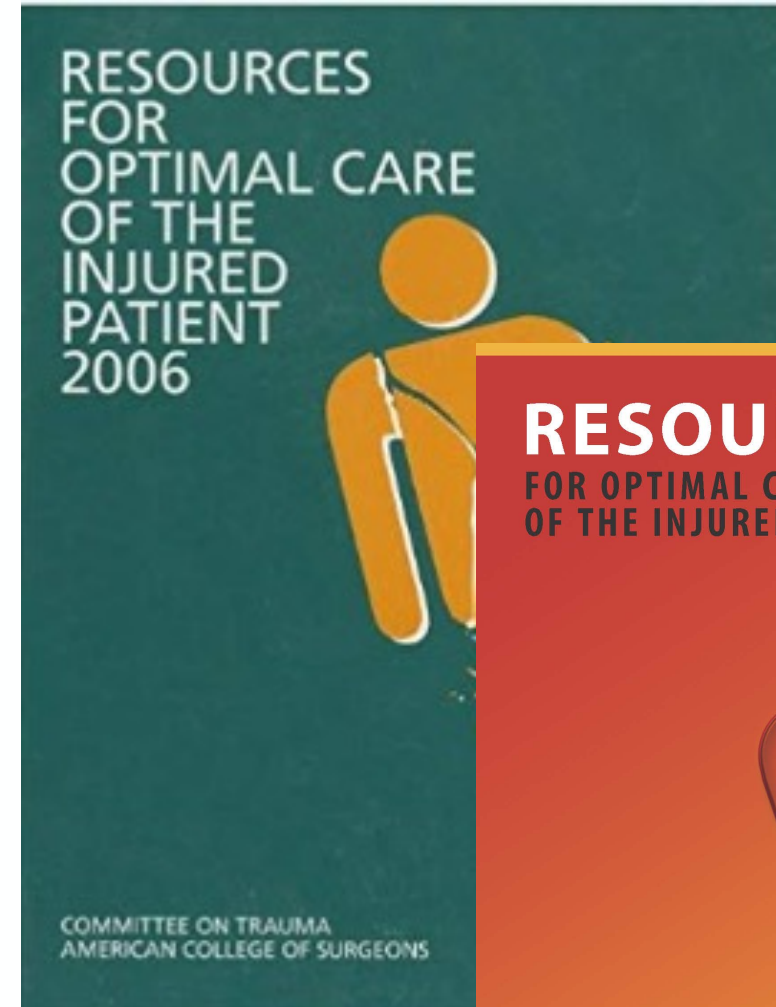
DENNIS W. ASHLEY, M.D.,* ROBERT F. MULLINS, M.D.,† CHRISTOPHER J. DENTE, M.D.,‡

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



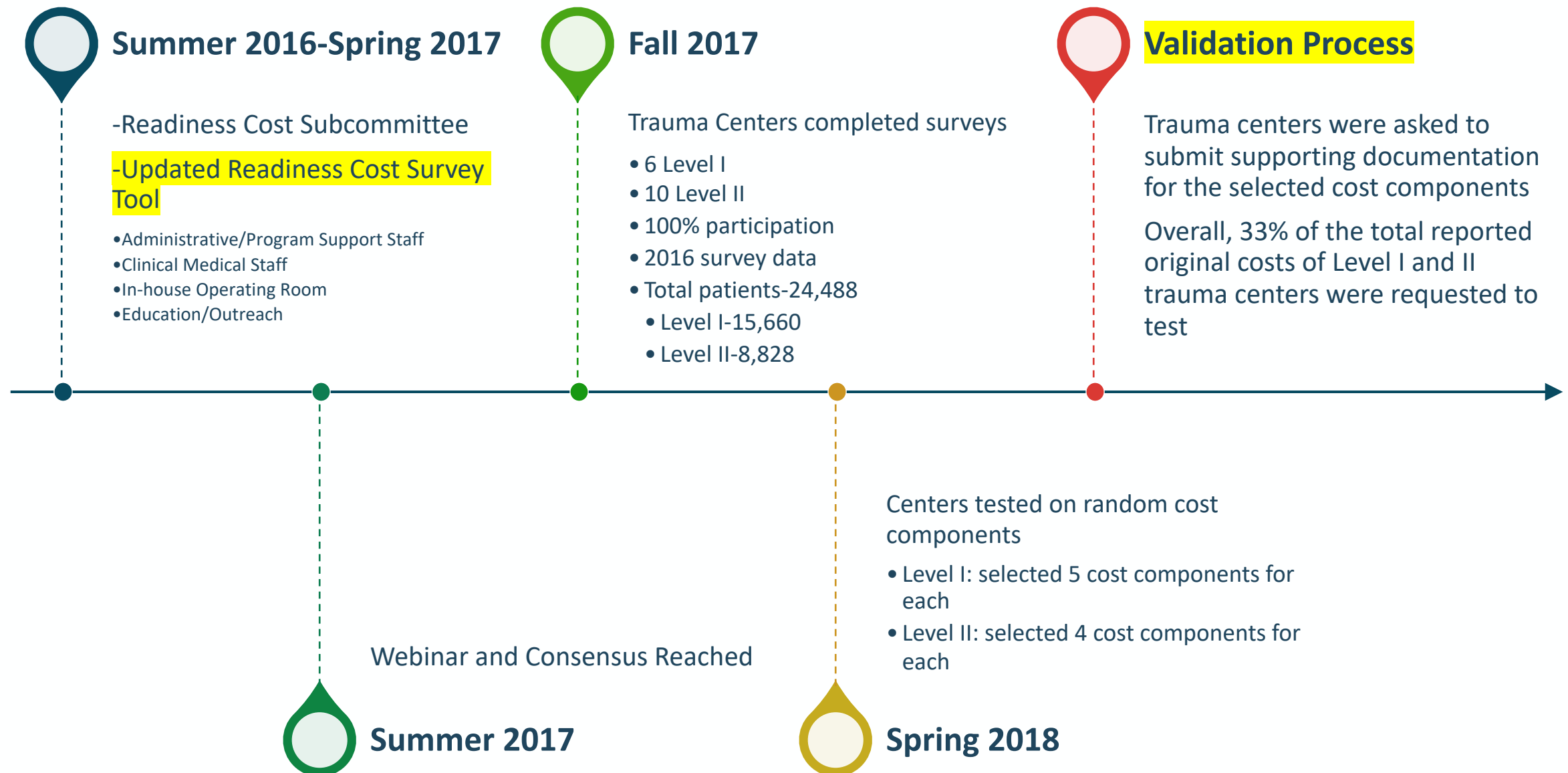
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100 years

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 | \$41,424 | 6 | 12-120 | \$34,119 | 9 | 12-80 | \$589,739 |
| Program 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

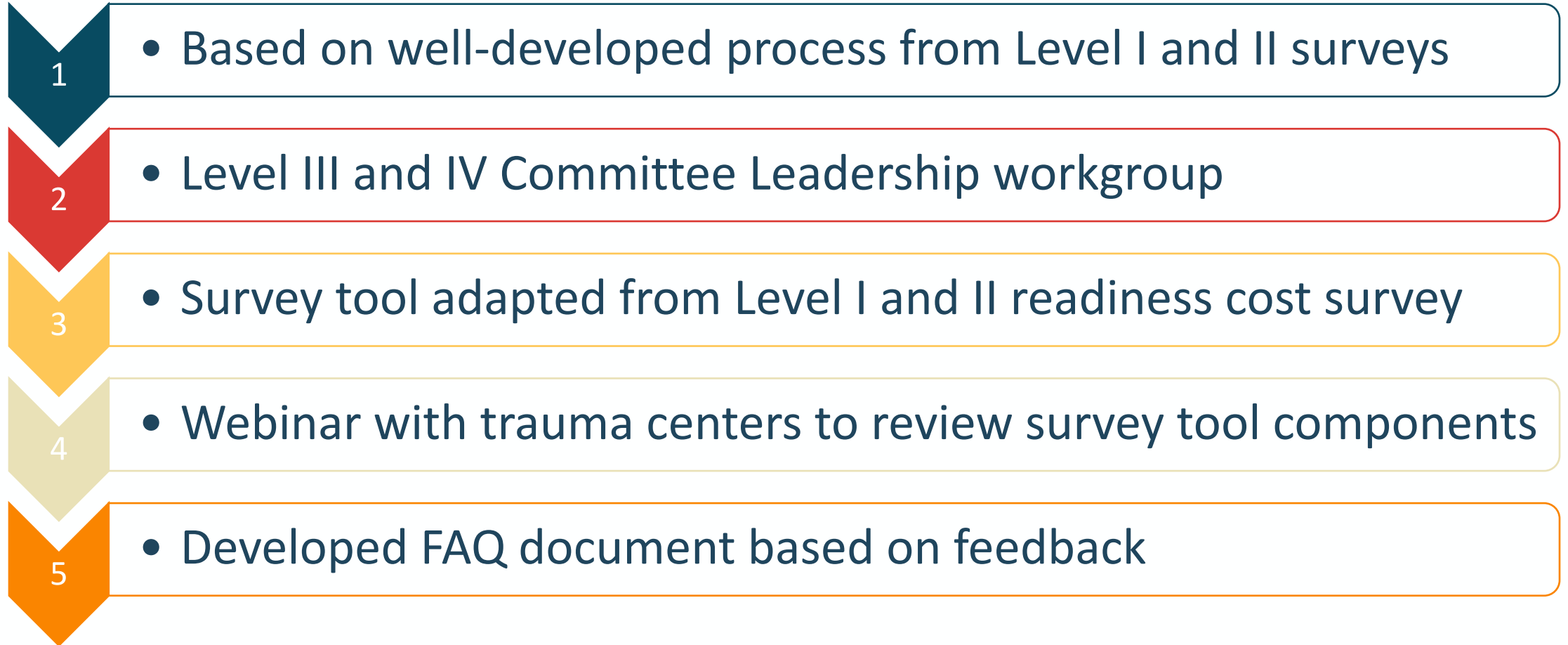
| Trauma Center | Average annual readiness cost | Most significant cost | Lowest Cost |
|---------------|-------------------------------|------------------------|------------------------|
| Level I | \$10,078,506 | Clinical Medical Staff | Education and Outreach |
| Level II | \$4,925,103 | Clinical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

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

Level III and IV

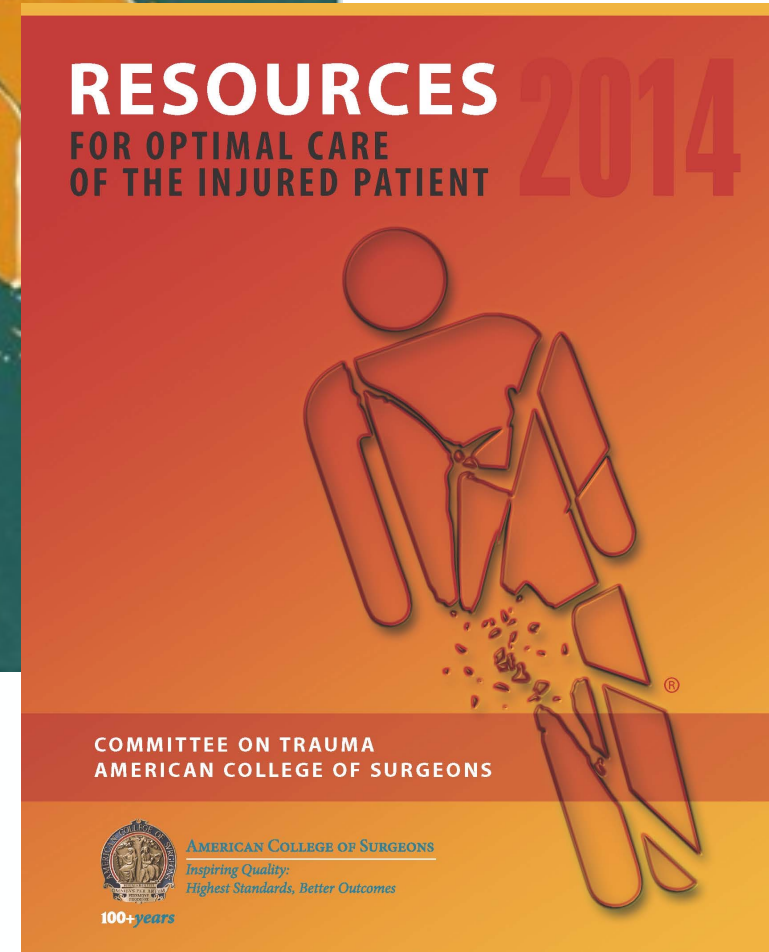


Developing Consensus for Readiness Cost Definitions



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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100 years

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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