Georgia Trauma Center Funding Readiness and Uncompensated Care Past, Present, and Future

Dennis Ashley, MD  Chairperson
Georgia Trauma Care Network Commission

16 December 2009
Senate Bill 60

• Passed in 2007

• Established the Georgia Trauma Care Network Commission
• Funds Appropriated in FY 2008
• Charged to:
  • Distribute the Fund fairly and effectively to EMS, trauma centers, and trauma physicians
  • Develop a statewide trauma system
  • Provide accountability for trauma system funding

For the first year, the Commission’s overarching goal: **Stabilize** and **Strengthen** existing infrastructure
Readiness Costs: Determination

- Medical staff payments for trauma call
- 24 hour OR staffing
- Higher staffing levels for lab/diagnostic services
- Ground or air transportation
- Support services
- Injury prevention
- Training of nurses and physicians
- Administrative infrastructure of trauma programs
- Physician extenders
- Verification process
- Trauma specific equipment
- Other trauma center costs
Uncompensated Care Costs Determination Methodology

A survey of Georgia Level I & II Trauma Centers was also conducted to determine the volume, severity and costs of treating uninsured patients who cannot pay their bills.

National Trauma Norms Used To Estimate Costs
To develop a fair and consistent approach to estimating costs, national trauma center patient treatment cost norms by injury severity were used, for both community and academic hospitals.

These norms were developed over the past decade by the National Foundation for Trauma Care and its predecessors and have been previously used for trauma care economic analysis in Texas, Arizona, New Mexico, South Carolina, Illinois and Oklahoma.

An Example In Red
Trauma hospital B2’s 90 ISS 0-8 self pay trauma registry patients are multiplied times the academic cost norm of $6,373 to arrive at $573,576. This is repeated for other ISS categories to arrive at the total of $4,098,183. This is then divided by total volume of 242 to arrive at an average expected cost of treatment of $16,935 for hospital B2’s self pay trauma patients.
### Total Trauma Fund Distribution
#### FY 2008/2009

<table>
<thead>
<tr>
<th>Trauma Center Allocation</th>
<th>Amount</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trauma Center Readiness Costs</td>
<td>$17,888,539</td>
<td>30.4%</td>
</tr>
<tr>
<td>Capital Grants for LI &amp; LII Trauma Centers</td>
<td>$4,148,602</td>
<td>7.0%</td>
</tr>
<tr>
<td>Level IV Trauma Center Costs (2)</td>
<td>$200,000</td>
<td>0.3%</td>
</tr>
<tr>
<td>Uncompensated Care Costs</td>
<td>$17,888,539</td>
<td>30.4%</td>
</tr>
<tr>
<td><strong>Total Trauma Center Allocation</strong></td>
<td>$40,125,680</td>
<td>68.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trauma Physician Allocation</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>25% of Trauma Center Readiness Costs</td>
<td>$5,962,846</td>
<td>10.1%</td>
</tr>
<tr>
<td>25% of Trauma Center Uncompensated care</td>
<td>$5,962,846</td>
<td>10.1%</td>
</tr>
<tr>
<td><strong>Total Physician Allocation</strong></td>
<td>$11,925,693</td>
<td>20.2%</td>
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</table>

<table>
<thead>
<tr>
<th>EMS/Pre-Hospital Allocation</th>
<th></th>
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<tbody>
<tr>
<td>EMS Competitive Grant Program</td>
<td>$4,000,000</td>
<td>6.8%</td>
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<tr>
<td>EMS Uncompensated Care</td>
<td>$1,479,945</td>
<td>2.5%</td>
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<tr>
<td>GPS &amp; Automatic Vehicle Locator System</td>
<td>$996,452</td>
<td>1.7%</td>
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<tr>
<td><strong>Total EMS/PreHospital Allocation</strong></td>
<td>$6,476,397</td>
<td>11.0%</td>
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<table>
<thead>
<tr>
<th>Oversight &amp; System Development</th>
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<tbody>
<tr>
<td>Trauma Commission/System Plan &amp; Dev</td>
<td>$375,000</td>
<td>0.6%</td>
</tr>
<tr>
<td><strong>Total Oversight/Development Allocation</strong></td>
<td>$375,000</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

**TOTAL 2008-09 GEORGIA TRAUMA TRUST FUND**: $58,502,769 | 100.0%
FY 2010 Funding

• $23,000,00 allocated by legislature for FY 2010
  • Less 5% due to Projected Revenue Short Falls

• $21,850,00 Commission Budget for FY 2010

• Super Speeder Law
# Level I/II Trauma Center Funding

**FY 2010**

<table>
<thead>
<tr>
<th>Trauma Hospital</th>
<th>Readiness Payment</th>
<th>Potential Performance Based Payments</th>
<th>Total Readiness Payments</th>
<th>Uninsured Payment</th>
<th>Total to each Center</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archbold</td>
<td>$427,443</td>
<td>$48,535</td>
<td>$475,978</td>
<td>$89,395</td>
<td>$565,373</td>
<td>4.0%</td>
</tr>
<tr>
<td>Atlanta</td>
<td>$427,443</td>
<td>$48,535</td>
<td>$475,978</td>
<td>$540,964</td>
<td>$1,016,942</td>
<td>7.2%</td>
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<tr>
<td>Columbus</td>
<td>$427,443</td>
<td>$48,535</td>
<td>$475,978</td>
<td>$81,566</td>
<td>$557,544</td>
<td>3.9%</td>
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<tr>
<td>Floyd</td>
<td>$427,443</td>
<td>$48,535</td>
<td>$475,978</td>
<td>$58,058</td>
<td>$533,056</td>
<td>3.8%</td>
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<td>Gwinnett</td>
<td>$427,443</td>
<td>$48,535</td>
<td>$475,978</td>
<td>$363,981</td>
<td>$839,959</td>
<td>5.9%</td>
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<tr>
<td>Hamilton</td>
<td>$427,443</td>
<td>$48,535</td>
<td>$475,978</td>
<td>$26,472</td>
<td>$502,415</td>
<td>3.5%</td>
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<tr>
<td>North Fulton</td>
<td>$427,443</td>
<td>$48,535</td>
<td>$475,978</td>
<td>$136,137</td>
<td>$612,115</td>
<td>4.3%</td>
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<tr>
<td>Egleston</td>
<td>$427,443</td>
<td>$48,535</td>
<td>$475,978</td>
<td>$41,040</td>
<td>$517,918</td>
<td>3.7%</td>
</tr>
<tr>
<td>Scottish Rite</td>
<td>$427,443</td>
<td>$48,535</td>
<td>$475,978</td>
<td>$39,836</td>
<td>$515,814</td>
<td>3.6%</td>
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<tr>
<td><strong>Level II Totals</strong></td>
<td>$3,846,989</td>
<td>$436,814</td>
<td>$4,283,803</td>
<td>$1,377,477</td>
<td>$5,661,260</td>
<td>40.0%</td>
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<tr>
<td>Grady</td>
<td>$712,405</td>
<td>$80,892</td>
<td>$793,297</td>
<td>$3,416,757</td>
<td>$4,210,064</td>
<td>29.7%</td>
</tr>
<tr>
<td>MCCCG</td>
<td>$712,405</td>
<td>$80,892</td>
<td>$793,297</td>
<td>$333,074</td>
<td>$1,126,371</td>
<td>8.0%</td>
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<tr>
<td>MCG</td>
<td>$712,405</td>
<td>$80,892</td>
<td>$793,297</td>
<td>$580,031</td>
<td>$1,373,328</td>
<td>9.7%</td>
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<tr>
<td>Memorial Health</td>
<td>$712,405</td>
<td>$80,892</td>
<td>$793,297</td>
<td>$989,301</td>
<td>$1,782,596</td>
<td>12.6%</td>
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<tr>
<td><strong>Level I Totals</strong></td>
<td>$2,849,621</td>
<td>$323,566</td>
<td>$3,173,187</td>
<td>$5,319,163</td>
<td>$8,432,341</td>
<td>60.0%</td>
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<tr>
<td><strong>Total LI/LII</strong></td>
<td>$6,696,610</td>
<td>$760,380</td>
<td>$7,456,990</td>
<td>$6,696,610</td>
<td>$14,153,600</td>
<td>100%</td>
</tr>
<tr>
<td>Hospital/Physician Fund Division</td>
<td>Hospital</td>
<td>Physician</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>----------</td>
<td>-----------</td>
<td>-------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trauma Center Readiness Costs %</strong></td>
<td>75.0%</td>
<td>25.0%</td>
<td>100.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Amount</strong></td>
<td>$5,592,722</td>
<td>$1,864,248</td>
<td>$7,456,990</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Uncompensated Care Costs %</strong></td>
<td>75.0%</td>
<td>25.0%</td>
<td>100.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Amount</strong></td>
<td>$5,022,458</td>
<td>$1,674,153</td>
<td>$6,696,610</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$10,615,280</td>
<td>$3,538,400</td>
<td>$14,153,680</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Total Trauma Fund Distribution FY 2010

<table>
<thead>
<tr>
<th>Hospital Allocation</th>
<th>Amount</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trauma Center Readiness Costs</td>
<td>$ 7,456,990</td>
<td>34.1 %</td>
</tr>
<tr>
<td>Trauma Center Performance Based Payments</td>
<td>$ 708,669</td>
<td>3.3 %</td>
</tr>
<tr>
<td>New Trauma Center Startup Grants</td>
<td>$ 1,000,000</td>
<td>4.5 %</td>
</tr>
<tr>
<td>Level IV Trauma Center Costs (2)</td>
<td>$ 54,000</td>
<td>0.2 %</td>
</tr>
<tr>
<td>Uncompensated Care Costs</td>
<td>$ 6,696,610</td>
<td>30.6 %</td>
</tr>
<tr>
<td><strong>Total Trauma Center Allocation</strong></td>
<td>$ 15,967,980</td>
<td>73.0 %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trauma Physician Allocation</th>
<th>Amount</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>25% of Trauma Center Readiness Costs</td>
<td>$ 1,864,248</td>
<td>8.5 %</td>
</tr>
<tr>
<td>25% of Trauma Center Uncompensated care</td>
<td>$ 1,674,153</td>
<td>7.6 %</td>
</tr>
<tr>
<td><strong>Total Physician Allocation</strong></td>
<td>$ 3,538,401</td>
<td>16.1 %</td>
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</table>

<table>
<thead>
<tr>
<th>EMS Allocation</th>
<th>Amount</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS Vehicle Replacement Grant Program</td>
<td>$ 2,125,000</td>
<td>9.7 %</td>
</tr>
<tr>
<td>EMS Uncompensated Care</td>
<td>$ 1,000,000</td>
<td>4.6 %</td>
</tr>
<tr>
<td>First Responder Training</td>
<td>$ 338,450</td>
<td>1.5 %</td>
</tr>
<tr>
<td>Trauma Related Equipment</td>
<td>$ 338,450</td>
<td>1.5 %</td>
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<tr>
<td><strong>Total EMS Allocation</strong></td>
<td>$ 3,801,900</td>
<td>17.4 %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State Infrastructure &amp; Trauma System Development</th>
<th>Amount</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Development and Operations</td>
<td>$ 2,185,000</td>
<td>9.4 %</td>
</tr>
<tr>
<td>EMS/T Allocation per SB 40</td>
<td>$ 605,500</td>
<td>2.8 %</td>
</tr>
<tr>
<td><strong>Total Infrastructure &amp; System Development Allocation</strong></td>
<td>$ 2,840,500</td>
<td>13.0 %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FY 2010 Available Budget Less 5% Projected Revenue Shortfall</th>
<th>Amount</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ 21,850,000</td>
<td>100.0 %</td>
</tr>
</tbody>
</table>
Performance Based Payments Program

Developed to encourage: Trauma Center Performance Improvement

- First Year (2010) 5% of Readiness funding tied to Performance Based Payments Program ($760,380)

- Two Criteria for first-year FY 2010:
  - Submission of required data and reports to OEMS & Trauma
  - Participation in Trauma Commission-sponsored Readiness Cost Determination Activities (webinar, face-to-face meeting, cost survey completion per timeline)

- In ensuing years, additional criteria with greater percentage of funding tied to Performance
New Trauma Center Startup Grants

• Application Process to begin January 2010
• Grant Awards to be determined by Trauma Commission
• Geographic location of hospital, level of designation sought will be considered in determining award amounts
• Award Amount Guidelines:
  • #2 $300K “grants” to hospitals “COMMITTING” to designation as a Level II trauma center
  • #2 $100K “grants” to hospitals “COMMITTING” to designation as a Level III trauma center
  • #4 $50K “grants” to hospitals “COMMITTING” to designation as a Level IV trauma center
Commission Operations and System Development Projects

- Administrator and Commission Operations
- Georgia Trauma Communications Center
- Pilot Project for Trauma System Regionalization
- Web-based Trauma Registry Capabilities
- Trauma TeleHealth: Georgia Partnership for Telehealth
- Bishop+Associates Financial Consultants
- American Association of Trauma Centers
- Center for Health Organization Transformation (systems assessments and process improvement plans)
- Broselow Pediatric Dosing and Care System (internet based)
State Program Infrastructure

- Senate Bill 60: 3% allocation to OEMS/T
  - $655,500

- Funding of key positions within OEMS/T
  - State EMS and Trauma Program Medical Director
  - Two EMS Region Program Directors
  - EMS Region 5 Trauma Nurse Coordinator
Trauma Center
Readiness Costs
Non Patient Care Costs Required By A Hospital’s Status As A Trauma Center.

The Hospital Would Not Have To Pay Them If It Were Not A Trauma Center

Costs Required By Trauma Regulations
2002 – Costs of Trauma Center Readiness Study

Costs Assessed:
- Physician On-Call Coverage
  - $337,900 - $4,208,051 Range
- Re-verification
  - $88,000 - $456,258 Range
- Outreach and Prevention
  - $2,000 - $215,766 Range
- Other Extraordinary, Non-Chargeable Costs
  - No guidance, complete discretion
  - $17,440 - $3,925,448 Range

10 of 20 Florida Trauma Centers Participated and Provided At Least Partial Information

Median Readiness Cost Per Center $2.7 Million
2004 – Use And Financing Of Trauma Centers In Virginia

Costs Assessed:
- Physician On-Call Coverage - $9.1 Million
- Administrative - $3.9 Million
- 24 Hour OR Availability - $2.9 Million
- Higher Staffing Levels $2.6 Million
- Air Transportation - $1.4 Million
- Support Services - $0.8 Million
- Research - $0.7 Million
- All Other - $0.6 Million

Virginia Had 13 Trauma Centers In 2004

Total Readiness Costs - $23.4 Million
### GEORGIA EXPERIENCE

<table>
<thead>
<tr>
<th>2007 Readiness Costs</th>
<th>Level I TC</th>
<th>GA Avg.</th>
<th>Level II</th>
<th>GA Avg.</th>
<th>LI/II Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Medical Staff</td>
<td>$12,922,170</td>
<td>$3,230,543</td>
<td>$12,173,618</td>
<td>$1,352,624</td>
<td>$25,095,788</td>
</tr>
<tr>
<td>24 Hour OR Staffing</td>
<td>$2,530,000</td>
<td>$632,500</td>
<td>$3,279,800</td>
<td>$364,422</td>
<td>$5,809,800</td>
</tr>
<tr>
<td>Higher Staffing Levels</td>
<td>$510,000</td>
<td>$127,500</td>
<td>$619,393</td>
<td>$68,821</td>
<td>$1,129,393</td>
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<tr>
<td>Transportation</td>
<td>$1,756,000</td>
<td>$439,000</td>
<td>$250,000</td>
<td>$27,778</td>
<td>$2,006,000</td>
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<tr>
<td>Support Services</td>
<td>$657,495</td>
<td>$164,374</td>
<td>$464,564</td>
<td>$51,618</td>
<td>$1,122,059</td>
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<tr>
<td>Injury Prevention</td>
<td>$78,500</td>
<td>$19,625</td>
<td>$1,074,770</td>
<td>$119,419</td>
<td>$1,153,270</td>
</tr>
<tr>
<td>Training</td>
<td>$220,000</td>
<td>$55,000</td>
<td>$488,456</td>
<td>$54,273</td>
<td>$708,456</td>
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<tr>
<td>Administration</td>
<td>$2,400,000</td>
<td>$600,000</td>
<td>$3,627,949</td>
<td>$403,105</td>
<td>$6,027,949</td>
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<tr>
<td>Physician Extenders</td>
<td>$737,000</td>
<td>$184,250</td>
<td>$121,744</td>
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<td>Verification Process</td>
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<td>$950</td>
<td>$21,250</td>
<td>$2,361</td>
<td>$25,050</td>
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<tr>
<td>Trauma Equip</td>
<td>$50,000</td>
<td>$12,500</td>
<td>$354,782</td>
<td>$39,420</td>
<td>$404,782</td>
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<tr>
<td>Other Costs*</td>
<td>Included Above</td>
<td></td>
<td>1,943,149$</td>
<td>$215,905</td>
<td>$1,943,149</td>
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<tr>
<td><strong>Total</strong></td>
<td>$21,864,965</td>
<td>$5,466,242</td>
<td>$24,419,475</td>
<td>$2,713,275</td>
<td>$46,284,440</td>
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</tbody>
</table>
Trauma Center
Readiness Costs
Determination Criteria
Members:
Dennis Ashley, MD, FACS
Kelli Vaughn, MSN, RN
Richard Bias, FACHE
Regina Medeiros, DNP, MHSA, RN
Debra Kitchens, RN
Renee Morgan, EMT-P
Jim Pettyjohn, Commission Administrator
Greg Bishop, Consultant / Facilitator
# Definitions

## Existing Trauma Center Readiness Cost

The cost incurred by Georgia licensed hospitals to maintain essential infrastructure, capacity and capabilities to provide the necessary and required services and program oversight at a specific designation level.

## Trauma Center Start-up Cost

The cost incurred by Georgia licensed hospitals to prepare for and create the essential infrastructure, capacity and capabilities to provide the necessary and required services and program oversight at a specific designation level.
To provide a rigorous and transparent methodology to measure the financial requirements for starting and maintaining a state-designated trauma center
Subcommittee Approach

• PAST
  – Bishop + Associates Survey of Georgia trauma centers and National cost norms

• PRESENT
  – Webinar and summit
  – Consensus on readiness costs criteria and definitions
  – State of Georgia Survey Tool

• FUTURE
  – Continuous evaluation and improvement to best determine cost for trauma centers
Subcommittee Approach

- American College of Surgeons
- The Cost of Trauma Center Readiness
  - Final Report to the Florida Department of Health
- Bishop + Associates
Subcommittee Approach

- First Time Effort
- Three Key Components
  - Administrative
  - Clinical
  - Education and Outreach
- Separated by Designation Level
Subcommittee Timeline

- **Expectations**
  - Provide working definition of readiness inclusion criteria
  - Evaluate criteria to determine feasibility of use

- **Summit**
  - Develop a mutually agreed upon framework to utilize in determining trauma center readiness cost.
Subcommittee Timeline

- Summit
  - Develop a final survey tool with agreed upon criteria

- Survey Tool
  - Distribute to centers
  - Timeline for response

- Bishop + Associates
  - Compile report within two weeks
  - Present preliminary finding at February commission meeting
Questions?
• Senior Administrator
  • Specific to time spent on trauma

• Salaries
  • Trauma Program Manager
  • Clinical Nursing
    • Outreach Coordinator
    • Discharge Planning
    • Research and Performance Improvement
  • Trauma Registrar
  • Secretarial Staff
• Salaries
  • Trauma Medical Director
  • ED Medical Director – percentage of time
  • ICU Surgical Director – percentage of time
  • Orthopedic Liaison
  • Neurosurgical Liaison

• Registry Hardware and Software
Clinical Costs

Physician Compensation:

- Trauma
- Orthopedics
- Neurosurgery
- Anesthesia
- Hand
- Microvascular
- Cardiac
- OB/GYN
- Ophthalmic
- Oral/Maxillofacial
- ENT/Plastics
- Critical Care Medicine
- Radiology
- Thoracic

Specialties accepted by the American College of Surgeons
Clinical Costs

Physician Compensation

• Call pay
• Stipends
• Employed Physicians
Surgical Resident Compensation

- Proportion of salary for residents based on time spent in trauma rotation
• Courses, training and supplies
  • Injury Prevention
  • Community Outreach
  • Professional Outreach
  • Outlying Hospital Education
Education & Outreach

- 16 hours of Trauma CME
  - Trauma Medical Director
  - Trauma Program Manager
  - ED Trauma Liaison
  - Neurosurgical Liaison
  - Orthopedic Liaison
Hospital Staff Education
- Emergency Department
- Intensive Care Units
- Surgery
Next Steps

• Expectation is to consider how you would best answer these for your facility
  – Bring answers to the summit

• Summit
  – Centers grouped by level, be prepared to negotiate these answers and determine a standardized definition for each criteria

• Bishop + Associates
  – Will compile the survey tool and results of the survey

• Final report – March Commission meeting
Questions ?