GEORGIA TRAUMA SYSTEM FUNDING ALLOCATION

June 9, 2008

GEORGIA TRAUMA COMMISSION
NOTES ON METHODOLOGY

Determining readiness costs and the costs for treating uninsured patients who could not pay for their own costs were the major challenges to the due diligence required of the Georgia Trauma Commission. The Georgia Trauma Commission used the following methodologies to overcome these challenges.

READINESS COSTS

Trauma Center readiness costs are for the additional resources required by a hospital’s status as a trauma center for treating serious injury. In order to develop an understanding of the characteristics and costs of readiness, a survey of Georgia Level I & II Trauma Center was conducted by national experts, who asked for cost information in the following categories.

- **Medical Staff Payments For Trauma Call**
  Please provide a list of payment for trauma call by surgical specialty (e.g., trauma surgery, neurosurgery, orthopedic surgery, etc).

- **24 Hour OR staffing**
  A part of trauma center readiness is the extra staffing required by your operating rooms. Please estimate incremental costs necessary to meet trauma center requirements.

- **Higher Staffing Levels For Lab And Diagnostic Services**
  Does the hospital hire additional staff to meet trauma center requirements for 24 hour access to laboratory and diagnostic services? If yes, please estimate cost.

- **Ground/Air Transportation**
  Does the hospital provide a subsidy for air transport? If yes, please estimate subsidy cost applicable to transport of trauma patients.

- **Social Support Services**
  Do you employ additional social workers and chaplains to assist families in dealing with emotional and financial consequences of major trauma?

- **Injury Prevention**
  Does your hospital participate in injury prevention to meet trauma center requirements? If yes, please estimate hospital costs to carry out these activities.

- **Training Of Nurses And Physicians**
  Do you pay for employees to attend classes and conferences or other training required by your status as a trauma center, as well as backfill staff while they attend training? If yes, please estimate cost.

- **Administrative Infrastructure Of Trauma Programs**
  Please provide total Trauma Program Budget amount

- **Physician Extenders**
  Does the hospital hire physician extenders (physician assistants, nurse practitioners, etc.) that are dedicated to the trauma program? If so, please estimate cost/number of positions:

- **Verification Process**
  Please estimate direct costs of preparing for and conducting your verification/designation site visit?

- **Trauma Specific Equipment**
  Please identify and estimate costs of added equipment required by your trauma center?

- **Other Trauma Center Costs**
  Please identify and estimate added costs of other resources required by your trauma center status.
The survey results were evaluated based upon national trauma center norms and adjusted to bring outliers in line with norms. The results are a reasonable estimate of readiness costs for Level I & II Trauma Centers in Georgia:

<table>
<thead>
<tr>
<th>Readiness Cost</th>
<th>Level I TC</th>
<th>Average</th>
<th>Level II</th>
<th>Average</th>
<th>Li/II Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Medical Staff</td>
<td>$12,017,488</td>
<td>$3,004,372</td>
<td>$10,343,929</td>
<td>$1,063,557</td>
<td>$22,361,417</td>
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<tr>
<td>24 Hour Staffing</td>
<td>$2,665,000</td>
<td>$666,250</td>
<td>$3,177,955</td>
<td>$338,631</td>
<td>$5,842,955</td>
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<tr>
<td>Higher Staffing Levels</td>
<td>$510,000</td>
<td>$127,500</td>
<td>$665,404</td>
<td>$54,983</td>
<td>$1,175,404</td>
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<tr>
<td>Transportation</td>
<td>$1,756,000</td>
<td>$439,000</td>
<td>$325,008</td>
<td>$43,334</td>
<td>$2,081,008</td>
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<tr>
<td>Support Services</td>
<td>$674,201</td>
<td>$168,550</td>
<td>$405,406</td>
<td>$33,411</td>
<td>$1,079,607</td>
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<tr>
<td>Injury Prevention</td>
<td>$77,775</td>
<td>$19,444</td>
<td>$408,021</td>
<td>$23,292</td>
<td>$485,796</td>
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<tr>
<td>Training</td>
<td>$218,440</td>
<td>$54,610</td>
<td>$454,195</td>
<td>$34,796</td>
<td>$672,635</td>
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<tr>
<td>Administration</td>
<td>$1,817,534</td>
<td>$454,384</td>
<td>$3,680,934</td>
<td>$330,791</td>
<td>$5,498,468</td>
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<tr>
<td>Physician Extenders</td>
<td>$733,259</td>
<td>$183,315</td>
<td>$235,160</td>
<td>$18,021</td>
<td>$968,419</td>
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<td>Verification Process</td>
<td>$3,300</td>
<td>$825</td>
<td>$34,250</td>
<td>$1,100</td>
<td>$37,550</td>
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<tr>
<td>Trauma Specific Equip</td>
<td>$335,000</td>
<td>$83,750</td>
<td>$517,838</td>
<td>$37,934</td>
<td>$852,838</td>
</tr>
<tr>
<td>Other Costs*</td>
<td>Included Above</td>
<td></td>
<td>$3,007,126</td>
<td>$245,395</td>
<td>$3,007,126</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$20,807,997</strong></td>
<td><strong>$5,201,999</strong></td>
<td><strong>$23,255,227</strong></td>
<td><strong>$2,225,245</strong></td>
<td><strong>$44,063,224</strong></td>
</tr>
</tbody>
</table>

**UNCOMPENSATED TRAUMA CARE COSTS**

A survey of Georgia Level I & II Trauma Center 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**

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.

**The Results**

The results of this analysis are contained in the table below. Key steps were as follows:

1. Multiply each hospital’s self pay injury severity volumes by the cost norm (community or academic hospital) for each injury category, total and divide by the hospital’s total self pay trauma registry volume (see example above). This will produce the hospital’s community or academic hospital severity adjusted cost norm.

2. Adjust for payment by some self pay patients by dividing the hospital’s total reported costs for self pay patients by the remaining costs after such payments. This produces the # of adjusted self pay patients, or the number of registry patient for which there was no compensation.
3. Multiply the # of adjusted self pay patients by the hospital’s community or academic hospital severity adjusted cost norm to arrive at total costs.

4. Divide each hospital’s total costs by the total costs for all trauma hospitals to arrive at each trauma centers % of norm based total costs.

5. Multiply each hospital’s percent of total norm based costs by the pool for uncompensated trauma patient costs to arrive at their allocation from this pool (see power point for amount for each hospital).