Costs and Benefits When Increasing Level of Trauma Center Designation

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OTA 2013

Disclosures

• None

Special Thanks to Mike Williams
Underlying Premise:

• Why are for-profit trauma centers opening across the US?
• The shortest distance between this question and the answer is likely $

Overview

• Briefly outline Desgination and ACS Verification Processes
• Discuss ACS criteria pertinent to Orthopaedic Trauma Surgeons
• Discuss potential costs
• Discuss Direct and Indirect Financial Benefits to increasing ACS Level
• Review costs and benefits to orthopaedic trauma surgeons

Classification of Trauma Centers

<table>
<thead>
<tr>
<th>Designation</th>
<th>Verification</th>
<th>Actual Function</th>
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<tbody>
<tr>
<td>Granted by State or local entity</td>
<td>ACS verification is voluntary in most states</td>
<td>Orthopaedic Trauma function may be higher level than the hospital</td>
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<tr>
<td>Many use ACS criteria but most do not require ACS Verification</td>
<td>Can help hospitals obtain designation</td>
<td>Levels I - IV</td>
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<td>Establishes the hospital as a trauma center</td>
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Trauma Center Designation

• Typically run by the state dept. of health
• Different criteria in each state
• Does not always use “level” terminology

ACS Verification

• Mission Statement - To create national guidelines for the purpose of optimizing trauma care in the United States.
• Trauma Centers are verified as levels I – IV based on adherence to Type I and Type II criteria
• Does not grant designation as a trauma center

ACS Verification

• **Type I** criteria must be in place at the time of the verification site visit in order to achieve verification.
• **Type II** criteria are also required, but are less urgent criteria.

• If any **Type I** deficiency or more than three **Type II** deficiencies are present at the time of the initial verification site visit, the hospital is not verified.
General Expectations for Trauma Center Designation

- Vary from state to state but the basic requirements are similar
- Most parallel ACS criteria
- Some use entirely different terminology ie Primary vs Regional vs Area Trauma centers

Level I

- Tertiary care facility central to the trauma system
- 24-hour in-house coverage by general surgeons, and prompt availability of care by ortho, neurosurgery, anesthesiology, ER, radiology, medicine, plastics, facial trauma, pediatric and critical care.
- Referral resource for communities in nearby regions.
- Comprehensive quality assessment program.
- Operates an organized teaching and research effort to help direct new innovations in trauma care.
- Meets minimum requirement for annual volume of severely injured patients.

Level II

- A Level II Trauma Center is able to initiate definitive care for all injured patients.
- 24-hour immediate coverage by general surgeons, as well as coverage by ortho, neurosurgery, anesthesiology, ER, radiology and critical care.
- Tertiary care needs such as cardiac surgery, hemodialysis and microvascular surgery may be referred to a Level I Trauma Center.
- Incorporates a comprehensive quality assessment program.
Level III

- Able to provide prompt assessment, resuscitation, surgery, intensive care and stabilization of injured patients
- 24-hour immediate coverage by emergency medicine physicians and the prompt availability of general surgeons and anesthesiologists.
- Comprehensive quality assessment program
- Has transfer agreements for patients requiring more comprehensive care at a Level I or Level II Trauma Center.
- Provides back-up care for rural and community hospitals.

Level IV

- Able to provide (ATLS) prior to transfer of patients to a higher level trauma center.
- Basic emergency department facilities to implement ATLS protocols and 24-hour laboratory coverage. Available trauma nurse(s) and physicians available upon patient arrival.
- May provide surgery and critical-care services if available.
- Transfer agreements with a Level I or Level II Trauma Center.

Determining Costs

- Entirely dependent on existing infrastructure, call arrangements with specialists, requires extensive individual analysis
- High cost centers involve surgical specialists providing call coverage, establishing education and research, funding a trauma program manager, compliance and preparation for site visits, consultants (Abaris group)
How do you offset these costs?

- Increased Government funding/subsidies
- Increased volume
- Trauma specific contract rates
- Trauma activation fees
- Halo effect

Financial Benefits to the Hospital

- Increased Government funding may vary by state (DISH funds in TX)
- By adding educational programs, may add funding from CMS for residents
- Easier to obtain research grants?
- Easier to obtain philanthropic funding?

Financial Benefits to the Hospital

- Increased Volume
  - Though payer mix may be worse, overall volume will provide increases in revenue
  - Watershed effect for elective, non-trauma surgical cases
  - With efficient systems processes, increased volume = increased profit
  - Aggressive imaging practices alone can be a source of significant revenue
Financial Benefits to the Hospital

• Trauma “Carve-outs”
  – Isolating Trauma in contract negotiations with commercial payers
  – Consider charging higher fees for common trauma procedures
  – Try to negotiate for higher collection percentage than non-trauma

Financial Benefits to the Hospital

• Trauma Activation Fees
  – Vary greatly, may be flat fees
  – Can be a single fee or broken down into fees for various personnel that respond
  – Different fees for ER discharge, standard admission, ICU admission, direct to OR

Financial Benefits to the Hospital

• Halo Effect
  – By having high level care in trauma, more patients and providers will be attracted to your facility due to the perception that it provides a higher level of care
  – Easy concept to understand, very difficult to quantify
Costs to the Orthopaedic Trauma Surgeon

- Increasing Trauma designation will make call busier (more likely a benefit than cost)
- Likely worsen payer mix by providing a path for unfunded patients to be shipped out without EMTALA violations
- Possible increase in administrative responsibilities, committee requirements
- Increased research/educational outreach pressure?

Benefits to the Orthopaedic Surgeon

- Increased volume
- Ability to negotiate better contracts for call coverage if you are needed more
- Chance to participate in education and research
- Increased job satisfaction from dealing with higher level of complexity