

# Costs and Benefits When Increasing Level of Trauma Center Designation

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# Disclosures

- None



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# Special Thanks to Mike Williams



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### Underlying Premise:

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




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### Overview

- Briefly outline Designation 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




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### Classification of Trauma Centers

Designation	Verification	Actual Function
<ul style="list-style-type: none"> <li>• Granted by State or local entity</li> <li>• Many use ACS criteria but most do not require ACS Verification</li> <li>• Establishes the hospital as a trauma center</li> </ul>	<ul style="list-style-type: none"> <li>• ACS verification is voluntary in most states</li> <li>• Can help hospitals obtain designation</li> <li>• Levels I - IV</li> </ul>	<ul style="list-style-type: none"> <li>• Orthopaedic Trauma function may be higher level than the hospital</li> </ul>




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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



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## 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



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## 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.



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### 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



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### 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.



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### 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.



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### 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.



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### 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.



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### 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)



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### How do you offset these costs?

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



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### 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?



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### 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



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### 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



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### Financial Benefits to the Hospital

- Trauma Activation Fees
  - Vary greatly, may be fiat 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



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### 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



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### 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?



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### 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



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