BENEFITS OF BECOMING A TRAUMA CENTER

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PEOPLE DON’T KNOW TO GET INJURED
ONLY CLOSE TO A LEVEL I TRAUMA CENTER
WHY DO YOU WANT YOUR HOSPITAL TO BE A TRAUMA CENTER?

ONE OF 1ST LEVEL IV'S IN KANSAS
YOU TELL ME………..

How could you sell your administration the idea

It can’t be “feelings” or “they say”—you need data and evidence!
Level IV Feedback from SE Region
Benefits of Being a Trauma Center
January 21, 2020

- Allows for feedback to improve performance and patient outcomes
- Data helps provide focus for performance improvement
- Helps mapping resources available
- Is a systematic way to improve communication with outside EMS agencies
- Helps to improve networking with Physicians at larger facilities to help streamline the transfer process.
- Improved teamwork amongst ED providers and ancillary staff
- Allows for opportunities for advanced training for providers and nurses.
TRAUMA IS CONSIDERED ONE OF THE TIME CRITICAL DIAGNOSES

STROKE, STEMI, TRAUMA (SEPSIS)
THAT WILL GIVE IT SOME CREDIBILITY
RURAL TRAUMA: IS TRAUMA DESIGNATION ASSOCIATED WITH BETTER HOSPITAL OUTCOMES

ABSTRACT:
Context: While trauma designation has been associated with lower risk of death in large urban settings, relatively little attention has been given to this issue in small rural hospitals.
Purpose: To examine factors related to in-hospital mortality and delayed transfer in small rural hospitals with and without trauma designation.
Findings: A total of 333 patients (3.5%) died in-hospital. After adjusting for patient, injury and hospital characteristics, in-hospital death was more likely among patients treated at the non-designated hospitals with fewer than 500 discharges per year than among patients treated at similar trauma-designated hospitals.
Conclusions: Associations between trauma designation and outcomes in rural hospitals warrant further study to determine whether expanding designation to more rural hospitals might lead to further improvement in trauma outcomes. 2008
The optimal way to reduce the morbidity, mortality, and economic consequences of injuries is to prevent their occurrence (10, 16). However, when prevention fails and an injury does occur, EMS providers must ensure that patients receive prompt and appropriate emergency care at the scene and are transported to a health-care facility for further evaluation and treatment.

Determining the appropriate facility to which an injured patient should be transported can have a profound impact on subsequent morbidity and mortality. Although basic emergency services generally are consistent across EDs, certain hospitals, called "trauma centers," have additional expertise and equipment for treating severely injured patients.

Patients with less severe injuries might be served better by transport to a closer ED. Transporting all injured patients to Level I trauma centers, regardless of the severity of their injuries, could burden those facilities unnecessarily and make them less available for the most severely injured patients.

The decision to transport a patient to a trauma center or a nontrauma center can have an impact on health outcome. The National Study on the Costs and Outcomes of Trauma (NSCOT) identified a 25% reduction in mortality for severely injured patients who received care at a Level I trauma center rather than at a nontrauma center.
The public health model is to prevent the injury, mitigate the effects of the injury if one occurs, and determine how to improve the overall trauma system.

Certain studies have suggested that smaller facilities that have been verified and designated as lower-level trauma centers and are included in an inclusive trauma system might have substantially better quality of care than facilities outside the system.

Other studies have demonstrated that regionalized trauma systems and formal protocols within a region for prehospital and hospital care can improve patient outcomes.

Having any trauma system, whether inclusive or exclusive, is better than having no trauma system.

Overall, trauma systems reduced the risk for death among seriously injured trauma patients 15%--20%.
TRAUMA CENTER CARE COST-EFFECTIVE
GREATEST EFFECT SEEN IN YOUNGER PATIENTS AND THOSE WITH SEVERE INJURIES
THE JOURNAL OF TRAUMA INJURY, INFECTION AND CRITICAL CARE.

• Trauma center care not only saves lives, it is a cost-effective way of treating major trauma—
  • Johns Hopkins Bloomberg School of Public Health’s Center for Injury Research and Policy.

• Although treatment at a trauma center is more expensive, the benefits of this approach in terms of lives saved and quality of life-years gained outweigh the costs.

• Taking the less severely injured to a lower level of trauma care will yield lower overall costs and increased efficiency in the system.

• The evolution of the name of this document corresponds with the evolution of the philosophy of care set forth by the ACS-COT.

• This subtle change in emphasis from “optimal hospital resources” to “optimal care, given available resources” reflects an important and abiding principle:

• This subtle name change better acknowledges that few individual facilities can provide all resources to all patients in all situations.

• This reality forces the development of a trauma system of care instead of simply developing trauma centers.
RESOURCES FOR OPTIMAL CARE OF THE INJURED PATIENT

- Level IV trauma facilities provide advanced trauma life support before patient transfer in remote areas where no higher level of care is available.

- A well-trained physician or midlevel provider must be continually available. As with Level III trauma centers, treatment protocols for resuscitation, transfer protocols, data reporting, and participation in system performance improvement are essential.

- A Level IV trauma facility must have a good working relationship with the nearest Level I, II, or III trauma center.

- Also, it is essential for the Level IV facility to have the involvement of a committed physician who can provide leadership and sustain the affiliation with other centers.

- An association with a higher level should facilitate expeditious transfer of seriously injured patients who require a higher level of care.

- Exchange of medical personnel between Level I/II and Level III/IV facilities may be an excellent way to develop this relationship. The Level I and II trauma centers have an obligation to extend their educational outreach to rural areas in the form of professional education, consultation, or community outreach.

- A mechanism should provide feedback about individual patient care and outcome analysis to the referring hospital.
A COMPARISON OF RURAL VERSUS URBAN TRAUMA CARE

• Compared the survival of trauma patients in urban versus rural settings after the implementation of a novel rural non-trauma center alternative care model called the Model Rural Trauma Project (MRTP).

• MRTP included three key elements: A warning system for the arrival of major trauma patients using trauma triage criteria, early activation of a trauma team in the emergency department (ED), and periodic systems review and modification.

• This study demonstrates that rural and urban trauma patients are inherently different. The rural system utilized in this study, with low volume and high blunt trauma rates, can effectively care for its population of trauma patients with an enhanced, committed trauma system, which allows for expeditious movement of patients toward definitive care.
INTRODUCTION

- Significant differences between injuries that occur in rural versus urban settings
  - typically older,
  - less severely injured,
  - more likely to die at the scene than urban patients
  - blunt injury with fewer penetrating injuries,
  - fatal crash rate is more than twice as high in rural than urban areas,

- Historical focus of trauma system development has centered only on the designation of urban-based trauma centers

- In rural communities, level III trauma centers have on-call trauma surgeons and in-house trauma teams, while level IV facilities usually do not.

- They noted that the administration of blood products to patients with a presenting systolic blood pressure of less than 90 mmHg and transferring patients both with an injury severity score (ISS) greater than 20 and a systolic blood pressure of greater than 90 mmHg to a higher level of care conferred increased survival in their patient population.
The urban and rural trauma populations were different in multiple baseline characteristics.

The rural victims tended to be older, had a higher percentage of females, and had a predominance of Caucasians.

Blunt injuries were more frequent in the rural setting.

While motor vehicle accidents represented approximately 31% of the mechanisms in both populations, falls were more common in the rural setting, whereas gunshot wounds and pedestrians struck by vehicles were relatively more frequent in the urban setting.
DISCUSSION

• Trauma patients in rural communities are known to have a higher rate of mortality than their peers in urban centers.

• However, we found that overall survival was indistinguishable between rural and urban hospitals after correcting for differences in patient populations.

• Our study reaffirms the assertion that rural trauma hospitals can have outcomes comparable to urban hospitals in survival, despite low patient volume.

• Several studies have noted that modest interventions such as set protocols for trauma, early activation of a trauma team, and standardized orders helped increase survival without the need for a formal level I trauma hospital.
WHEN YOU DON’T KNOW WHAT IT’S ABOUT………

It’s **ALWAYS** about the money…………..
Cost-effectiveness was more favorable for patients with injuries of higher versus lower severity and for younger versus older patients.

Conclusions: Our findings provide evidence that regionalization of trauma care is not only effective but also it is cost-effective.
COLORADO FACT SHEET
The Colorado Trauma Program has done some fact sheets
SIDE EFFECTS: 8 WIDE-REACHING BENEFITS OF BECOMING A TRAUMA CENTER

1. There are meaningful financial advantages.
2. There is a "halo effect."
3. It acts as a process improvement program.
4. It can increase surgeon satisfaction.
5. It can help with surgeon recruiting.
6. Trauma designation brings clout.
7. Trauma designation can be outsourced.
8. It can improve overall service.
HERE’S WHAT I THINK—

- It is always about the patient—not the money, prestige, glamour (right…), competition
- I believe it saves lives and reduces complications! In rural areas, that’s your neighbors………..
- Evidence shows concentration on a few time critical diagnoses make a difference in outcomes—not just death but quality of life outcomes
- I do believe a plan of care pathway improves compliance with evidence-based medicine, protocols
- In overwhelming situations, it's good to have a pre-determined plan for lots of reasons
- I do believe there is a “halo” effect
- I do believe the more you do the better you get
- I do believe that healthcare providers in rural areas are as smart as those in more populated areas. They just don’t have the same resources
GREAT ANALOGY

CHIEFS COACH—PLASTIC

FIRST 15 PLAYS

Courtesy Dr. Robert Holt
Belleville
THE ENTIRE HOSPITAL IS A TRAUMA CENTER, NOT JUST THE ED

That's even more true than in urban centers
RESOURCES

Mostly each other!
RESOURCES ON-LINE PROTOCOLS

Vanderbilt University Medical Center

GUIDELINES FOR FIELD TRIAGE OF INJURED PATIENTS: RECOMMENDATIONS OF THE NATIONAL EXPERT PANEL ON FIELD TRIAGE, 2011

The Darlene Whitlock “Memorial” Project #2
REMEMBER IT IS NOT JUST A TRAUMA CENTER THAT SAVES LIVES, IT IS AN ENTIRE TRAUMA SYSTEM

Be involved in your state system
SERIOUSLY—I ADMIRE WHAT YOU ALL STILL DO—

“The names of the patients whose lives we save can never be known. Our contribution will be what did not happen to them. And, though they are unknown, we will know that mothers and fathers are at graduations and weddings they would have missed, and that grandchildren will know grandparents they might never have known, and holidays will be taken, and work completed, and books read, and symphonies heard, and gardens tended that, without our work, would never have been.”

Donald M. Berwick, MD, MPP, Former President and CEO, Institute for Healthcare Improvement

100,000 Lives Campaign
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JUST FYI—

KENA Scholarships for TNCC/ENPC