Acute Care Surgery Model in the World of Specialty Surgery

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Outline

- Hospital versus Surgeon needs
 - Definitions
- History
- Data- Quality? Demographic?
- Challenges and Controversies
- AAMC Reflections
- Looking ahead

Every important hospital should have on its resident staff of surgeons at least one who is well trained and able to deal with any emergency

- Dr. William Steward Halsted



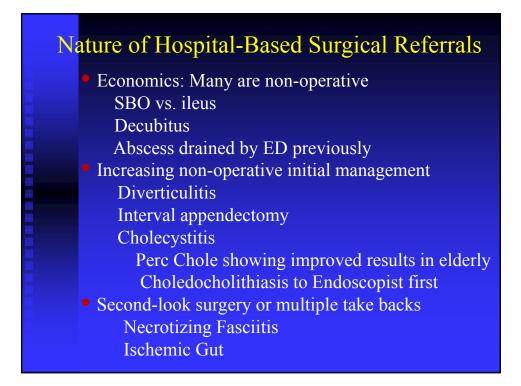
Evidence that...

Elderly require twice the time and effort of the general surgeon - even more relevant for the elderly patient in the Acute Care Setting



Beyond GMENAC — Another Physician Shortage from 2010 to 2030? Ernest P. Schloss, Ph.D. N Engl J Med 1988; 318:920-922<u>April 7, 1988</u>DOI:





Hospital-Based Surgeon

 Possible Nomenclature Emergency Surgery Acute Care Surgery Surgical Hospitalist Surgicalist

Advocates for:

Acute Care Surgeon Board certified trauma and critical care Acute Care Surgery fellowship trained only Surgicalists/ Emergency Surgeon general surgeons without fellowship

The Origins of ACS

- A call to action to address an emergency case crisis (especially rural) in 1993
 Michael John, MD FACS (Former Emory U. Chancellor) proposed creation of a mandatory Natl Health Service Corp (NHSC)
 Specific General Surgery NHSC to deploy BC surgeons for extended rotations across
- rural US
- Did not get traction

The Emergency Surgical Care Crisis

ACEP – 2005 Survey: 75% of ED Med Directors reported inadequate surgical coverage
IOM "Hospital Based Emergency Care: At the Breaking Point" (2006) : hospitals in many states closed ED's due to lack of surgical coverage - devastating results for critically ill & uninsured
Bill 1873 introduced (2007 ,110th Congress) to allocated \$12M/yr. from '08 to '13 to design & implement regionalized system of Emergency Case

...by Senator B. Obama ...did not pass!

Origins of ACS : Academic Depts. Of Surgery Coverage & Quality Challenges (Early,Schwab et al Ann Surg Oct 2006)

 1999 – U Penn D.o.S. combined trauma, emergency surgery & surgical critcare to form ACS service

ACS vs. Traditional model demonstrated signif \downarrow in perf rates, complications & LOS in appendicitis pts.

↑ surgeon satisfaction

Enhanced resident training opportunities

Early Academic ACS Experience: (Maa et al JACS 2007)

- UCSF reorganized Acute Gen Surgery service into hospitalist model of ACS (2005) due to:
- Prior faculty dissatisfaction with disruption of elective clinics, OR list & academic activity
- Poor continuity of pt. care

UCSF: Key Elements of the Surgical Hospitalist Model

- On-call period lasts continuously for 1 week, not 24 hours, in order to improve continuity of care.
- During the on-call period, no elective clinics or procedures are scheduled that might disrupt or conflict with acute surgical care.

UCSF: Key Elements of the Surgical Hospitalist Model (cont'd)

A resident or attending should evaluate the patient within 30 mins of consultation during thee day and within 45 mins off hours.

Patients requiring special expertise initially assessed by the team then triaged to a higher level of expert care as indicated.

After the on-call period, the care of inpatients and consults is handed off to the next on-call surgeon in a group-practice model.

Results of UCSF ACS Reorganization

High satisfaction among ED. Drs.

 \downarrow pt. waiting times

Consults & reimbursement

High satisfaction among participating surgeons:

Appropriate triage of complex pts.

Financial incentives

↑protected time for education & research

Quality Impact of Transition to ACS Model (Gomez et al JACS 2012)

- Loma Linda Med Center 2010 Combined Trauma & Emergency G.S. Divisions:
 - 12 hr. in house shifts
 - One surgeon on call; one back up from home
 - Retrospective comparison of pts. undergoing appendectomy & cholecystectomy over following year

Retrospective Comparison of Appendicitis Experience (LLMC):

# of second over 1 second	Traditional G.S. Service	ACS Service
# of cases over 1 year Avg time to surgical	82	93
eval(hrs)	6.6	4.6
Avg time to OR(hrs)	16	11
Mean LOS (days)	2.8	1.8
Mean Case Cost (\$)	\$8,942.00	\$7,018.00

Retrospective Comparison of Cholecystitis Experiences (LLMC):

	Traditional G.S. Service	ACS Service
# of cases over 1 year	51	51
Avg time to surgical eval. (hrs.)		-5.84
Avg time to OR (hrs.)		-25.37
Mean Case Cost (\$)	\$13,128.00	\$9,903.00



Formation of Acute Care Surgeons

- Am Coll of Surgeons (Dr. Britt) proposes new training paradigm for ACS (2007)
- First Formal AAST Fellowship program begins 2008
- Currently 14 Accredited program (+ others)
- 24 month curriculum (Trauma/Crit Care/Emergency Surgery)

Challenges for ACS: Concrete

- Decide upon a name! O/W can't track nor measure
- Negative (peer) Perception-who goes into ACS?:
 - "sundowners" winding down practice
 - those who failed to build practices
 - "newbies" undecided-straight out of training
- "What successful surgeon with an established elective practice signs up to drain pus at night?!"

ACS Challenges:Concrete & Emotional

Litigation challenges:

1) In several jurisdictions Priv practice Gen Surg groups have sued hospitals claiming restraint of trade /unfair labor practices. Some hospitals have settled & turned to "pay for call"(plaintiff's end game?)

2) Med Mal ↑ among ACS surgeons-higher concentration of sicker pts?

Elective practice?



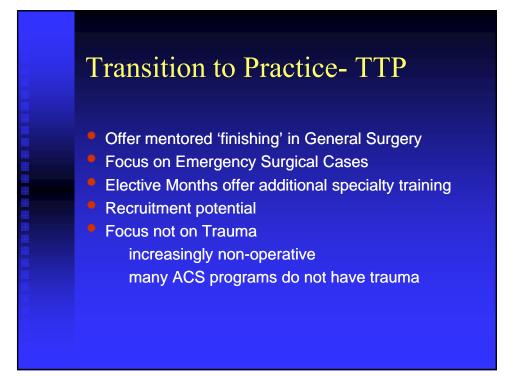
- For in house coverage need 6-7 surgeons
- Most (all?) subsidized by hospital
- Some Acad hospitals put new recruits on ACS for "X" shifts over "Y" months
 - allows even subspecialists to get case
 - experience with back up
 - -builds confidence
 - builds practice
 - helps institutions with staffing



Core Management Principles:

- Expeditious initial assessment
- End point guided resuscitation
- Early intervention and definitive management
- Essential physiologic monitoring

Acute Care Surgery by LD Britt MD, Andrew Peitzman MD



Controversies Around ACS:

- Quality programs variable-best practice, choosing wisely* (lean opportunities) protocolization.
- Challenge of managing increasingly complex emergency surgical problems. When is subspecialty care more appropriate? –eg post Bariatric surgery SBO, colonoscopy perfs, etc.
- Work hours / cycle
- Compensation
- Institutional Gen Surg ED call
- Elective practice (or not?)