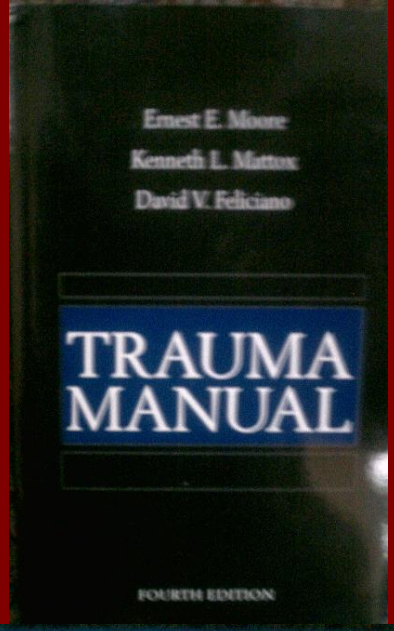
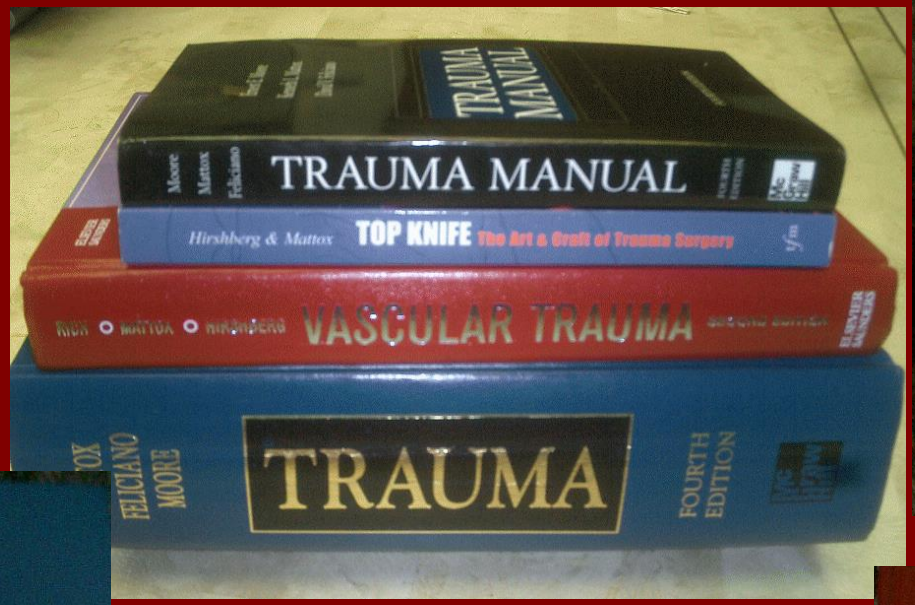
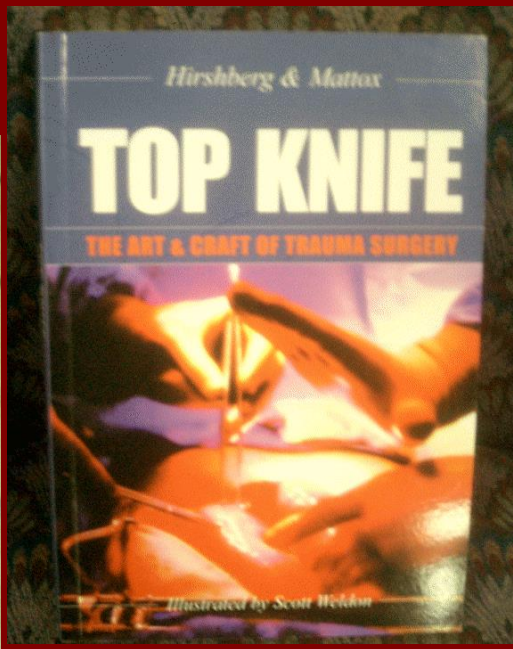
3.
STANDARDS
EMS & Other

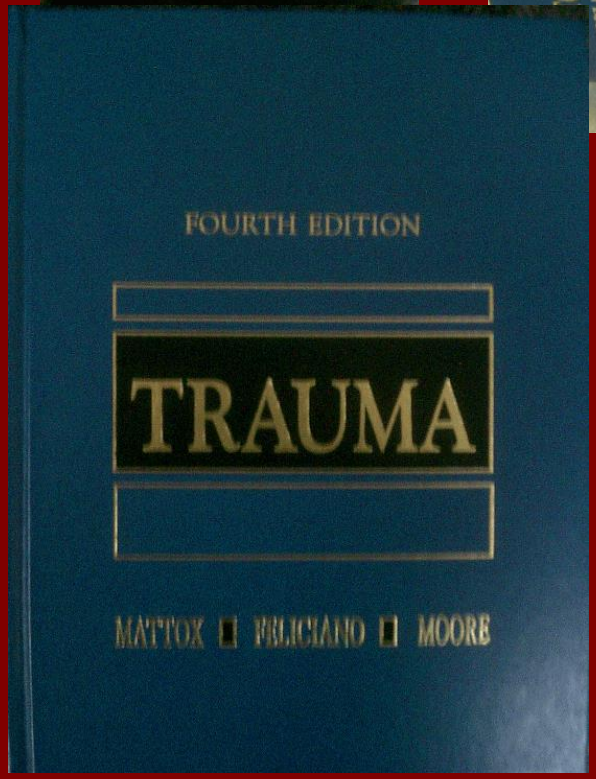
EPIPHANY

Baylor College of Medicine

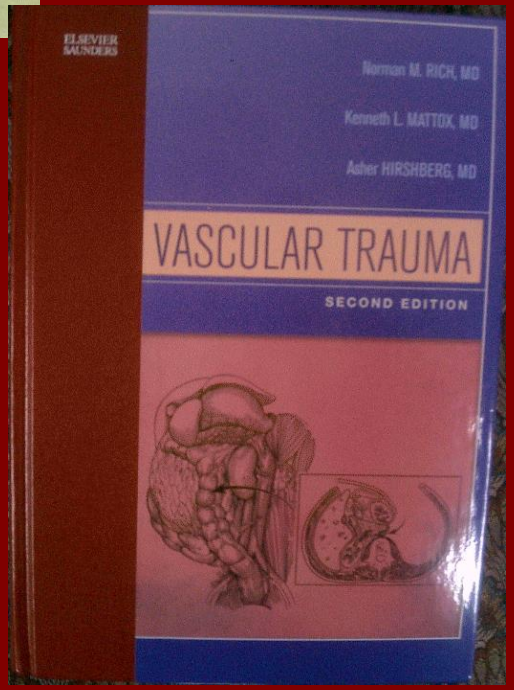

Ernest E. Moore
Kenneth L. Mattox
David V. Feliciano
TRAUMA MANUAL
FOURTH EDITION

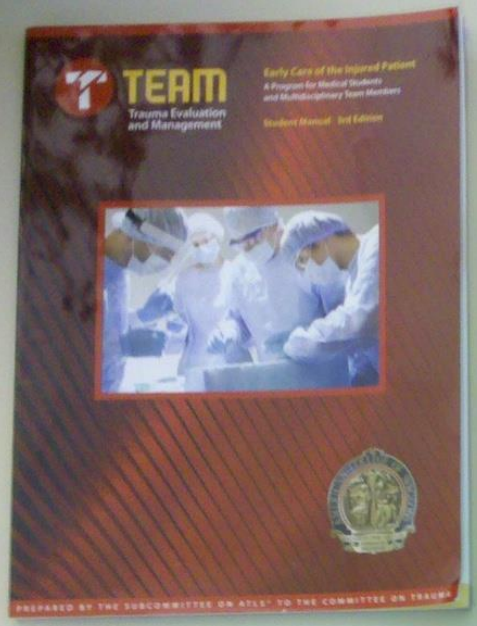

TRAUMA MANUAL
Moore
Mattox
Feliciano
Hirshberg & Mattox
TOP KNIFE The Art & Craft of Trauma Surgery
VASCULAR TRAUMA
TRAUMA
FOURTH EDITION

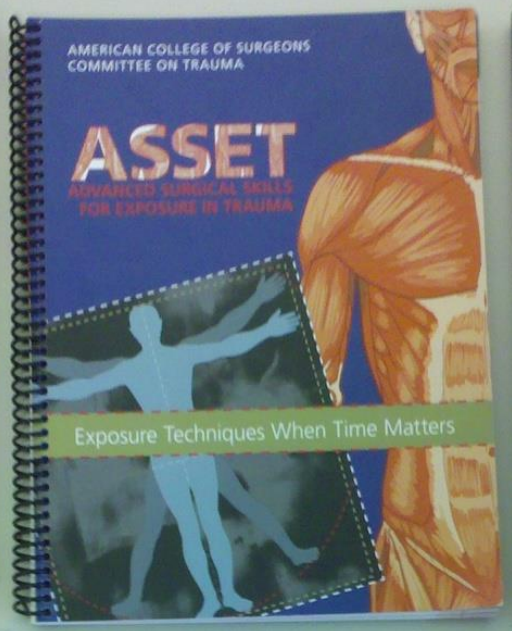

Hirshberg & Mattox
TOP KNIFE
THE ART & CRAFT OF TRAUMA SURGERY

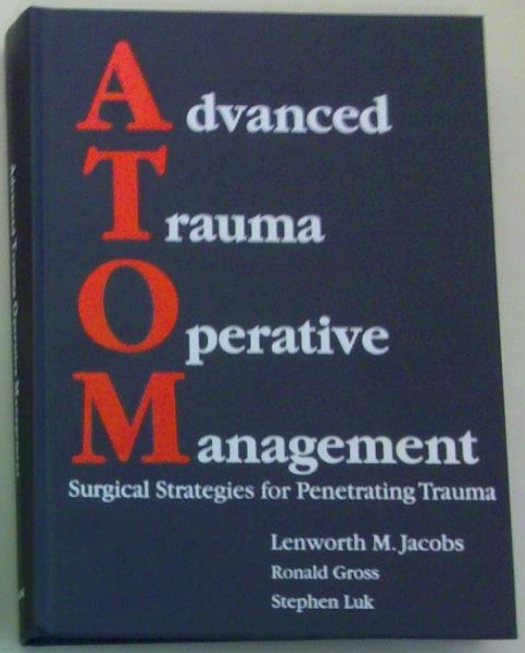

FOURTH EDITION
TRAUMA
MATTOX FELICIANO MOORE

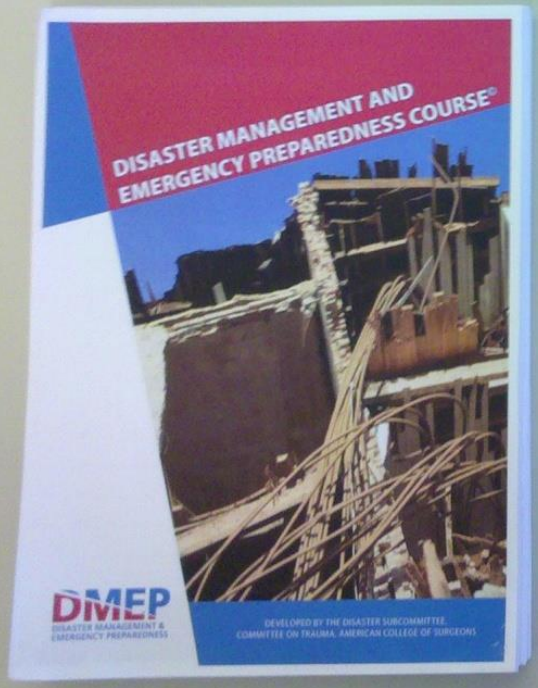
TRAUMA

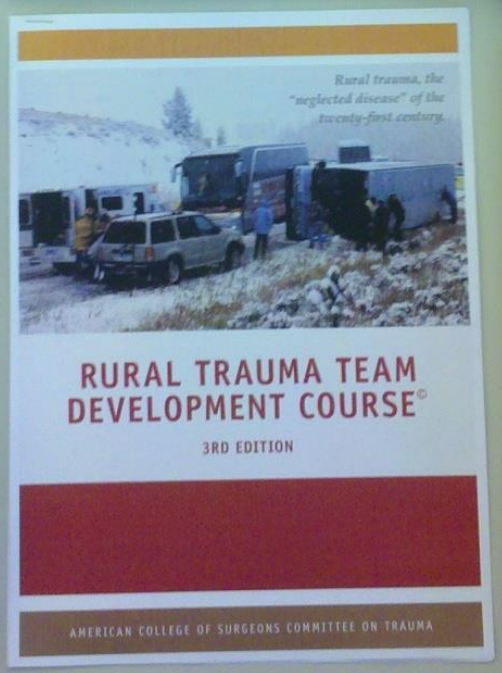

ELSEVIER
SAUNDERS
Norman M. RICH, MD
Kenneth L. MATTOX, MD
Asher HIRSHBERG, MD
VASCULAR TRAUMA
SECOND EDITION

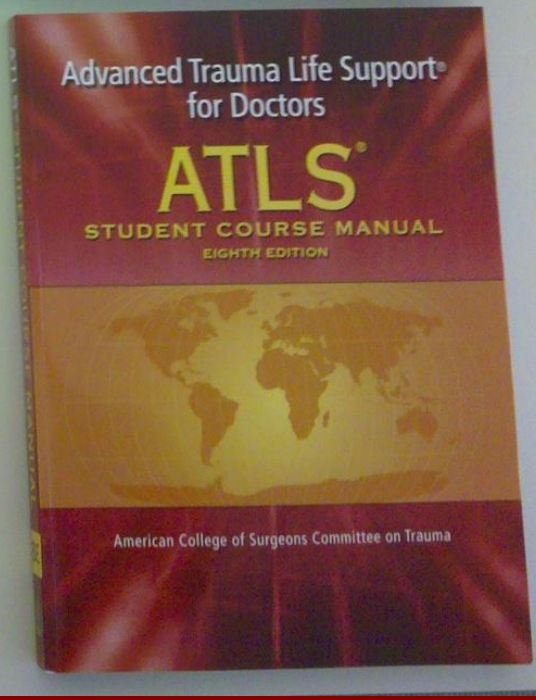

TEAM
Trauma Evaluation and Management
Early Care of the Injured Patient
A Program for Medical Students and Multidisciplinary Team Members
Student Manual 3rd Edition


AMERICAN COLLEGE OF SURGEONS
COMMITTEE ON TRAUMA
ASSET
ADVANCED SURGICAL SKILLS FOR EXPOSURE IN TRAUMA
Exposure Techniques When Time Matters


Advanced Trauma Operative Management
Surgical Strategies for Penetrating Trauma
Lenworth M. Jacobs
Ronald Gross
Stephen Luk


DISASTER MANAGEMENT AND EMERGENCY PREPAREDNESS COURSE®
DMEP
DISASTER MANAGEMENT & EMERGENCY PREPAREDNESS
DEVELOPED BY THE DISASTER SUBCOMMITTEE, COMMITTEE ON TRAUMA, AMERICAN COLLEGE OF SURGEONS


Rural trauma, the "neglected disease" of the twenty-first century.
RURAL TRAUMA TEAM DEVELOPMENT COURSE®
3RD EDITION
AMERICAN COLLEGE OF SURGEONS COMMITTEE ON TRAUMA


Advanced Trauma Life Support® for Doctors
ATLS®
STUDENT COURSE MANUAL
EIGHTH EDITION
American College of Surgeons Committee on Trauma

Over riding PRINCIPLES

- Created PROFESSIONAL organizations
- Certified Regional Government
- Reviewed Locally
- Credentialed by DATA

Baylor College of Medicine

1. FIRST

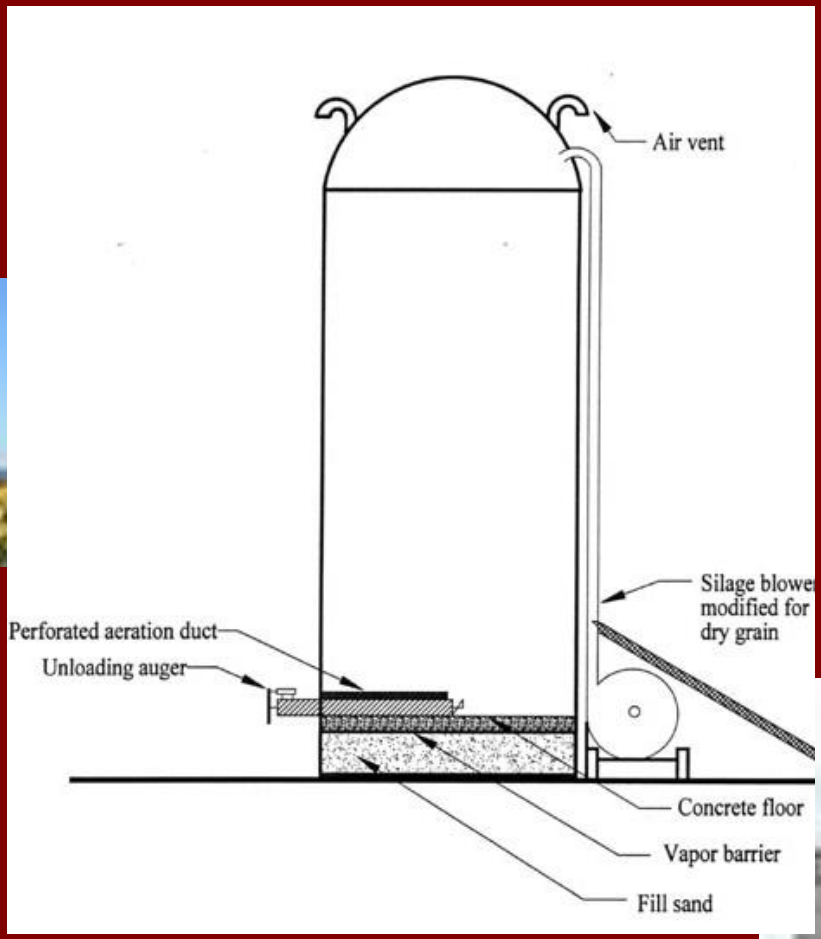
Lesson of the SILOS

EPIPHANY

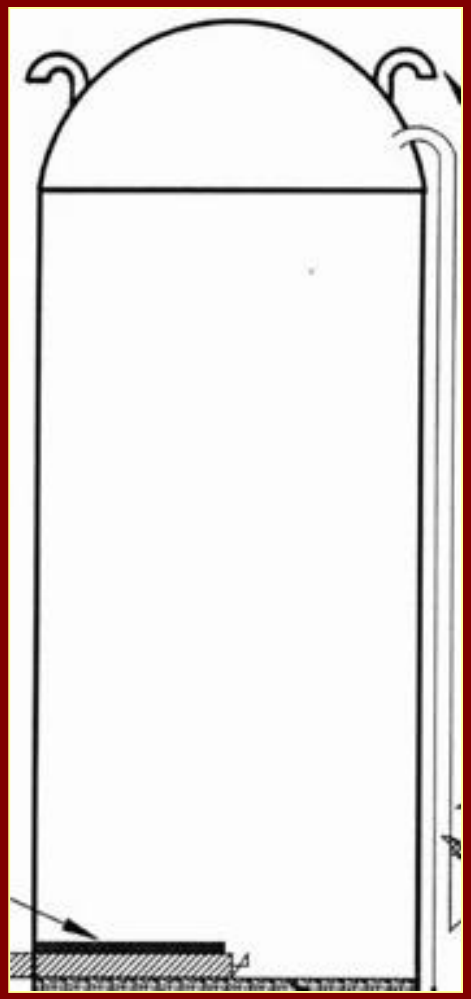
Baylor College of Medicine

SILOS

SILOS

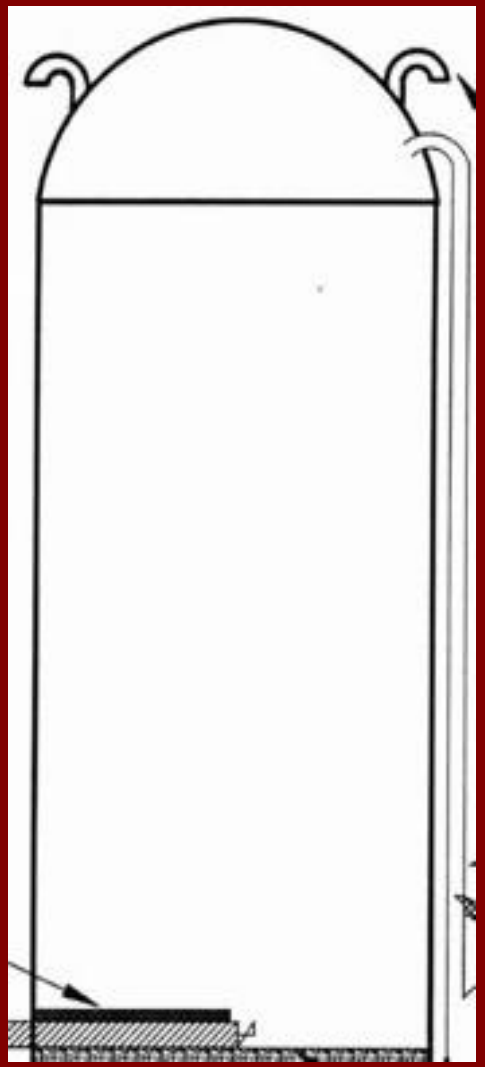

Air vent
Silage blowe
modified for
dry grain
Perforated aeration duct
Unloading auger
Concrete floor
Vapor barrier
Fill sand

Silos
Anatomy & Physiology



- Tall
- Imposing
- Windowless
- Imbedded in weeds
- Disconnected
- Isolated
- Not integrated
- Aloof
- Fills from the top

Silo Anatomy & Physiology



- Contains uniform "stuff"
- Can be contaminated
- Sometimes EXPLODES
- Cannot see contents (unless inside)
- Top down management

Silos

Weeds

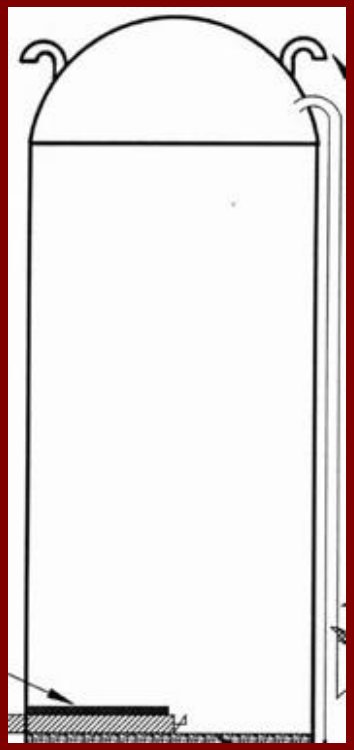
Communications from one silo to another often involve wading around in the weeds

BCM Baylor College of Medicine

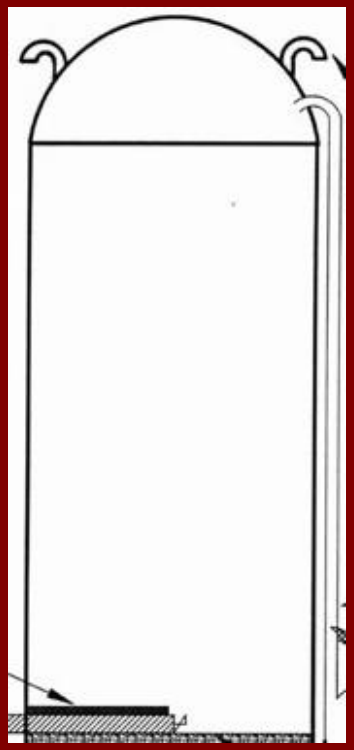
Trauma

Each SILO is SEPARATE

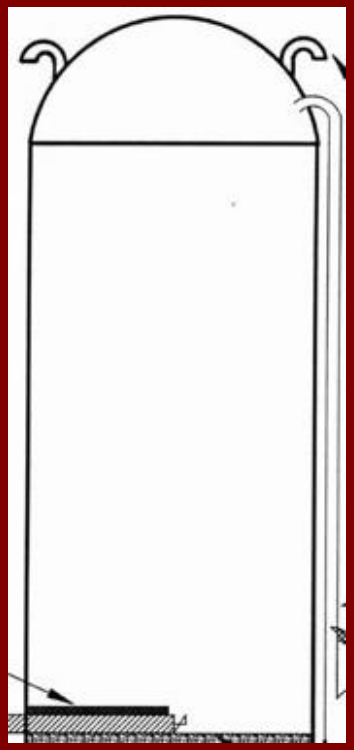
Rescue



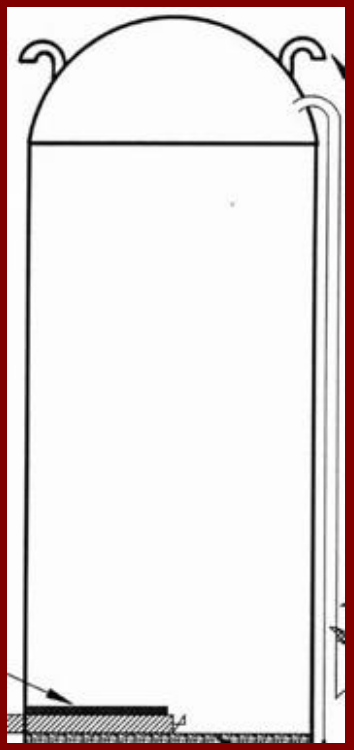
EMS



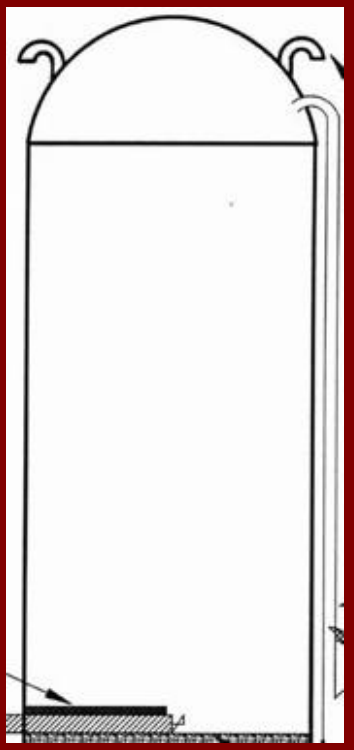
Medical Care



Security



Infrastructure



BCM Baylor College of Medicine

Trauma

EMS View

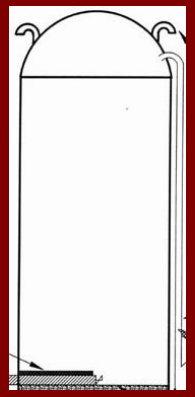
Rescue

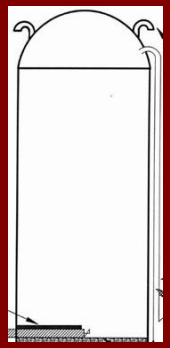
Trauma

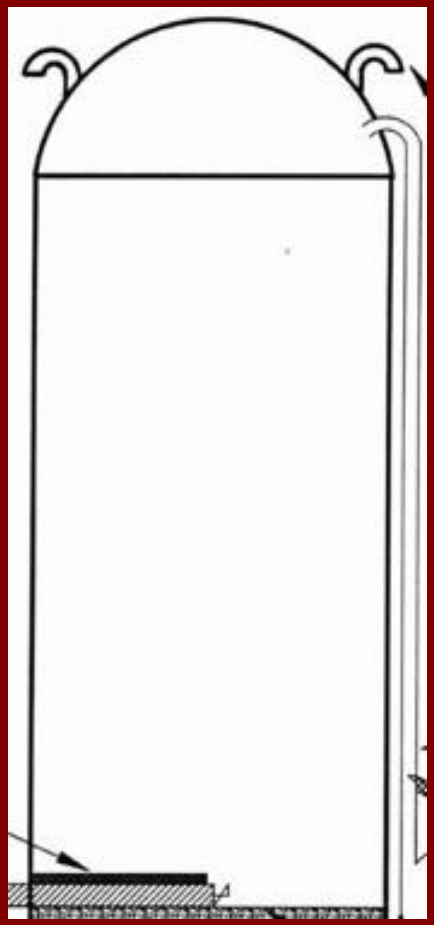
EMS

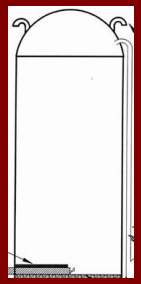
Local Government

Federal Government









WHICH is the BOSS ?

BCM Baylor College of Medicine

Trauma

2. SECOND

Views of the AMERICAN COLLEGE of SURGEONS

Baylor College of Medicine

4. Example American College of Surgeons

EPIPHANY

Baylor College of Medicine

How/WHY did ACS Develop Trauma Program

COMMITTEE ON FRACTURES 1922
CHARLES L. SCUDDER

- 26 surgeons from across the country met at the Massachusetts General Hospital in April 1922: “the essentials of the treatment of fractures” – 23 page syllabus in the *Archives of Surgery* in 1923 - “Outlines of Treatment of Fractures”
- Scudder organized committee and appointed 12 members as area chairs, with 66 local chairs.
- The committee developed standards for the hospital care of fractures, approved by the Regents in 1924 and published in Hospital Standardization Manuals
- The following year, 1,947 surgeons caring for fractures in hospitals were listed and 151,000 fractures reported from 1,050 hospitals.
- In 1922, the Regents established the Committee on Fractures and named Charles L. Scudder the Chair. Dr. Scudder guided this committee until 1932.

9 years after ACS was formed

ACS TRAUMA PROGRAM

- Define the ISSUES / PROBLEMS
- Construct ORGANIZATION
- Establish SYSTEM
- Recognize SPECIALTY
- Verify / Certify TRAUMA CENTERS
- Create DATA BASE
- Create EDUCATION / RESEARCH
- CLOSE LOOP – Quality

Systems Approach to Problems

- ISSUES
- ORGANIZATION
- SYSTEM
- SPECIALTY
- Verify / Certify
- DATABASE
- EDUCATION / RESEARCH
- QUALITY

What are the COMPONENTS of the CURRENT ACS COT Programs

Pre-Hospital	Verification	Disaster	Research
• EMS • PHTLS • Standards • Quality Review	Optimal Resources Document Verification Review Designation Review & ReCert	Incident Command Drills & Exercises Courses Networking	•Involve stakeholders •Include all phases of trauma care

Young Surgeon	Acute Care Surgery	Surgical Critical Care	Trauma Rehabilitation
<10 Years post Residency Essential for leadership development	Emergency Surgery Gatekeeper for Vascular Emergency Surgical Hospitalist	Part of Surgery training Trauma patients need SURGEONS in SICU	•Concepts to be applied as soon as patient arrives

Forensic Trauma	PREVENTION	OUTREACH	Special Projects
Aware of linkages Prevention Sexual assault Preservation of data Chain of Evidence	Industrial programs Teen education Elder issues – falls Toddler protection	Linking to other health programs Involving all stakeholders Link to prevention	•Burns •Falls •Terrorism •Cartels

Rural Trauma	Tele-Consultation	Resident Programs	Education
Level IV centers Networked to I or II TeleNetworking	Internet & Texting Successful examples	Trauma Paper Competition Sponsor for courses Mentoring	•> 10 offerings •CME Credit •Publications •Tele-education
Quality	**Trauma System**	**ATLS**	**Advocacy**
Use of databases Compare trauma centers Improvement programs	Eliminate SILOS Regional cooperation Shared resources Shared conferences	Basic course Widely taught 1st step in care Not definitive	•Who are we? •What do we do? •What is our value? •What do we need?
Pediatric	**Registry-Data Base**	**Military**	**International**
Special centers Adjust treatment	Local, regional, national Basic data set Advanced data set	Austere environment Staged approaches Frequency harmonics	•Internet •Conferences •ACS Clinical Congress •Chapters

What is TRAUMA

Trauma

- Injury, including Burns
- Industrial accidents
- Motor vehicle crashes
- Interpersonal violence
- Disaster effects
- Wars & Conflicts
- Drug Cartel & Terrorist damage

- Injury
  - Can be classified
  - Trauma Scoring, Injury Severity Score
  - Probability of Survival
- Surgical Critical Care
- Acute Care Surgery – Emergency Surgery
- Medical Disaster Response

Major Public Health Issue

- EVERY Country in World (incl. Mexico)
- Trauma is a MAJOR Pubic Health Issue
- Potential Years of Life Lost (PYLL)
  - Leading Health ISSUE for ALL ages
- Affects young & workers
- Tremendous societal economic impact
- Often AVOIDED by societies

TRAUMA

- **GREATEST HEALTH RISK to SOCIETY**
  - **Greater than**
    - **Cancer**
    - **Cardiac Disease**
    - **Atherosclerosis**
    - **Pneumonia**
    - **GI Tract problems**
    - **Renal Failure**
    - **Cosmetic Surgery**

First regional systems public health approach

More important in society than:
Cancer Centers
Pediatric Hosp.
Heart Hosp.
Geriatric Hosp.

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What is a TRAUMA Surgeon

Surgery

What is SURGERY ?

- An Approach to Problem Solving
- An Ability to deal with issues
- An ORGANIZATIONAL approach
- Sometimes involves a technical procedure
- Much more than a tradesman

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Department of Surgery

Trauma Surgeons

- Are “DIFFERENT”
- Similar to “Acute Care Surgeons”
- Have a “SPECIAL GENOME”
- Are often the “GO TO” surgeon in a community !!!!

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TRAUMA Surgeon

- Describes SPECIAL Physician
  - Acute Care Surgeon
  - Emergency Surgeon
  - Surgical Critical Care
  - Surgery Hospitalist
  - UNIQUE Training & Skills

Basic Curriculum
CME defined
Certifiable (More than ATLS)
SURGICAL discipline
Cost Effective for society

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What is a TRAUMA CENTER

Trauma Centers

- **Military & Civilian Specialized Centers**
  - **NOT JUST ANY HOSPITAL**
  - **May be part of General Hospital**
- **Standards exist**
- **Requires Review – VERIFICATION**
- **Levels of care I. II, III, IV, others**

RESOURCES 2013

FOR OPTIMAL CARE OF THE INJURED PATIENT

COMMITTEE ON TRAUMA
AMERICAN COLLEGE OF SURGEONS

AMERICAN COLLEGE OF SURGEONS
Inspiring Quality:
Highest Standards, Better Outcomes

Site Visit Process Critical Review

We are doing better!

VRC Review/Consultation Standardization		
Pre-Visit	**Site Visit**	**Post Visit**
• Policy and Procedures	• Policy and Procedures	• Policy and Procedures
• Resource Manual	• Resource Manual	• Resource Manual
• Pre-Review Questionnaire	• Survey Checklist • Research Checklist	• Report Generator
• Chart List/Preparation	• Case Review Checklist	• Report Generator
• PI Process Description	• PIP Checklist	• Report Generator
• Reviewer Identification/ competency assurance	• Reviewer assignment criteria	• Reviewer evaluation

TRAUMA Center

- **Describes COMMITMENT Location**
  - **Levels I-III**
  - **Receives bad trauma from region**
  - **Part of NETWORK SYSTEM**

COST EFFECTIVE
Saves LIVES
Reduces Complications
Decreases length of stay
1: 1 million population

TRAUMA PRE-HOSPITAL TRANSPORTATION (EMS)

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Ambulance - EMS

Transportation - EMS

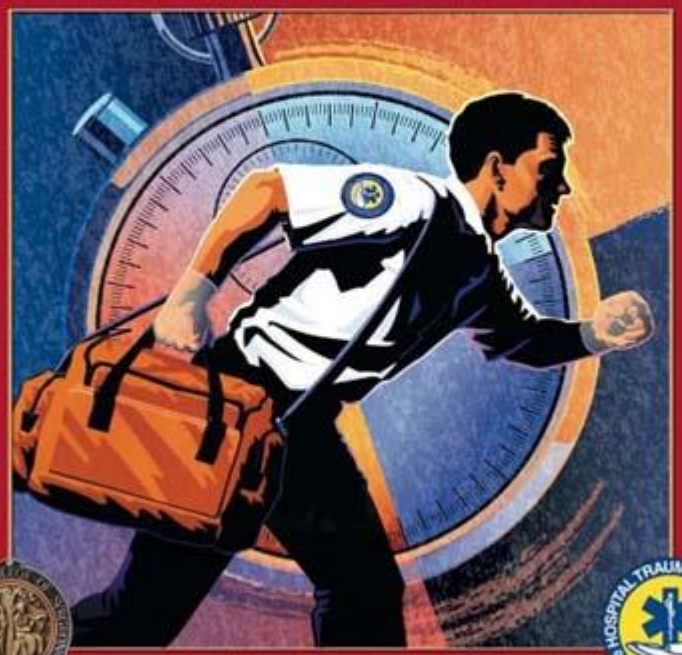
- Not just an ambulance & attendants
- Specialized training
  - No BP – Check CNS Status & Pulse
- Like a mobile ICU
- Might include air transportation
- Also requires supervision & review

Seventh Edition

DVD INSIDE

PHTLS

Prehospital Trauma Life Support



American College of Surgeons COMMITTEE ON TRAUMA

PREHOSPITAL TRAUMA LIFE SUPPORT • NAEMT •

ELSEVIER MOSBY JEMS

Prehospital Trauma Life Support Committee of The National Association of Emergency Medical Technicians in Cooperation with The Committee on Trauma of The American College of Surgeons

2011 Guidelines for Field Triage of Injured Patients

Measure vital signs and level of consciousness

1

Glasgow Coma Scale	≤13
Systolic Blood Pressure (mmHg)	<90 mmHg
Respiratory Rate	<10 or >29 breaths per minute, or need for ventilatory support (<20 in infant aged <1 year)

NO

Assess anatomy of injury

2

- All penetrating injuries to head, neck, torso, and extremities proximal to elbow or knee
- Chest wall instability or deformity (e.g. flail chest)
- Two or more proximal long-bone fractures
- Crushed, degloved, mangled, or pulseless extremity
- Amputation proximal to wrist or ankle
- Pelvic fractures
- Open or depressed skull fracture
- Paralysis

YES → **Transport to a trauma center.** Steps 1 and 2 attempt to identify the most seriously injured patients. These patients should be transported preferentially to the highest level of care within the defined trauma system.

NO

Assess mechanism of injury and evidence of high-energy impact

3

- **Falls**
  - Adults: >20 feet (one story is equal to 10 feet)
  - Children: >10 feet or two or three times the height of the child
- **High-risk auto crash**
  - Intrusion, including roof: >12 inches occupant site; >18 inches any site
  - Ejection (partial or complete) from automobile
  - Death in same passenger compartment
  - Vehicle telemetry data consistent with a high risk of injury
- **Auto vs. pedestrian/bicyclist thrown, run over, or with significant (>20 mph) impact**
- **Motorcycle crash >20 mph**

YES → **Transport to a trauma center,** which, depending upon the defined trauma system, need not be the highest level trauma center.

NO

Assess special patient or system considerations

4

- **Older Adults**
  - Risk of injury/death increases after age 55 years
  - SBP <110 may represent shock after age 65
  - Low impact mechanisms (e.g. ground level falls) may result in severe injury
- **Children**
  - Should be triaged preferentially to pediatric capable trauma centers
- **Anticoagulants and bleeding disorders**
  - Patients with head injury are at high risk for rapid deterioration
- **Burns**
  - Without other trauma mechanism: triage to burn facility
  - With trauma mechanism: triage to trauma center
- **Pregnancy >20 weeks**
- **EMS provider judgment**

YES → **Transport to a trauma center** or hospital capable of timely and thorough evaluation and initial management of potentially serious injuries. Consider consultation with medical control.

NO

Transport according to protocol

When in doubt, transport to a trauma center.

Find the plan to save lives, at www.cdc.gov/Fieldtriage

National Center for Injury Prevention and Control
Division of Injury Response

CDC

TRAUMA QUALITY REVIEW (Loop Closure)

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Quality Review

- Teleconferencing follow-up
- Weekly conferences
- Special Published Reports
- Research Reviews
- New approaches developing

- (More on Quality / Value Later in talk)

TRAUMA REGRISTRY (Data Bank)

Trauma Registry

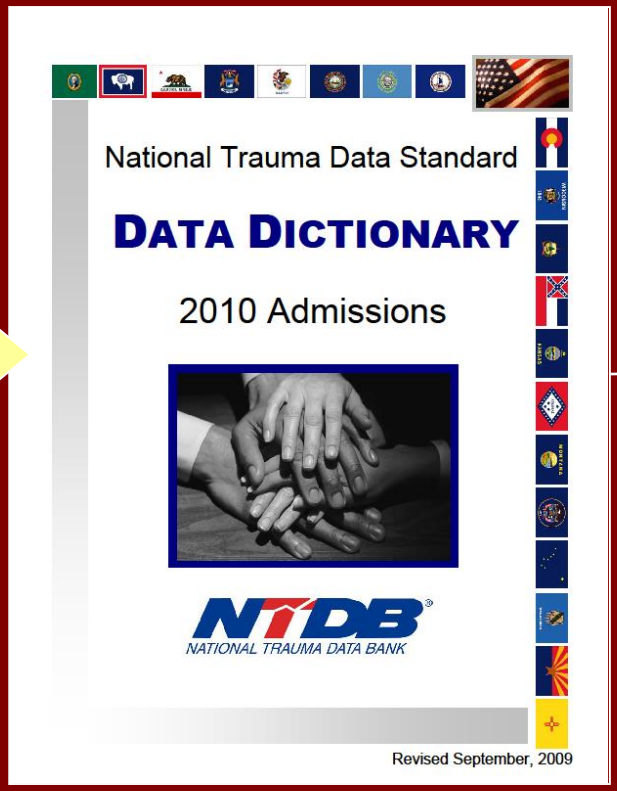
- Ambulance (EMS) data
- Individual patient data
- Individual hospital data
- System data
- Individual physician data
- Research & Reports

Update

- Over 5 million records
- Shift to quarterly, concurrent data collection
- HL7 approval for National Trauma Data Standard
- Trauma center inventory
- Maintenance of certification

Information Flow

Trauma Registries



ACS tqip TRAUMA QUALITY IMPROVEMENT PROGRAM

CDC/ACS NTDB National Sample Program

ACS NTDB Research Data Set

NTDB Reports

TQIP Components

Risk adjusted inter hospital comparisons:	• Risk adjusted benchmark reports • Online data analysis tool to drill down into your own TQIP data, obtain patient lists, compare to other centers
Education and training:	• Annual meeting • Online training • Monthly educational experiences for abstractors
Enhanced data quality:	• External data validation • Data quality reporting and quarterly submissions • TQIP Validator
Sharing best practices:	• Annual meeting • Best practices guidelines (Geriatrics, MTP) • Web conferences

TRAUMA RESEARCH

TRAUMA RESEARCH

NEW Trauma Research

- Clotting & Coagulopathy
- Control of truncal bleeding
- Intra-aortic occluding BALLOONS
- Control of INFLAMMATION
- Traumatic BRAIN Injury
- Advanced Rehabilitation

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Department of Surgery

Socio-Politico-Economics of TRAUMA Programs

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TRAUMA ECONOMICS

- In ABSENCE of Trauma System, Money is spent for patients ALREADY (More)
- With Trauma System
  - REDUCTION in all cost areas
  - Duplications are reduced
  - Efficiency demonstrated
  - OUTCOMES BETTER

ACS, AAST, ABS, ACGME, JCAHO,

TRAUMA
is a
RECOGNIZED
DISCIPLINE

TRAUMA

RECOGNIZED DISCIPINE

- Special body of knowledge
- Requires special training
  - Not just “ANY SURGEON” capable
- Most often NOT Elective
- Linked to Surgical Critical Care
- Significant impact on injury survival

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TRAUMA TECHNOLOGY & SPECIAL TRICKS

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NEW TRAUMA TRICKS

- Belly Foam
- Pharmed Blood from stem cells
- Regenerative surgery
  - Tissues
  - Organs
  - Reconstruction
- Suspended Animation – CP Bypass

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Department of Surgery

2. SECOND

Views of (TEXAS) REGIONAL ADVISORY COUNCILS (RACS)

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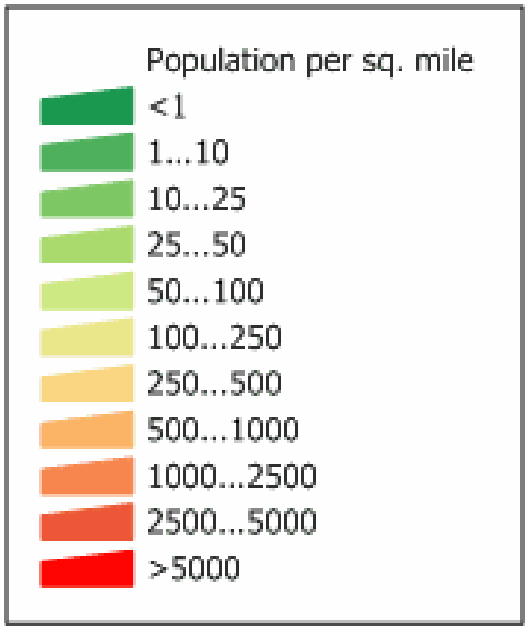
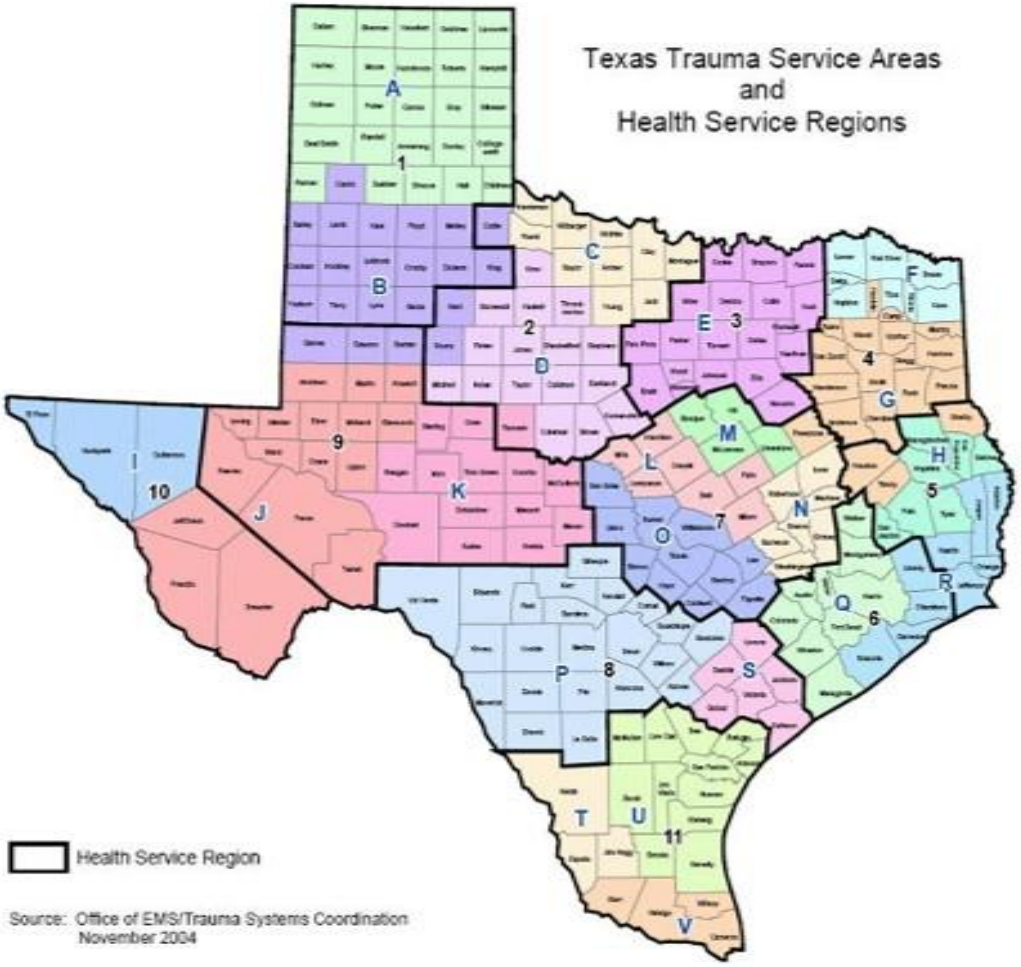
Texas Population
25 Million

Thailand Population
67 Million

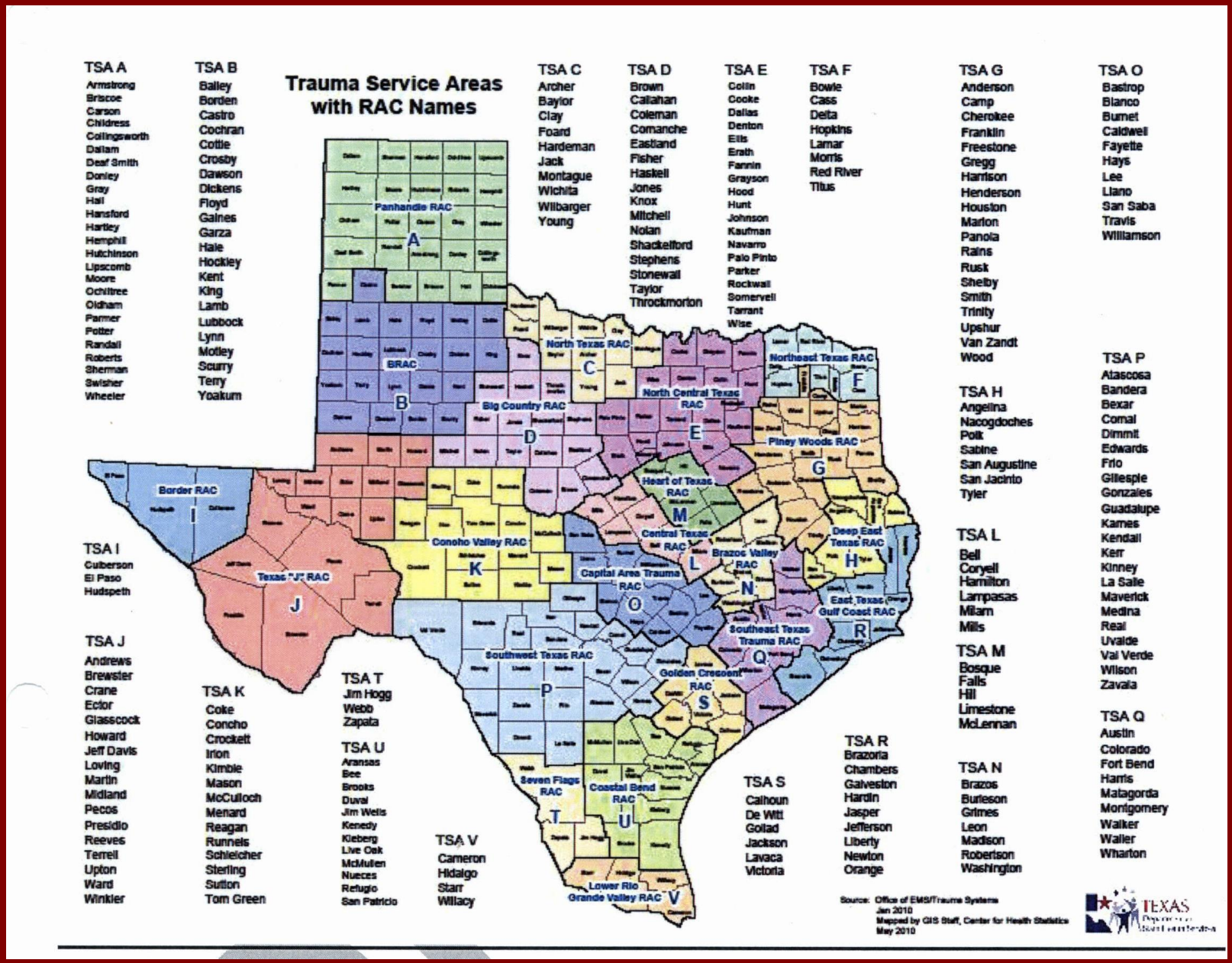


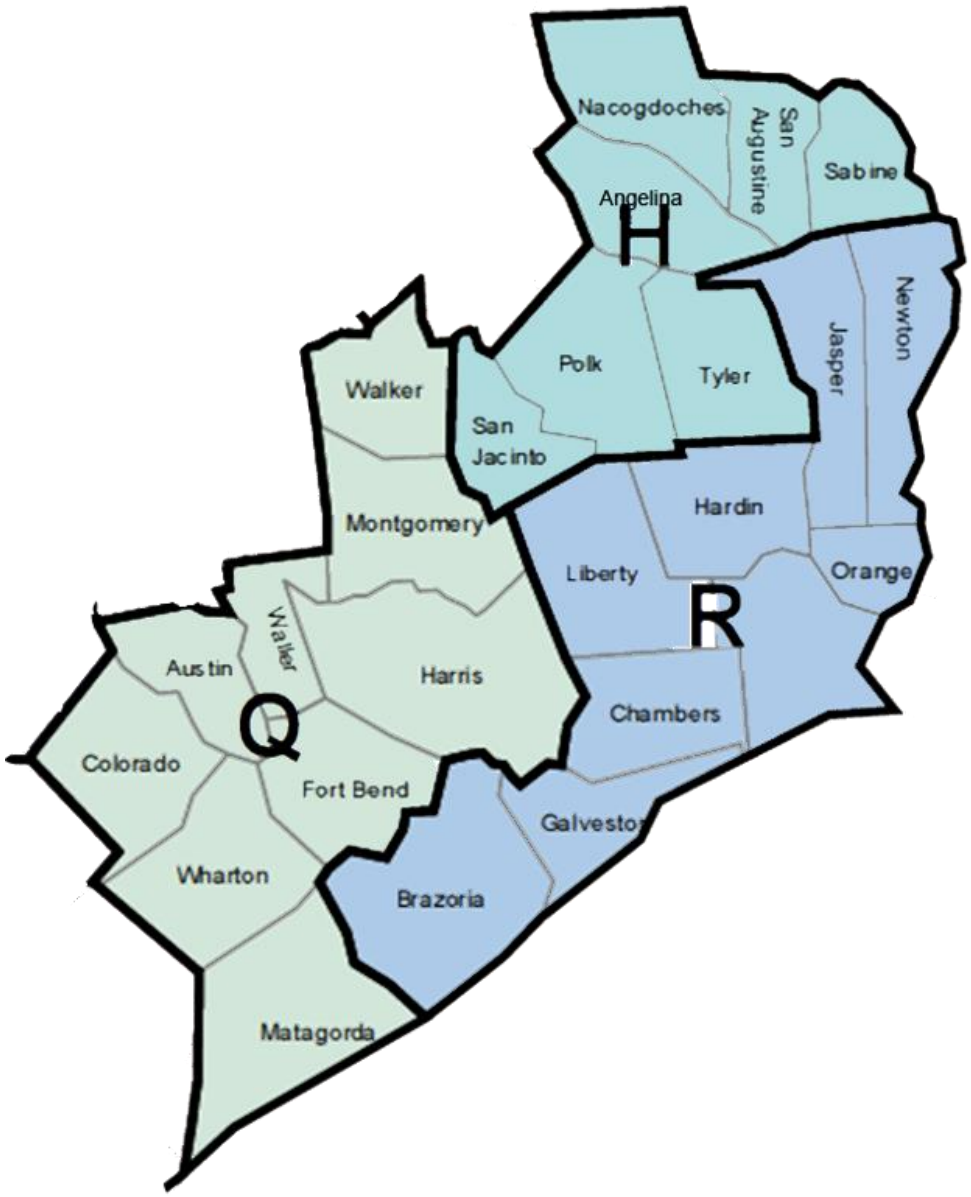
Source: U. S. Census Bureau
Census 2000 Summary File 1
population by census tract.

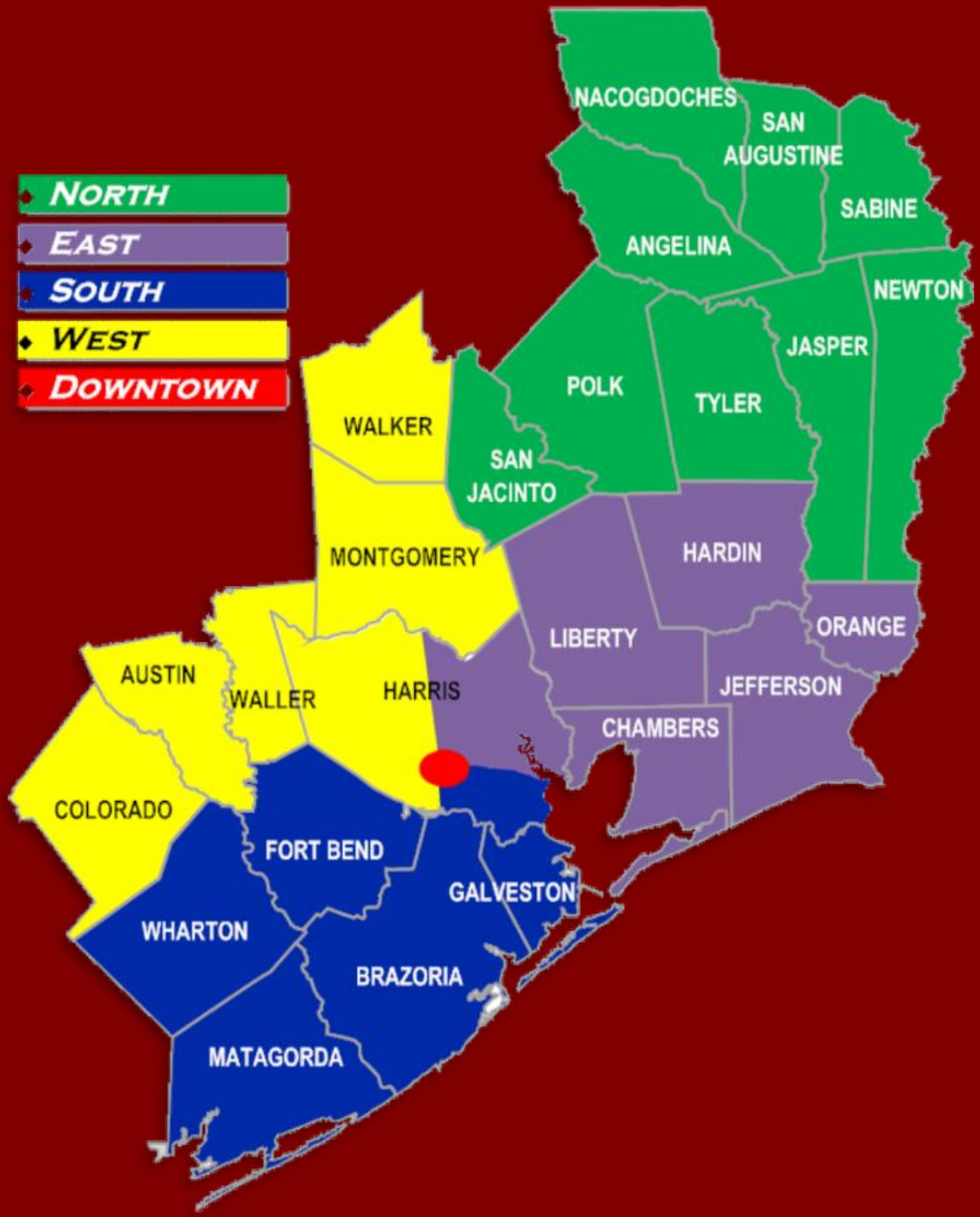
Health Service Areas



Health Service Areas




Nacogdoches
San Augustine
Sabine
Angelina
H
Polk
Tyler
Jasper
Newton
Walker
San Jacinto
Montgomery
Hardin
Liberty
Orange
R
Walker
Austin
Harris
Q
Chambers
Colorado
Fort Bend
Galveston
Wharton
Brazoria
Matagorda


NORTH
EAST
SOUTH
WEST
DOWNTOWN
NACOGDOCHES
SAN AUGUSTINE
SABINE
ANGELINA
NEWTON
JASPER
POLK
TYLER
WALKER
SAN JACINTO
MONTGOMERY
HARDIN
LIBERTY
ORANGE
AUSTIN
WALLER
HARRIS
JEFFERSON
CHAMBERS
COLORADO
FORT BEND
GALVESTON
WHARTON
BRAZORIA
MATAGORDA

Other SETRAC Programs

- Trauma Center Review & Certification
- STEMI Review & Certification
- STROKE Review & Certification
- EMS Review & Certification
- Prevention Programs
- Pediatric Emergency Care
- Disaster Integration (esp. Medical)

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VISION

“Never doubt that a small group of thoughtful, committed citizens can change the world;

indeed, it's the only thing that ever has.”

Margaret Mead

TRAUMA SYSTEM And NETWORK

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Trauma Program

A (Local, Regional, National) Organized TRAUMA PROGRAM Catalyst for Quality (Managing Population Heath)

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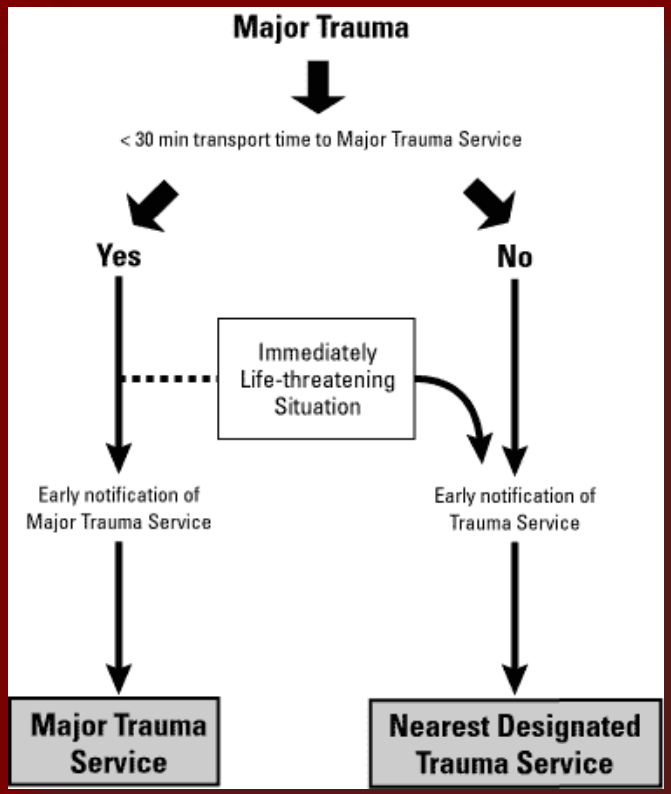
TRAUMA SYSTEM

- Integrated Collaborative System
  - EMS
  - Emergency Center Evaluation
  - Operating Room
  - Surgical ICU
  - Referring Centers
  - Loop Closure – Data Analysis
- Military & Disaster implications

System & Network

- Brings LOCAL, Regional, National & International SURGEONS together
- Standardizes treatment
- Improves results
- Utilizes emerging virtual technology & Internet
- Allows Sharing Resources

What is the relationship between Triage Criteria, Destination Protocols and Activation Criteria?



- In an ideal system – this would be optimal
- Greater emphasis on this

REGIONAL TRAUMA SYSTEMS: OPTIMAL ELEMENTS, INTEGRATION, AND ASSESSMENT

SYSTEMS CONSULTATION GUIDE

COMMITTEE ON TRAUMA
AMERICAN COLLEGE OF SURGEONS

TRAUMA SYSTEMS
EVALUATION AND PLANNING COMMITTEE

TRAUMA IMPACT on OTHER AREAS

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Surgical Morphing

TRAUMA
CRITICAL CARE &
ACUTE CARE
SURGERY

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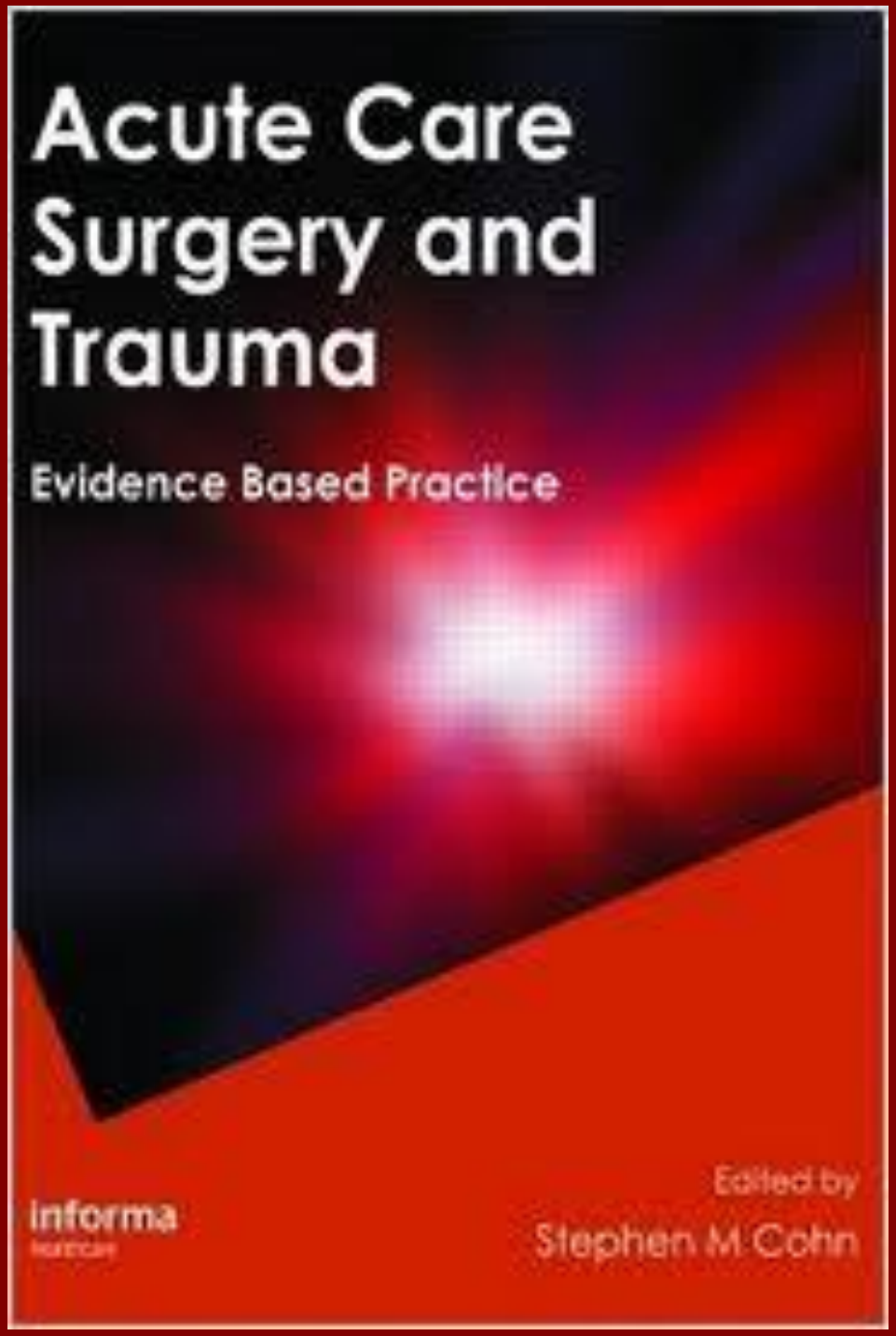
Michael E. DeBakey
Department of Surgery

Acute Care-Critical Care

- Closely linked to “Trauma”
- Surgical Oversight often SAME
- Also consider Emergency Surgery – Surgical Hospitalists
- NOT well served by Medical Intensivist or Anesthesiologists
- Continuum of SURGICAL APPROACH


Acute Care Surgery and Trauma
Evidence Based Practice
Edited by
Stephen M Cohn
informa

TRAUMA and GENERAL SURGERY

Baylor College of Medicine
Michael E. DeBakey Department of Surgery

Trauma & "General Surgery"

- General Surgery is disappearing
- Trauma Care (EMS, EC, OR, ICU, Clinic) is very much what GS used to be
- Excellent training base for General Surgery
- Faculty of Trauma are General Surgeons

TRAUMA and Surgery SPECIALITIES

TRAUMA & Surgery Specialties

- Burns
- Neurosurgery
- Vascular Surgery
- Orthopedic Surgery
- Surgical Critical Care
- Surgical Infectious Disease
- Plastic & Reconstructive Surgery

TRAUMA & MEDICAL DISASTER RESPONSE

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Department of Surgery

TRAUMA/Disaster Response

DISASTER RESPONSE

- War – Constant disaster
- Triage & Surge
- Disaster plans & trauma plans – SAME
- Integrated communications & Command

TRAUMA & MILITARY MEDICINE

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Department of Surgery

TRAUMA / Military Medicine

- Linked throughout history
- Frequency harmonics of relearning lessons
- Research exchanges
- Personnel co-training

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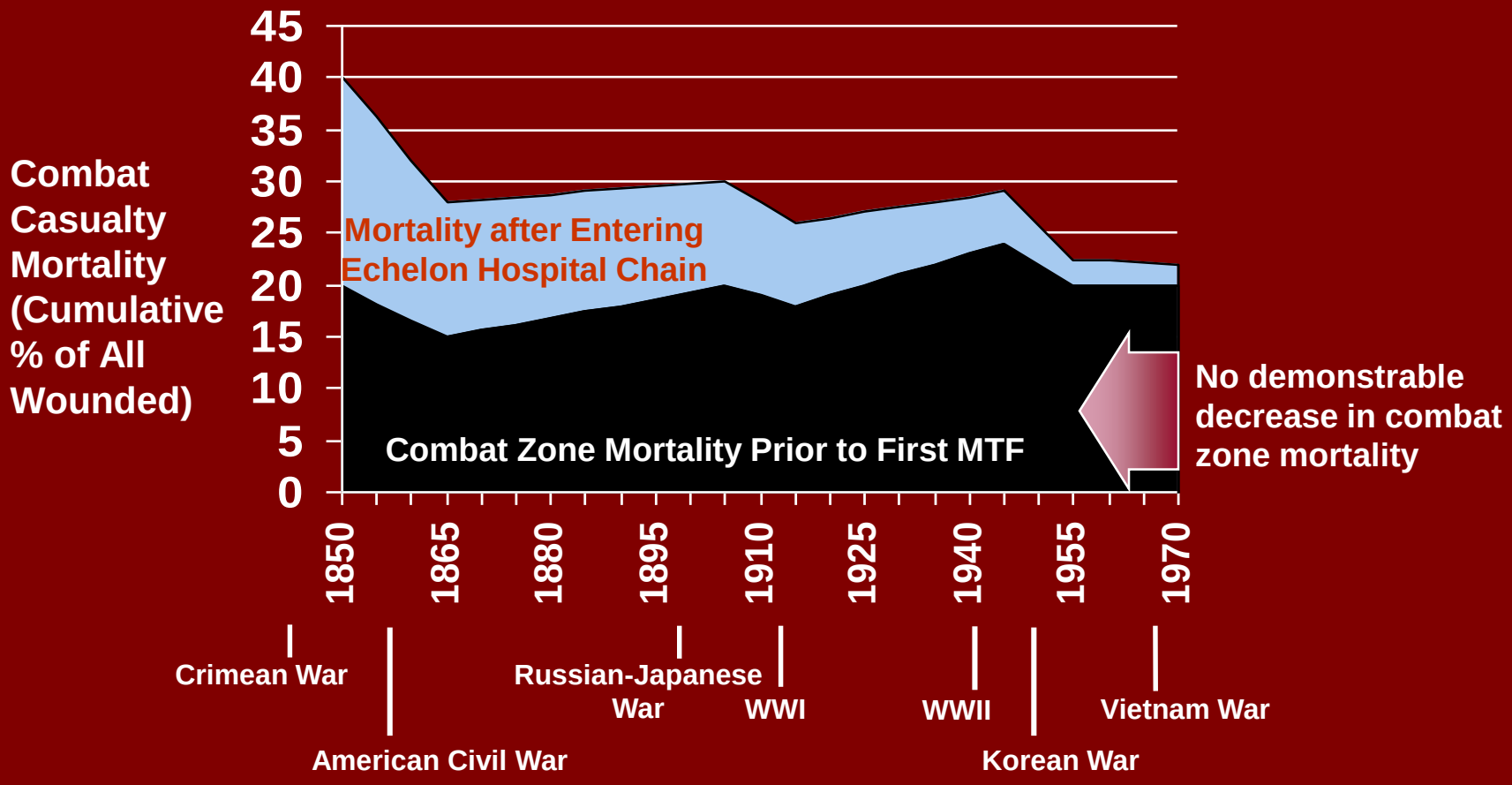
In-Theater Combat Mortality*



*Slide from Dr. Jane Alexander, DARPA

In-Theater Combat Mortality*

Killed in Action (KIA) in Iraq

12.2%

(Averaged 20% for all wars since Crimean War)

WHAT WAS DIFFERENT IN IRAQ?

*Source – USUHS Symposium March 26, 2004

Lethality of War Wounds among U.S. Soldiers.*

War	No. Wounded or Killed in Action	No. Killed in Action	Lethality of War Wounds
			%
Revolutionary War, 1775–1783	10,623	4,435	42
War of 1812, 1812–1815	6,765	2,260	33
Mexican War, 1846–1848	5,885	1,733	29
Civil War (Union Force), 1861–1865	422,295	140,414	33
Spanish-American War, 1898	2,047	385	19
World War I, 1917–1918	257,404	53,402	21
World War II, 1941–1945	963,403	291,557	30
Korean War, 1950–1953	137,025	33,741	25
Vietnam War, 1961–1973	200,727	47,424	24
Persian Gulf War, 1990–1991	614	147	24
War in Iraq and Afghanistan, 2001–present	10,369	1,004	10

* Data are from the Department of Defense.[1,3]

Wounding to Surgery Times

- WWI WWII – Sometimes days
- Korea / Vietnam – 1-20 hours
- Mogadishu – 17 hours to care
- Afghanistan – 14 hours
- Iraq – less than one hour
- Trauma Center US – 8 minutes (in some cities

Full spectrum of surgical casualty care

Large number of multi-trauma patients – general surgeon admits:
- Neurosurgery, Orthopedic surgery, ENT/OMFS

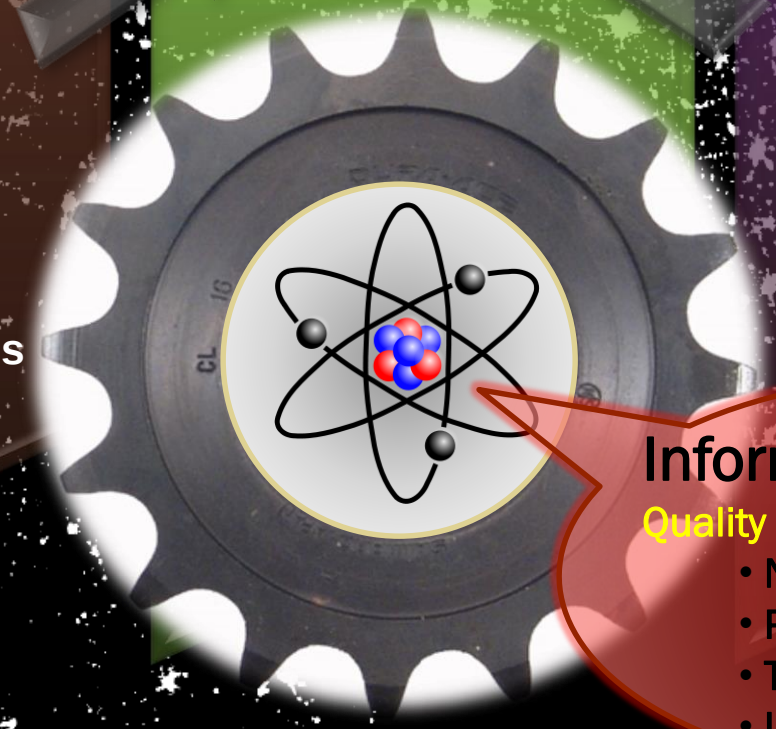
TRAUMA EDUCATION

Education

- ATLS
- PHTLS
- RTTDC
- DMEP
- Surgical Skills
  - ASSET
  - ATOM
- SBI
- Optimal Center

- Congress Courses
- Scudder
- East/West/Mid

Advocacy



Quality

- Systems
- VRC
- EMS
- Rural
- Disaster
- Prevention

Information Engine

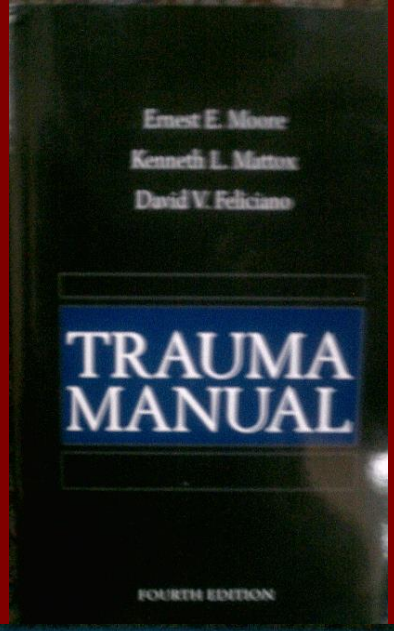
Quality and Data Resources

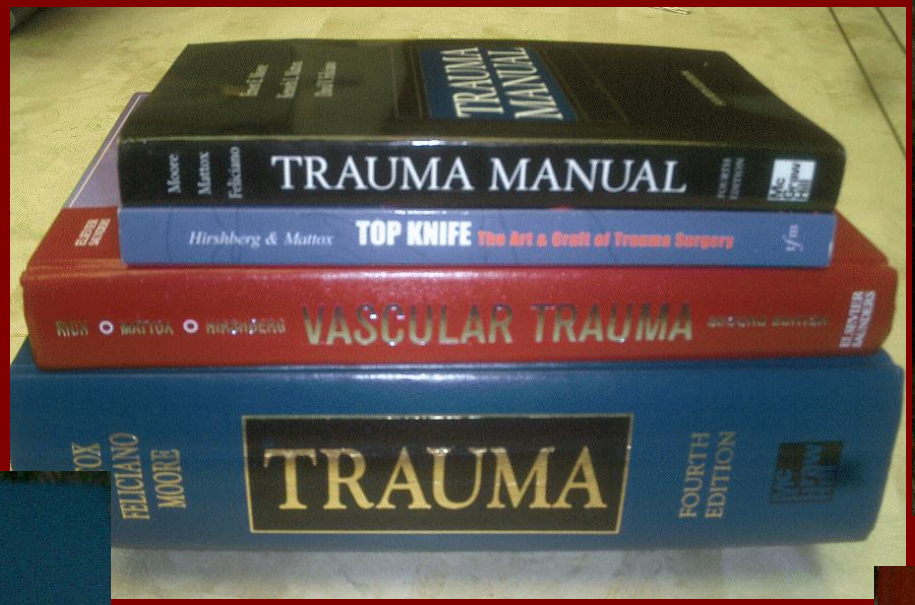
- NTDB - TQIP
- PIPS
- TSPEC - VRC Data
- Information Tech

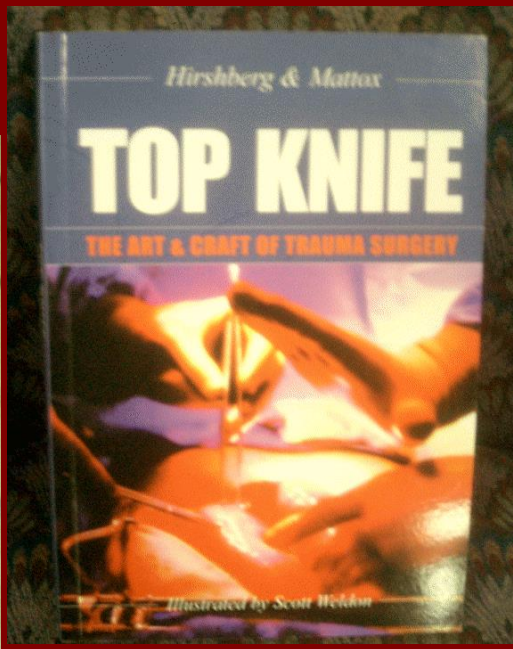
Trauma Education

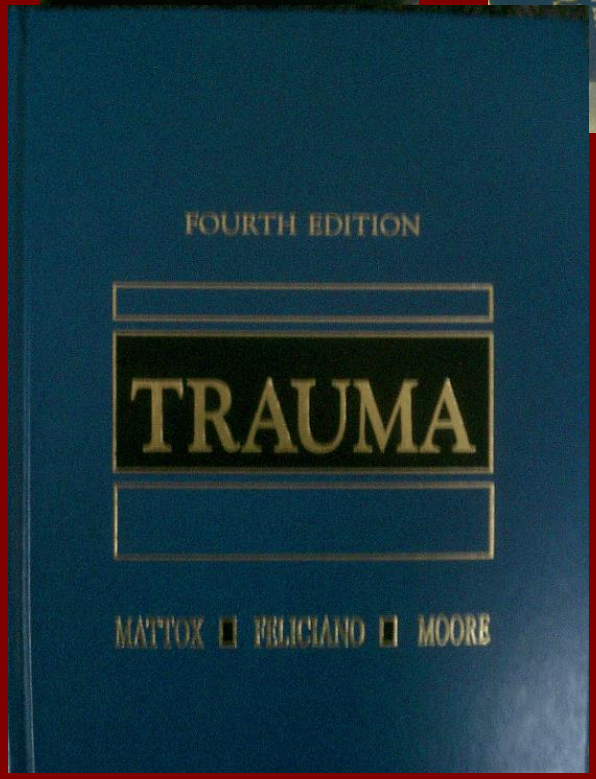
- Advanced Trauma Life Support Course – **ATLS**
- Trauma Evaluation and Management – **TEAM**
- Advanced Surgical Skills for Exposure in Trauma – **ASSET**
- Advanced Trauma Operative Management - **ATOM**
- Disaster Management and Emergency Preparedness – **DMEP**
- Optimal Trauma Center Organization and Management Course
- Rural Trauma Team Development Course – **TEAM**
- Prehospital Life Support Course – **PHTLS** *
- Trauma Outcomes and Performance Improvement – **TOPIC***

*cosponsored with other organizations

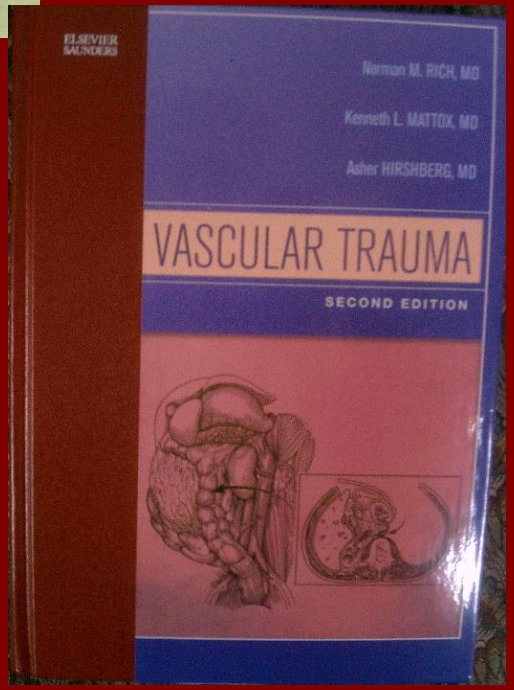

Ernest E. Moore
Kenneth L. Mattox
David V. Feliciano
TRAUMA MANUAL
FOURTH EDITION

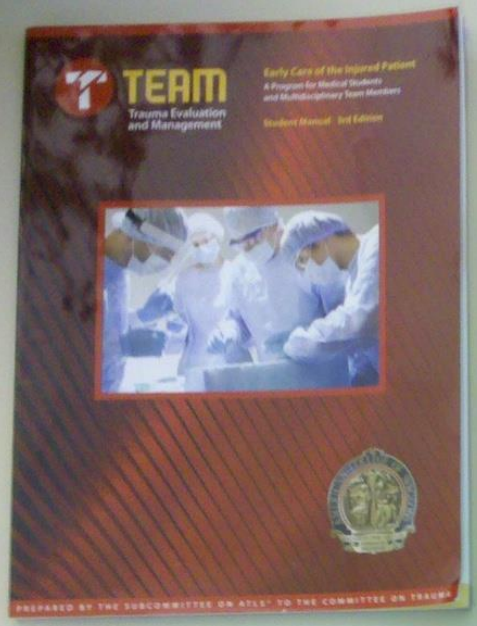

TRAUMA MANUAL
Moore
Mattox
Feliciano
Hirshberg & Mattox
TOP KNIFE The Art & Craft of Trauma Surgery
VASCULAR TRAUMA
TRAUMA
FOURTH EDITION

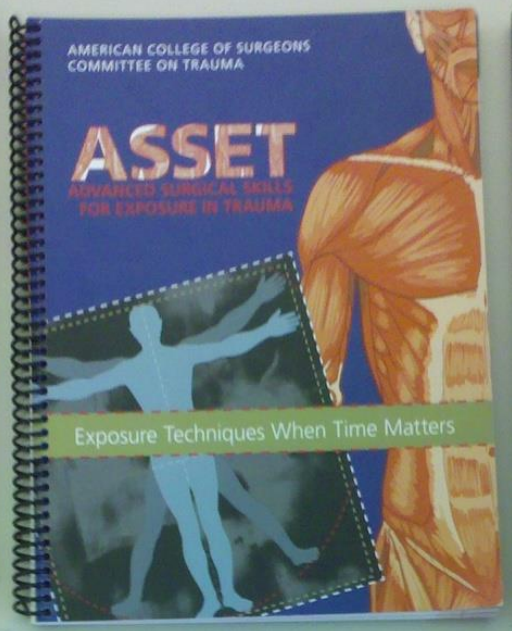

Hirshberg & Mattox
TOP KNIFE
THE ART & CRAFT OF TRAUMA SURGERY

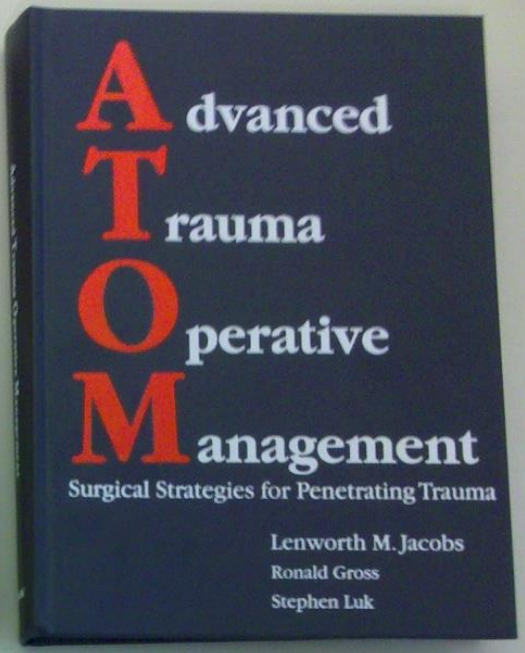

FOURTH EDITION
TRAUMA
MATTOX FELICIANO MOORE

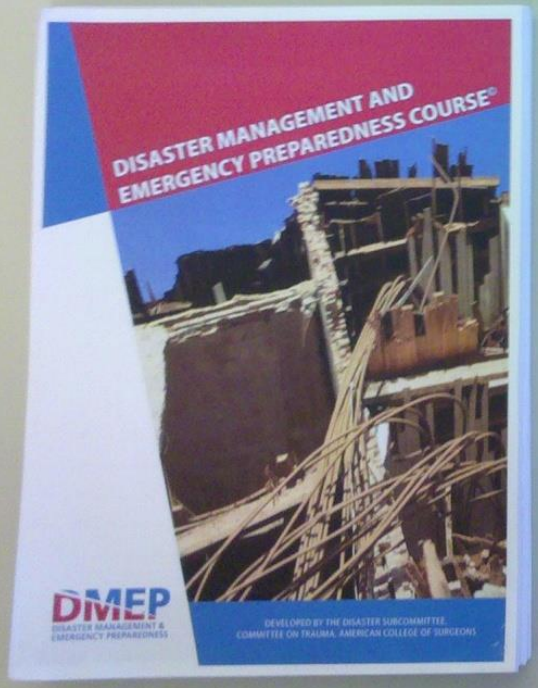
TRAUMA

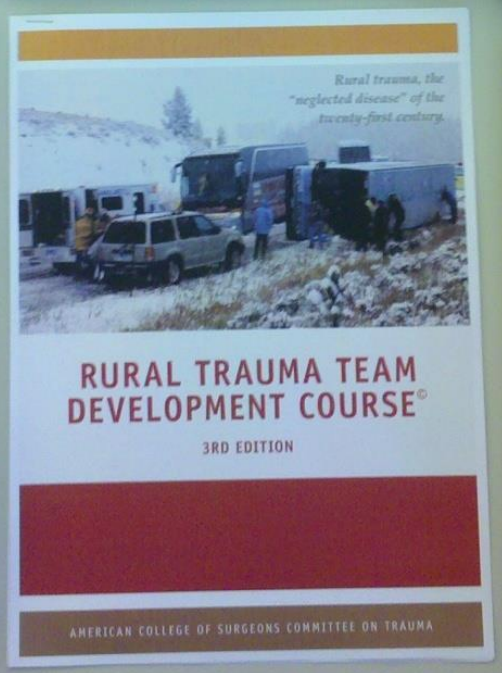

ELSEVIER
SAUNDERS
Norman M. RICH, MD
Kenneth L. MATTOX, MD
Asher HIRSHBERG, MD
VASCULAR TRAUMA
SECOND EDITION

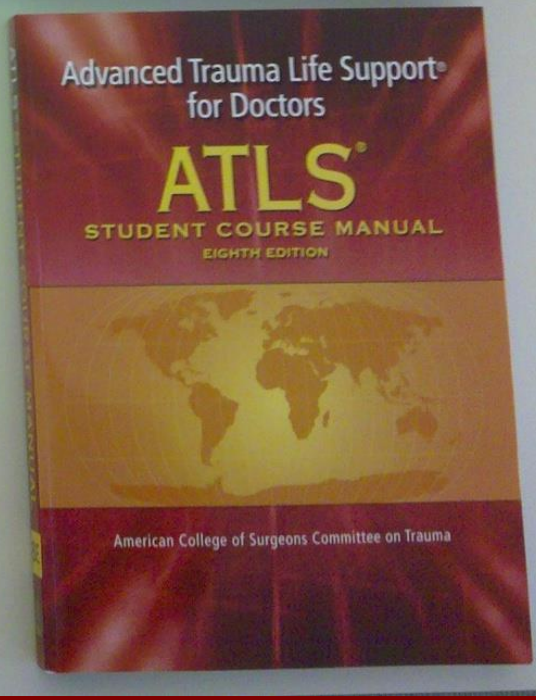

TEAM
Trauma Evaluation and Management
Early Care of the Injured Patient
A Program for Medical Students and Multidisciplinary Team Members
Student Manual 3rd Edition


AMERICAN COLLEGE OF SURGEONS
COMMITTEE ON TRAUMA
ASSET
ADVANCED SURGICAL SKILLS FOR EXPOSURE IN TRAUMA
Exposure Techniques When Time Matters


Advanced Trauma Operative Management
Surgical Strategies for Penetrating Trauma
Lenworth M. Jacobs
Ronald Gross
Stephen Luk


DISASTER MANAGEMENT AND EMERGENCY PREPAREDNESS COURSE®
DMEP
DISASTER MANAGEMENT & EMERGENCY PREPAREDNESS
DEVELOPED BY THE DISASTER SUBCOMMITTEE, COMMITTEE ON TRAUMA, AMERICAN COLLEGE OF SURGEONS


Rural trauma, the "neglected disease" of the twenty-first century.
RURAL TRAUMA TEAM DEVELOPMENT COURSE®
3RD EDITION
AMERICAN COLLEGE OF SURGEONS COMMITTEE ON TRAUMA

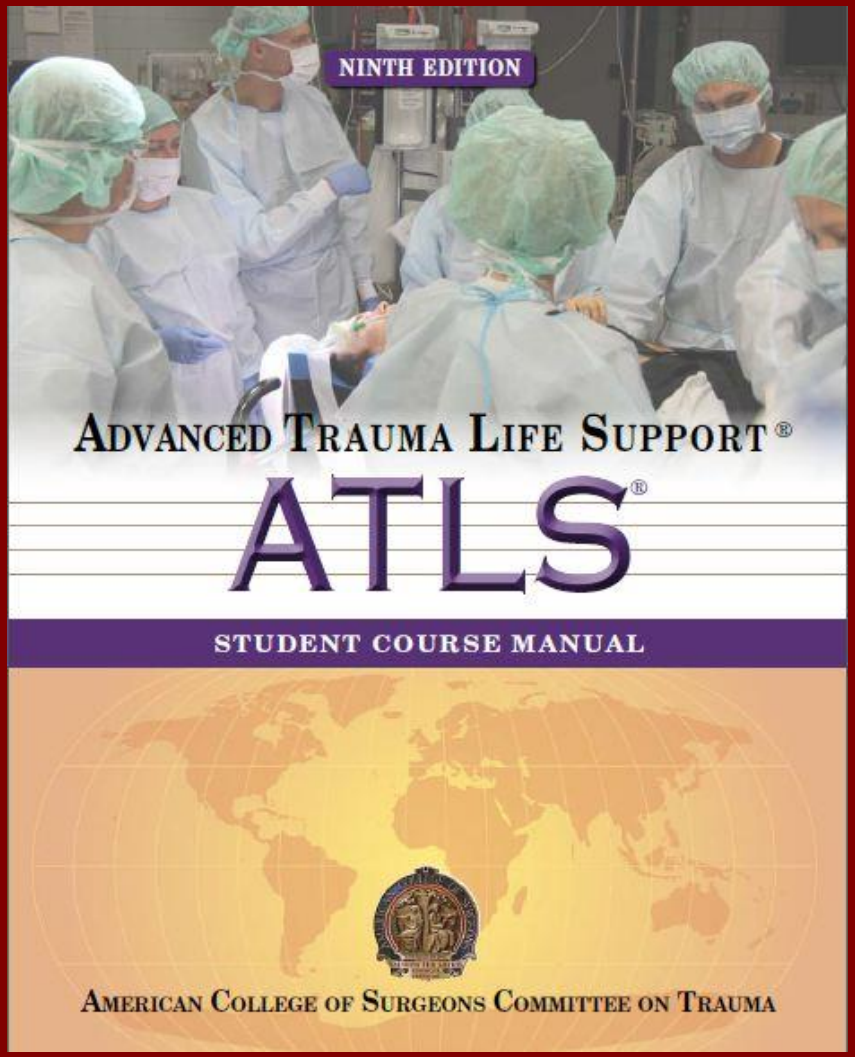

Advanced Trauma Life Support® for Doctors
ATLS®
STUDENT COURSE MANUAL
EIGHTH EDITION
American College of Surgeons Committee on Trauma

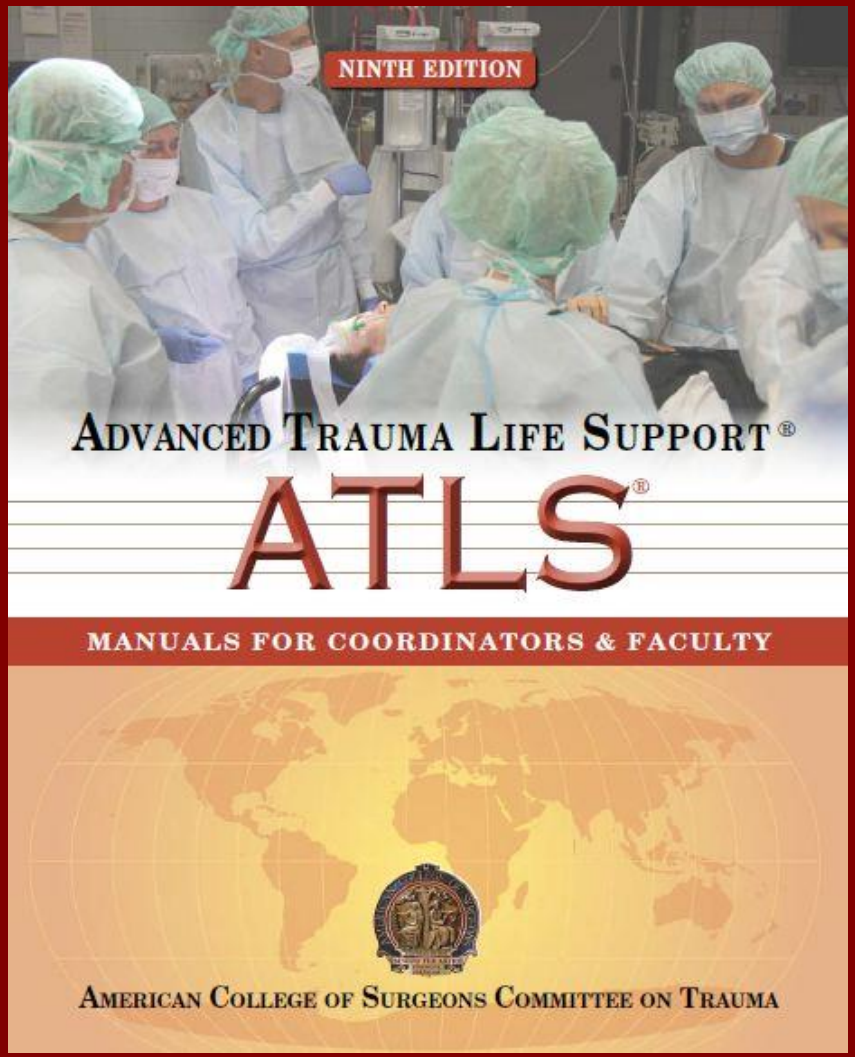
Trauma CME Courses – 2011 & 2012

Course Name	2011 Courses Held	2011 Students Trained	2012 Courses Held	2012 Students Trained
ASSET	35	30	87	442
ATLS	1,962	28,788	2,013* estimate	37,434* estimate
ATOM	82	371	97	368
DMEP	27	500	36	1100
RTTDC	89	754	91	1,572
Totals	2,165	30,753	2,324	40,916

ATLS 9th Edition- October 2012

New Look!





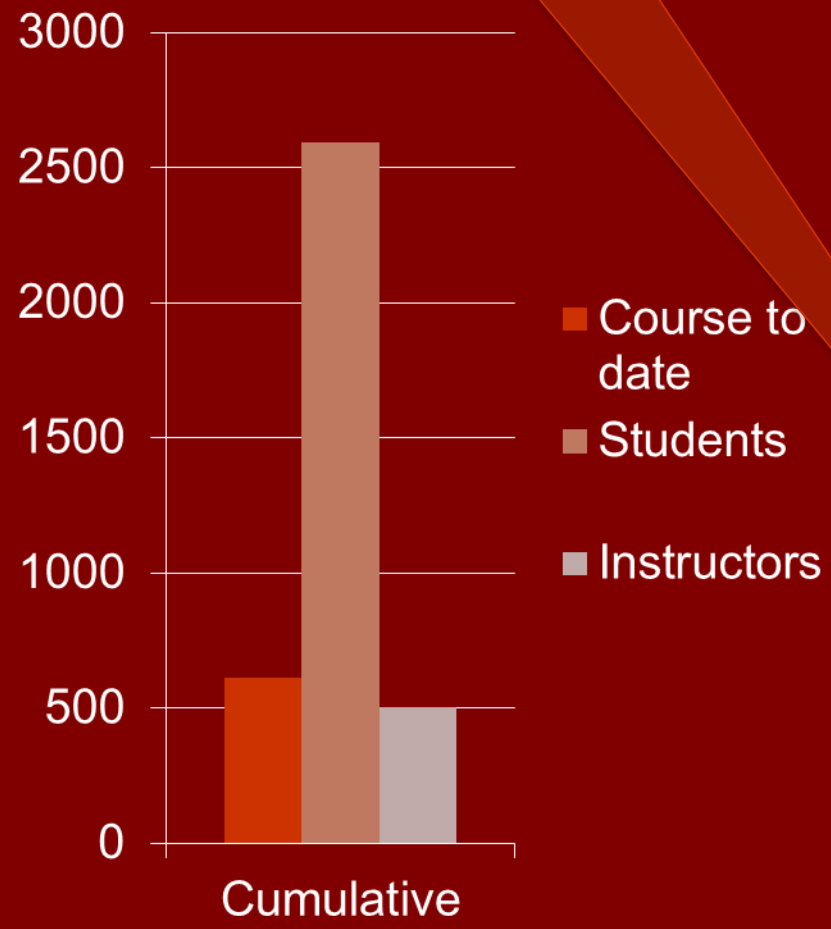
ATLS Promulgation

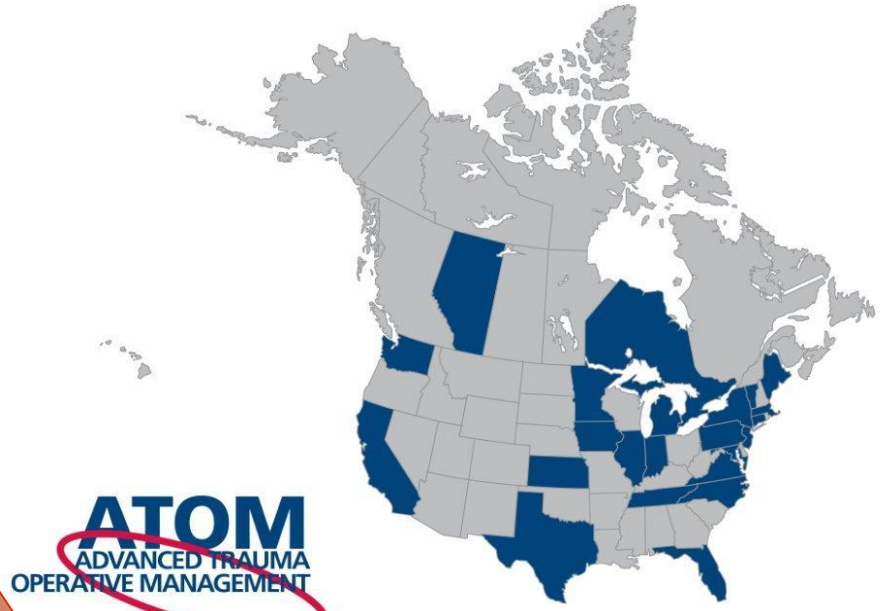
ATLS®
ADVANCED TRAUMA LIFE SUPPORT

AMERICAN COLLEGE OF SURGEONS
Inspiring Quality:
Highest Standards, Better Outcomes
100 years

Approved Applications: Bangladesh, Belize, Bosnia, Croatia, El Salvador, Georgia, Ghana, Honduras, Iraq, Mongolia, Philippines, and Poland

Colombia


3000
2500
2000
1500
1000
500
0
Course to date
Students
Instructors
Cumulative

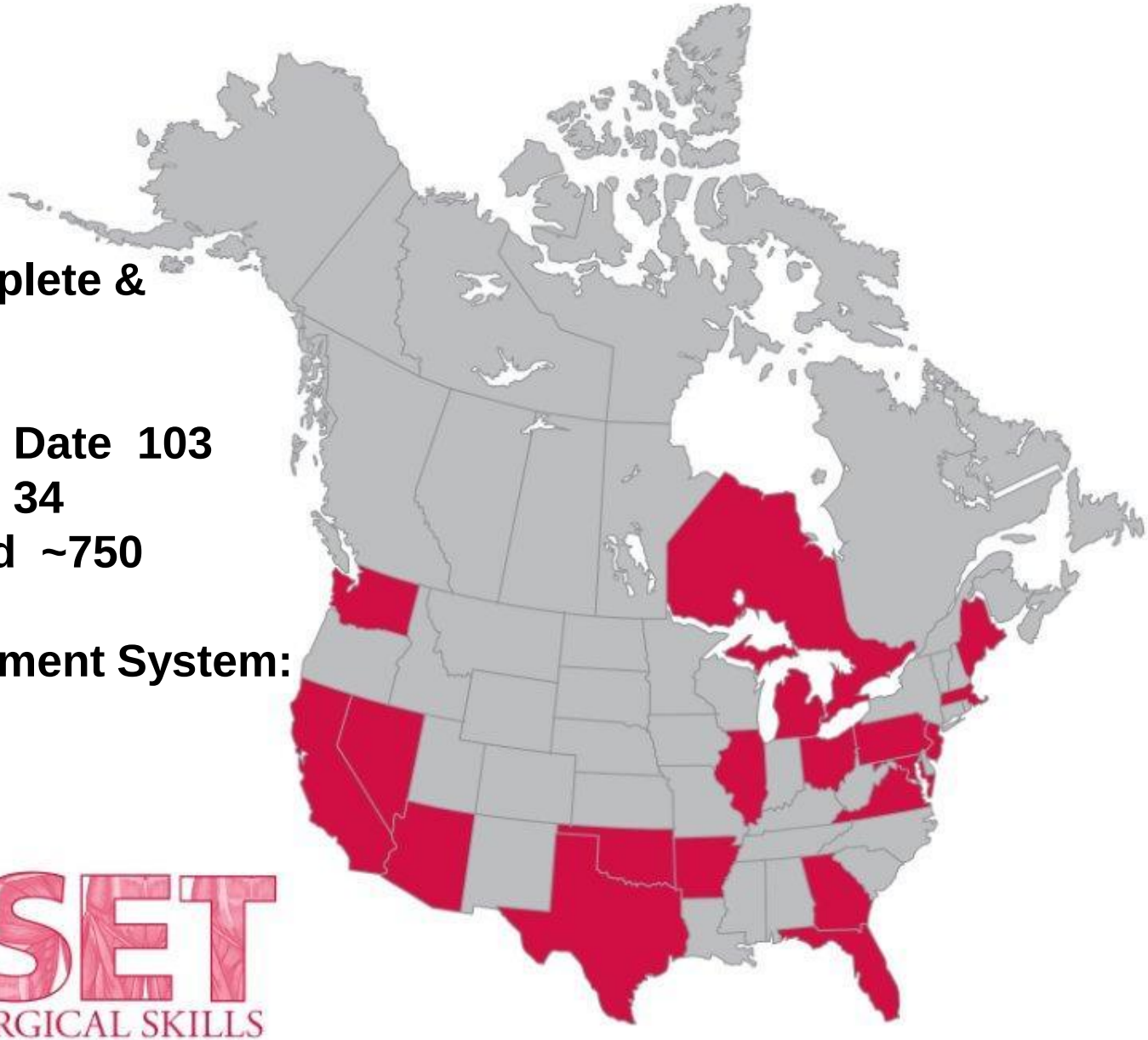

ATOM
ADVANCED TRAUMA
OPERATIVE MANAGEMENT


ATOM
ADVANCED TRAUMA
OPERATIVE MANAGEMENT

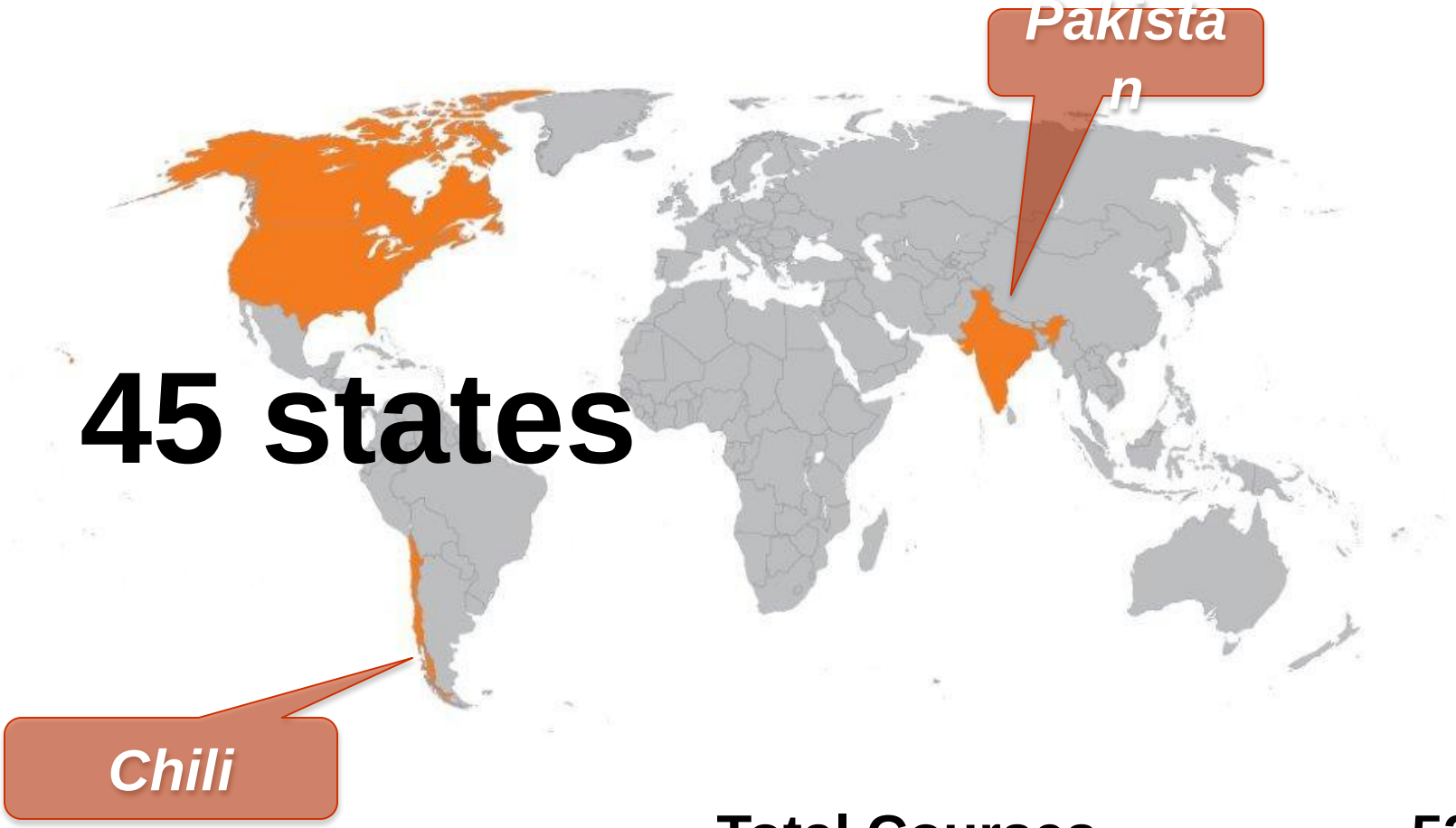
Courses Held:

2008: 1
2009: 2
2010: 13
2011: 39
2012: 63 (complete & scheduled TD)

Courses held to Date 103
Number of sites 34
Students trained ~750
Instructors: 165
Course Management System: March 2013



ASSET
ADVANCED SURGICAL SKILLS FOR EXPOSURE IN TRAUMA

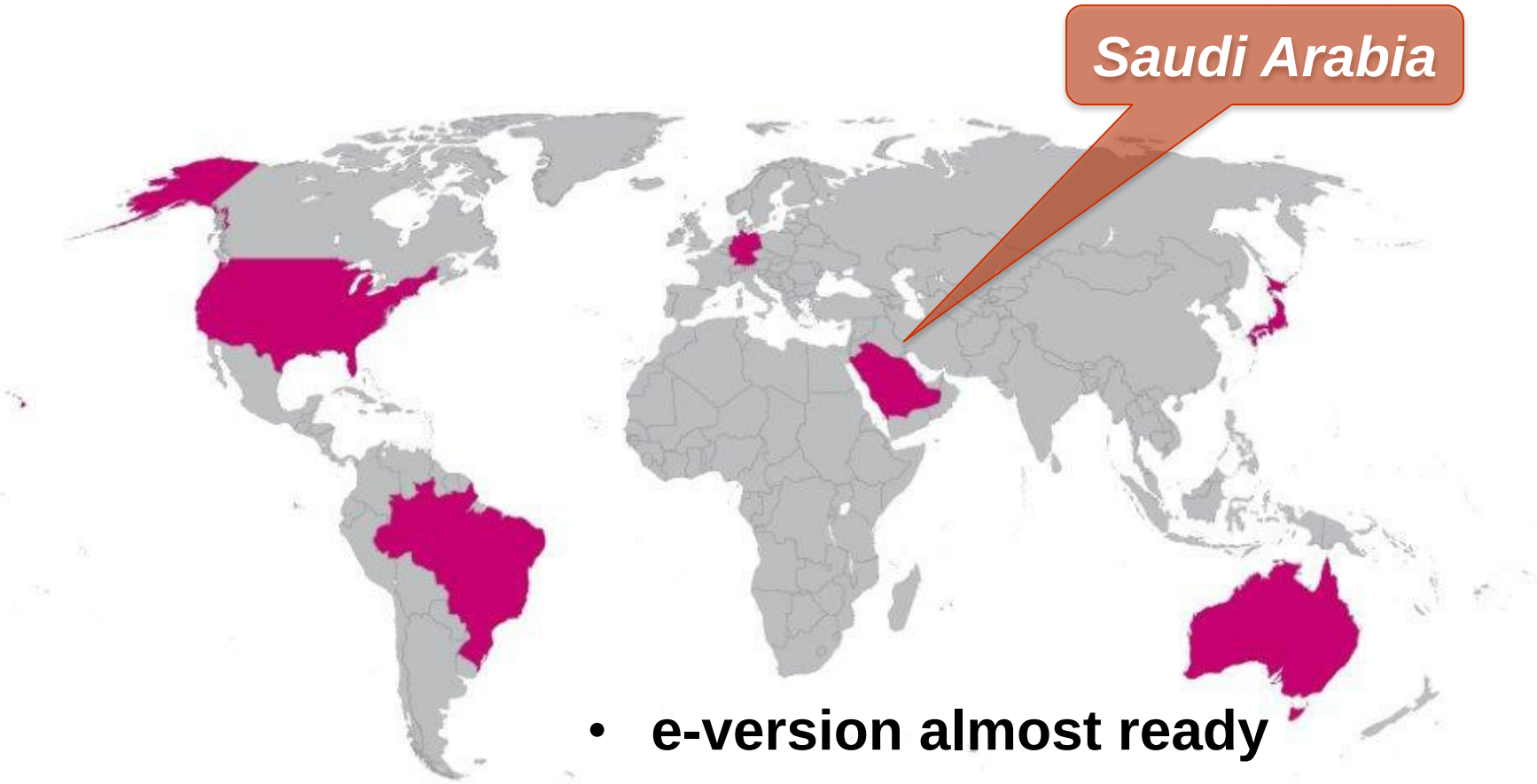


45 states

rttdc
rural trauma team development course

Total Courses	530
2012 Completed	40
Students trained	7000
Instructors	125

3rd edition Spanish, French



- **e-version almost ready**
  - **beta testing with committee**
- **program revisions for fall 2013 release**
- **8 courses scheduled between now and April 2013**
  - **131 to date; 1, 875 student**

DMEP
DISASTER MANAGEMENT & EMERGENCY PREPAREDNESS

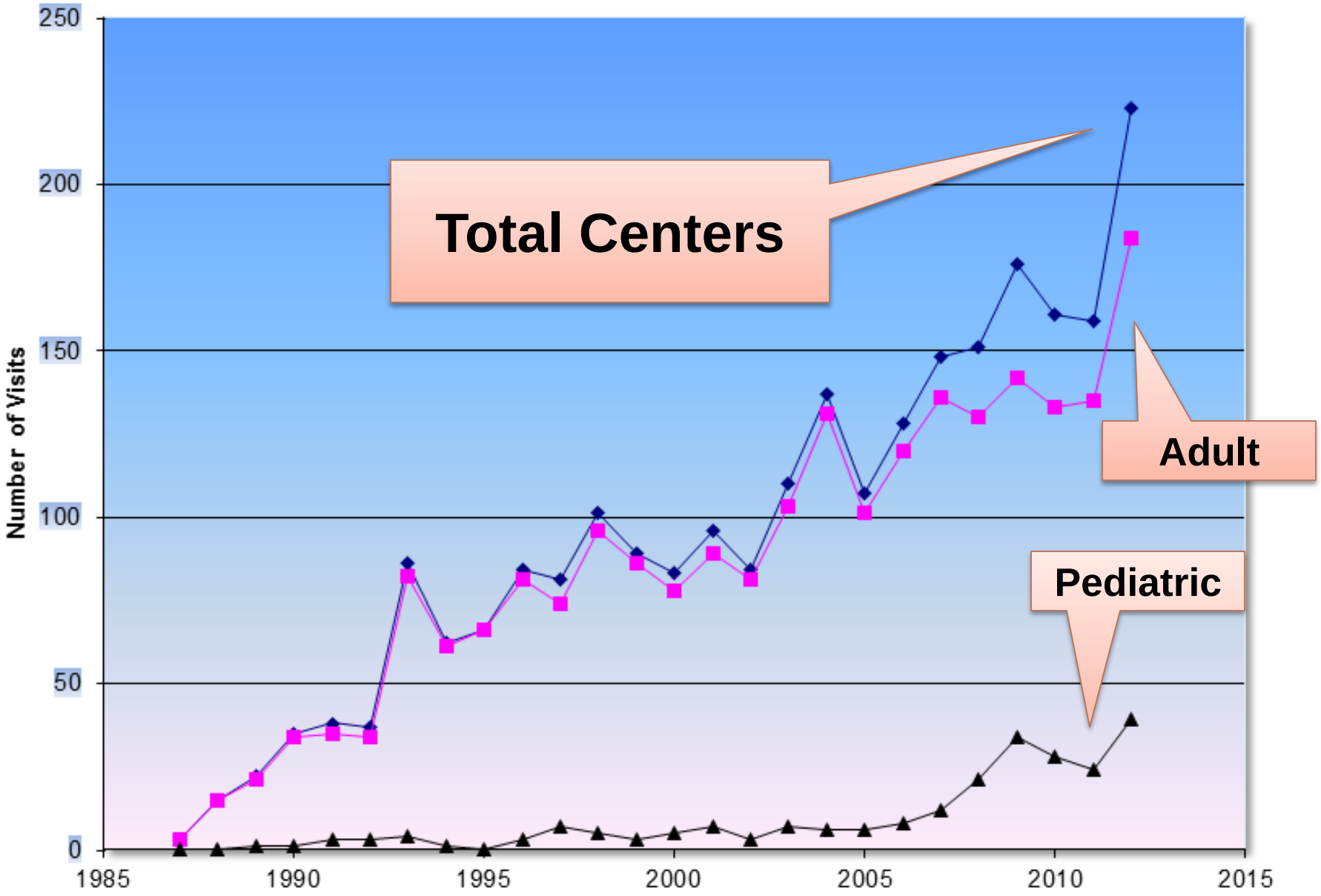
QUALITY
&
VALUE

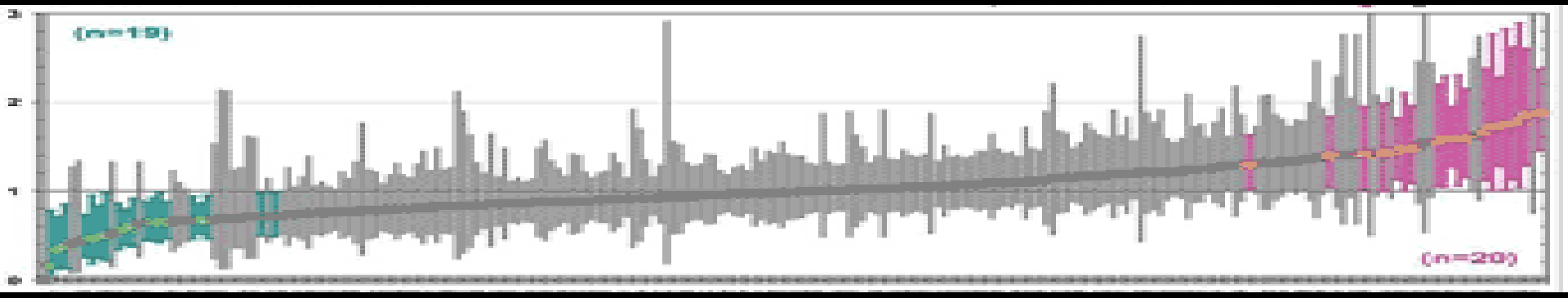
QUALITY AND SAFETY

What does the American College of Surgeons do to improve patient quality and safety?

The American College of Surgeons has developed a way for hospitals to measure performance now used in over 170 hospitals across the country.

ACS Visits 1987-2012




(n=19)
(n=20)

INTERNATIONAL

International Affairs

ACS GLOBAL

How can we work together more effectively to advance the cause of the injured?

Can the COT morph and change to meet needs across the globe?

How can we partner with other International Societies with like minded ideals?

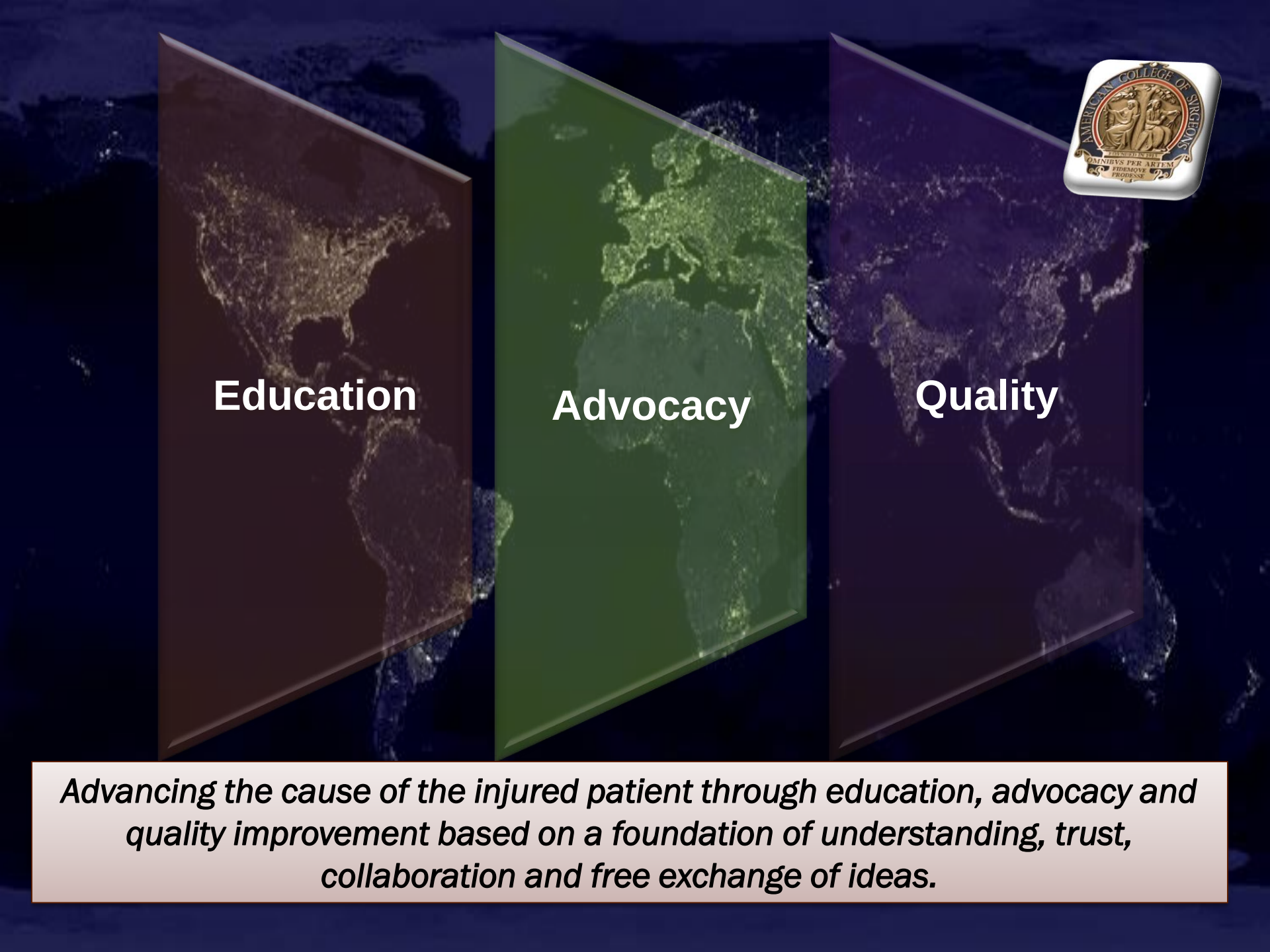
International Injury Care Committee

A new structure within the COT…… International Region Chiefs, ATLS International Leaders, key members of the National COT and a Diplomatic Core charged with:

- ***Developing new relationships***
- ***Fostering understanding, trust and collaboration***

Ideas: Global Collaboration Next Steps

- *International Trauma Data Bank (ITDB)*
- *Relevant Standards for Trauma Centers*
- *Relevant Trauma System Assessment*
- *Education/TEAM*



Advancing the cause of the injured patient through education, advocacy and quality improvement based on a foundation of understanding, trust, collaboration and free exchange of ideas.

6. Expectations EMS Hospitals

All Hospitals are NOT the same

EPIPHANY

Baylor College of Medicine

American College of Surgeons Trauma Program as a MODEL for EXCELLENCE / QUALITY

EMS ERRORS

As perceived by Trauma Centers

EPIPHANY

Baylor College of Medicine

7. Expectations Disaster Medical Responses

EPIPHANY

Baylor College of Medicine

8. Putting it all together

FOR THAILAND

OPPORTUNITIES for Thailand