

# Visioning Simulation Conference

*Summary Report to the TSDA*

# Center for Medical Simulation, Cambridge MA April 19 - 20, 2007

- TSFRE
- JCTSE
- ABTS
- TSDA
- STS
- AATS
- ACS
- EACTS
- Industry

## TSDA Representatives

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Manuscript reviewer

# Reasons for change

*“How can simulation be used to improve patient safety and transform thoracic surgery in a positive way?”*

- Procedural
  - Individual Training
  - Uncommon techniques / procedures
  - Team Training
    - communication, judgment, safety
- Computer Based Simulation
  - Patient Specific Anatomy
  - Operative Planning
  - Pattern recognition
  - Rare events

*“What is unique about thoracic surgery as a specialty that makes it the right venue for leading the way in simulation for surgical education?”*

- Small specialty, highly algorithmic
- Committed leadership
- Repetitive activities
  - Rare variations benefit from simulation
- Time limitations and outcomes visibility
- We are already behind

Simulation needs and wants

*“What physiological procedures and patient care activities most need to be simulated?”*

- Fundamental skills
- Complex integration skills
- New / evolving techniques
- Communication skills
  - Effective informed consent
  - Challenging patients / families
- Repository database of anatomic variations

*“What team challenges and competencies most need to be simulated?”*

- Team dependent activities
  - Improve interactions
  - Reduce errors
- Minimize learning critical steps on live patients

# Implementing simulation in thoracic educations

“What key simulation activities and events should happen in which locations as we build and implement a comprehensive simulation system for thoracic surgery?”

	Low fidelity		High Fidelity
Local	Basics, team building, events, computer based		
Regional / Mobile		Endo... , new technology, robotics	
National			Complex, uncommon, certification *

\* Need for validation and consistency

*“What key actions are necessary to begin implementation of simulation in thoracic surgery education?”*

- Certification or maintenance of certification
  - Very high fidelity, validated simulations
  - Gradual implementation
  - Residency training / check out
- Team Training
  - Improve communication
  - Define roles and empower
  - Error analysis and prevention
- Emerging Technology
  - Train new techniques
  - Develop and validate new procedures / techniques
  - High Fidelity

# Funding Simulation Support

*“Whose support do we need (key decision makers with resources) to make this vision happen?”*

- Profit motivations
  - Device industry
  - Simulation industry
- Government
  - NIH, NSF, NASA, DoD, others?
- Payers / Malpractice providers
  - Motivated by improved safety, reduced cost
- Private investors / foundations
  - Motivated by profit / philanthropy

*“What are the critical resources we need to make this vision a reality?”*

- We are already behind
- Build catalog
  - Available centers / technology
  - How are these being used?
  - How can WE access and use them?
- Mandate
  - Professional societies
  - Boards / training governance
  - Government

# Vision and Action

- What actions are we, individually or collectively, willing to undertake?
- Who is willing to make sure this task happens?
- How long will this task take?

# Role of TSDA

- Formulate simulator based curriculum
  - Kurt Tribble
- Identify available simulators / potential developers
  - Joe Zwischenberger
- Establish profession-wide task force
  - Bill Baumgartner (JCTSE)