

The Position of the
Eastern Association for the Surgery of Trauma
on the Future of Trauma Surgery

EAST Future of Trauma Surgery Committee

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Preface

Efforts are underway throughout American Surgery to redefine the scope of general and trauma surgery, and to determine training paths required for board certification. Current proposals are formulated based on both current and past practice. However, these initiatives are proceeding, with little regard for the willingness of candidates to pursue these practices given the future health care and social environment. Moreover, the sociocultural and professional mores of the future prospective candidate pool must also be considered.

In formulating the position paper that follows, the Eastern Association for the Surgery of Trauma has explored the issue from the standpoint of patients, the health care system and the surgeons of the future. It has attempted to identify key opportunities for change, which might enhance this surgical specialty. In formulating this position, EAST has researched and acknowledged incentives or disincentives to entering the field and has been proactively responsive to these factors in recommending a practice model.

The exhaustive review of the literature and analysis of opinion surveys administered to medical students, residents, trauma fellows and practicing surgeons upon which the position statements are founded is available on the EAST website (www.east.org). Issues identified as crucial to developing a desirable practice which will attract future physicians, revolve around the following: 1) An expanded scope of practice not limited to trauma and surgical critical care, but including both elective and emergency general surgery; 2) a personal and professional lifestyle which allows for predictable and

controllable work hours with appropriate support to minimize stress; 3) compensation perceived to be commensurate with work effort and other high intensity/high stress professions.

In summary, then, there is evidence from the literature and surveys of current and future surgical practitioners of desirable job characteristics that can be applied to trauma surgery with regard to education and training, scope of practice, income, work environment, benefits and restrictions. Based on this evidence, the EAST puts forth the following position statements on the future of trauma surgery, which confront and address this evidence.

Qualifying Statement

The Eastern Association for the Surgery of Trauma recognizes that the following position statement characterizes an optimal model and that certain caveats exist with regard to its uniform acceptance and full implementation. These include the need to be sensitive to local factors, such as the scope of the work, the volume of patients, the number of available surgical providers, and the availability of advanced level practitioners.

Moreover, local restrictions must be recognized and barriers must be overcome for full implementation to take place.

The effort to initiate and implement any such model of practice will involve effecting a paradigm shift among surgeons, the public and the healthcare community. A wide-ranging educational and marketing campaign will be required to alert policy makers of the crisis in uniform access to quality trauma care, the causes of its impending demise, and the consequences of the extinction of trauma surgery. Collaboration and education within the healthcare and insurance industries will be necessary. Unanimity of purpose and philosophy within hospitals, departments of surgery, and professional organizations and society will also be necessary. Similar forces on American medicine were necessary to legitimize the discipline of Emergency Medicine. Those concerted efforts delivered the resources required to support and sustain both the practice model and the practitioners.

The Eastern Association for the Surgery of Trauma is fully cognizant of the fact that until such a paradigm shift occurs there is a great need to achieve flexibility within the optimal

philosophy, and determine which components are non-negotiable and which are less essential. This may require adoption of a format similar to that of the American College of Surgeons Committee on Trauma Optimal Resources Document, which employs an essential vs. desired categorization for equipment and services.

The Eastern Association for the Surgery of Trauma is equally cognizant that implementation of such a model, in even a less-than-complete form, may dictate regionalization of trauma care along with pre-hospital triage, and perhaps also “back triage” or repatriation. This may not be popular or feasible initially, thus presenting yet another challenge to trauma and health system planners. It will also require a more intimate, protocol-driven, and closely monitored involvement of Emergency Medicine specialists in the initial stabilization and non-operative management of patients as part of a close-knit network. This type of staged care delivery, initially utilizing non-surgeons, will need to be incorporated into trauma system design with a legitimate process of system verification and performance improvement. Abdication of this initial care of trauma patients by general and subspecialty surgeons has already occurred in many communities.

Despite these issues, the Eastern Association for the Surgery of Trauma espouses this scope of training and practice model template as an ultimately achievable entity. It must be considered seriously if quality and cost-efficient patient care is to be delivered consistently. We believe its implementation is equally important to the survival of our

profession and will allow us to achieve our primary and ultimate goal of better serving patients and society.

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Position Statements

The Eastern Association for the Surgery of Trauma Future of Trauma Surgery

EAST Position on Training Paths in Surgery, Trauma, Surgical Critical Care, and Emergency Surgery

1. The Eastern Association for the Surgery of Trauma is supportive of the ongoing authority and scope of the American Board of Surgery and its role as the determining body for the core of general surgery knowledge necessary for certification as a specialist in surgery.
 - This includes the general composition of residency rotations, the necessary cognitive and psychomotor skills, and the six core competencies in general surgery.
 - The Board will, as expected, remain the governing body determining the duration of this experience for trainees in surgery. This duration is expected to be either four or five years.
2. The Eastern Association for the Surgery of Trauma believes that there is a specialty that exists separate and distinct from the core of general surgery and all other surgical specialties. This specialty is constituted primarily by care of trauma and emergency surgery patients and the critically ill surgical patient but does not eschew the principles of elective general surgery in which it is rooted, nor does it preclude a practice encompassing elective general surgery.
 - This practice in surgery contains all the attributes necessary to qualify for a separate board, including a specific patient population, a body of knowledge, a core curriculum, a lead organization, and a group of physicians currently in practice within that realm.
 - This practice is defined by and within the scope of general surgery.
3. On the basis of this, the Eastern Association for the Surgery of Trauma supports the creation of an advisory group to the American Board of Surgery to determine the scope of work to be performed by this specialist and to develop a specific training path above the core of general surgery in this area of specialty. The Eastern Association for the Surgery of Trauma believes that the curriculum for this specialty training should, in addition to general surgery, encompass surgical critical care, trauma, and emergency surgery, and should have all the hallmarks of a bona fide training path for surgeons.
 - This advisory group should be a multidisciplinary organizational group with broad representation from organizations such as the American Association for the Surgery of Trauma, Eastern Association for the Surgery of Trauma, Western Trauma Association, Society of Critical Care Medicine, American Burn

Association, American Pediatric Surgical Association, Association for Program Directors of Surgery, Association for Surgical Education, American College of Surgeons and its Committee on Trauma, and the American College of Emergency Physicians. Representation or advisement should also be sought from the American Boards of Vascular Surgery, Thoracic Surgery, Orthopedic Surgery, Neurological Surgery, Radiology, Emergency Medicine and the American Board of Medical Specialists, as well as the Surgical Section of the Residency Review Committee, Association of American Medical Colleges, and potentially other pertinent professional entities.

- This group should be concerned with development of the curriculum content and competencies, as well as the training path and time interval required to master them.
- This group should be aware of, and sensitive to, the content of training in the core of general surgery such that appropriate balance and interplay can take place between general surgery training and specialty training. It must also be sensitive to a tenable time frame (including medical school) for imparting this large body of knowledge and technical skill.
- This training path should include content relative to emergency surgery, including the study of conditions related to peritonitis, soft tissue infection, and shock, including their physiology, biology, and metabolic implications.
- It should include complete training in trauma, including the cognitive basis for the treatment of injuries of the abdomen, neck, thorax, soft tissue, and major vasculature. It should also include trauma training relative to burns, basic and intermediate orthopedic trauma management, including placement of traction pins, splints, closed reductions, and perhaps external fixators of the pelvis and extremities. It should also include initial management of neurosurgical trauma emergencies, including intracranial pressure monitor placement, but not formal craniotomy. Specific training relative to pediatric injury should be included.
- The training should also encompass comprehensive education in surgical critical care and management of acute surgical conditions. This would include a complete understanding of infection control and treatment, bedside surgery and the physiology of critical illness. This curriculum should include a full understanding the physiologic principles as well as operative and technical skills.
- Recommendations for the number and types of rotations in trauma, emergency surgery, and surgical critical care should be addressed for residency and medical school. These recommendations should also include the training level at which these rotations should occur. Moreover, operations, resuscitations, and case management experience should be monitored and catalogued. Didactic aspects of each element should be explicitly specified.
- The need for, and extent of, experience in burns, orthopedics, thoracic, vascular surgery, infectious disease, nutrition, pediatric ICU, pulmonary medicine, and interventional radiology should be determined.
- Training in the performance of laparoscopic surgery, diagnostic and therapeutic imaging and endoscopy, as well as education in the areas of the metabolic basis of disease, coagulopathy, sepsis, hemodynamics, geriatric considerations, bowel physiology and burns should be compulsory.

- Exposure to other specialties, including emergency medicine, anesthesiology, infectious disease, and cardiology should all be given careful consideration.
 - The nature, extent and placement within the training period for non-surgical and non-medical education such as systems administration, business, and other ancillary topics shown to be of need must be determined.
4. The Eastern Association for the Surgery of Trauma recognizes that there is a critical and worsening shortage of burn surgeons and a meager number of hospitals with committed resources to support them. Few residency programs are equipped to train burn surgeons; the adoption of this model may not resolve this issue.
 - Therefore, trainees in this new specialty must be skilled in the resuscitation and initial stabilization of the burn patient.
 - Specialty trainees should be educated at institutions that are closely affiliated with American Burn Association-verified burn centers to accomplish this appropriately.
 5. The Eastern Association for the Surgery of Trauma believes that this specialty training must not limit the trainee's ability to perform elective surgery as defined by the core training in general surgery and governed by the American Board of Surgery.
 - Graduates must not be precluded from the elective practice of surgery.
 6. The Eastern Association for the Surgery of Trauma believes that those not taking this training path should not routinely be restricted from practicing surgical critical care or trauma surgery if they can be credentialed appropriately through a process that assures baseline and continuing competency in all areas integral to the specialty practice.
 - Initial acquisition of this competency may be achievable through a one-year experience during which the core competencies of surgical critical care and trauma surgery are mastered. Only after completion of such formalized additional training should a surgical practitioner assume the responsibility to manage critically ill and injured patients.
 7. The Eastern Association for the Surgery of Trauma, recognizing the multiple factors pointing towards a need to compress and limit the length of overall surgical training, endorses the abandonment of formal fellowships as they are currently recognized in favor of their incorporation into the greater scheme of surgical residency training as it will emerge.

EAST Position on Scope of Practice, Compensation, Longevity and Lifestyle for the Specialty Trained Surgeon in Surgery, Trauma, Surgical Critical Care, and Emergency Surgery

1. The Eastern Association for the Surgery of Trauma endorses a practice model for future trauma surgeons, which is hospital-based and encompasses a group practice of several specially trained surgeons.
 - Such a practice model is associated with a lesser degree of reluctance to treat trauma patients. The practice of individual private practitioners assembled into a loosely configured “trauma panel” eventually must be abandoned.
2. The Eastern Association for the Surgery of Trauma advises that such hospital-based groups develop and maintain standardized, consistent practice patterns and policies that are agreed upon by all practitioners and that are evidence-based to the greatest degree possible.
 - Such models have been shown to decrease variability and cost, increase efficiency and improve outcome.
3. The Eastern Association for the Surgery of Trauma advises the group practice should encompass a defined portfolio of patient types extending beyond the multi-system trauma patient. This portfolio will include, but not be limited to:
 - Elective General Surgery
 - Trauma
 - Surgical Critical Care (trauma/non-trauma)
 - Emergency General Surgery
 - Group practice “portfolios” will vary in nature and scope of patient composition based on the interest and expertise of the individuals within the group.
 - Such diversity will be an incentive for candidates considering careers in trauma surgery.
 - This broader scope will also increase volume, which will improve outcomes. Increasing volume also increases the potential for revenue.
4. The Eastern Association for the Surgery of Trauma recommends a defined scope of work for each group practitioner extending beyond clinical duties. The preferred scope of practice will involve:
 - Clinical responsibilities encompassing both operative and non-operative work.
 - Non-clinical responsibilities such as teaching both at the bedside and in the classroom, administration, community education and outreach for a broad base of learners including healthcare providers, the public and government officials, research (basic science, translational, clinical, epidemiologic and systems) and allied efforts related to Emergency Medical Services and disaster preparedness.

The scope of work for each individual or group will vary according to factors including skill mix, interest, and seniority.

5. The Eastern Association for the Surgery of Trauma advocates tangible lifestyle-enhancing policies and benefits for practice groups and their members, which are commensurate with other industry and professional group standards.
 - These should include but not be limited to:
 - Enforced mandatory day off after night call
 - Limited and predictable weekly work hour schedules
 - Mandatory vacation time – distinct from educational leave
 - A programmed progression from greater amounts of acute care responsibilities and night call to greater amounts of non-clinical responsibilities and less night call as the practitioner ages.
 - Formulation of contingency plans for emergent absences of group members to decrease stress/workload of the remaining staff
 - Guaranteed maternity/paternity leave
 - Child daycare/nightcare benefits
 - Reimbursed CME time – distinct from vacation
 - Strictly protected intervals for pursuit of non-clinical activities and responsibilities
 - Sabbaticals as appropriate
 - Such benefits are associated with greater job satisfaction and professional and personal well being, and address many factors identified as disincentives to the practice of trauma surgery as it currently exists.

6. The Eastern Association for the Surgery of Trauma notes the importance of practice governance and continual performance evaluation as individuals and as a group. This assessment should be conducted from the personal, professional, patient care, and programmatic perspectives.
 - In order to evaluate performance adequately and facilitate optimal function as a group practice, the following must first occur:
 - Roles and responsibilities should be delegated according to interest, ability and skill, seniority and maturity, and to physical and emotional well being
 - Programmed progression of members' roles, responsibilities, and functions within the group from junior to senior status
 - Definition of performance standards and accountability
 - Articulation of practice/program goals and objectives
 - Articulation of individual member career goals and objectives
 - Regular (at least annual) evaluation/re-evaluation of performance goals and objectives for both the group and individuals.

This strategy has proved to be successful in a multitude of organizations both within and outside of medicine and is drawn from organizational behavior models.

7. The Eastern Association for the Surgery of Trauma believes that a guaranteed, structured salary plan based the achievement of specific performance goals is pivotal to the survival of trauma surgery in any current or future form.
 - This plan must be equitable in relation to other specialties/professions and should be commensurate with the intensity/complexity of services provided.
 - It should also reflect the true value of these practitioners and the services they provide to society and the healthcare industry.
 - This is essential to attract and retain a qualified pool of practitioners.
 - Analysis suggests that an initial income be competitive and perceived to be commensurate with effort and other high volume and stress specialties. A figure equal to or better than the 75th percentile of AAMC/MGMA benchmarks is appropriate. The addition of regular cost of living increases, annual bonus (if conditions permit or based on incentive strategies), 30% fringe benefits, and coverage of malpractice insurance premium is reasonable. Sabbatical leave opportunities, discretionary funds for research stimulation and education, or other “perks” may be advantageous and feasible to offer in some settings.
 - Evidence is overwhelming that reimbursement issues and under valuation of the complexity and intensity of services provided are a major deterrent to treating trauma patients, and that increased remuneration would be an incentive.

8. The Eastern Association for the Surgery of Trauma recognizes that the provision of ancillary support is key to the success of the practice as well as the personal and professional satisfaction of the practitioners.
 - Committed administrative support by the hospital/health system is a factor associated with a preference among surgeons to treat trauma patients. Such support must be physician-directed, and appropriate to the practice volume and size of the group.
 - Support Personnel should include:
 - Administrative/scheduling personnel
 - Clinical physician extenders–NP/PA/Residents
 - Billing/coding specialist (s)
 - Clinical performance improvement specialist(s)
 - Clinical data collector(s) and data management software
 - Case manager (s)
 - Additional services/benefits to be provided by the hospital/health system include:
 - Life insurance, long-term care insurance, health insurance, and malpractice insurance

- Annual financial/investment/retirement/estate planning consultation
- Mandatory Executive Health Assessment including a stress/burnout assessment
 - * Optional substance abuse assessment
- Guaranteed paid leave for, and cost coverage of, interventions necessitated by problematic assessments.
- Experienced medicolegal counsel on retainer and available for consultation and depositions (treating physician/defendant)