ANNEXURE-III

The following table shows levels of categorization and their *(R) equired &* (D)esirable characteristics	**IV**	**III**	**II**	**I**
A. HOSPITAL ORGANIZATION **1. Trauma Service-A designated trauma team** **a**. Specified delineation of privileges for the Trauma Service must occur by the medical staff Credentialing Committee **b.** Trauma Team: Organized and directed by a general surgeon expert in and committed to the care of the injured; all patient with multiple system or major injury must be initially evaluated by the trauma team *when appropriate*, and the surgeon who shall be responsible for overall care of a patient (the team leader) identified. A team approach is required for optimal care of patients with multiple-system injuries.	D	D	D	*R*
2.Emergency Department-Prompt & Appropriate carecare The Emergency Department staffing shall ensure immediate and appropriate care for the trauma patient. The Emergency Department physician shall function as a designated member of the trauma team, and the relationship between Emergency Department physicians and other participants of the trauma team must be established on a local level, consistent with resources but adhering to these standards and ensuring optimal care.	*R*	*R*	*R*	*R*
3. **Surgical Specialty Capability Availability** **a. General Surgery** To be decided later after the tenders are evaluated by the technical committee **1. Full, unrestricted trauma surgery privileges** To be decided later after the tenders are evaluated by the technical committee	D D	R R	R R	R R
2. ATLS* **3**. On-call and promptly available (within 30 minutes) **4**. On-call and promptly available to the patient upon activation of the trauma protocol. **5**. In-house and immediately available to the patient on arrival in the Emergency Department (assumes 5-minute prehospital notification). A *Post Graduate Year (PGY) 3 or higher Resident* may be used to fulfill this requirement.	R	R R	R R	R R

The following table shows levels of categorization and their *(R) equired* (D) esirable characteristics	IV	III	II	I
Neurologic surgery 1. Full, unrestricted neurosurgery privileges. On-call and promptly available.		D	R	R
OR 2. Physician with special competence, as judged by the Head of Neurosurgery, in the care of patients with neural trauma, and who is capable of initiating measures directed toward stabilizing the patient and initiating diagnostic procedures. In-house and immediately available.			R	R
c. Cardiac surgery (on-call and promptly available)			R	R
d. Microsurgery capabilities (promptly available)			D	R
e. Obstetric/Gynecological Surgery (on-call and promptly available) *(With the exception of Pediatric Facilities)*			R	R
f. Hand Surgery (on-call and promptly available)			D	R
g. Ophthalmic surgery (on-call and promptly available)		D	R	R
h. Oral, Otorhinolaryngologic, **OR** Plastic/Maxillofacial Surgery (on-call and promptly available).		D	R	R
i. Orthopedic Surgery (on-call and promptly available)	D	D	R	R
j. Pediatric Surgery capabilities (on-call and promptly available) *(Applies to Pediatric Facilities)*			R	R
k. Thoracic Surgery (on-call and promptly available)		D	R	R
l. Urologic surgery (on-call and promptly available)		D	R	R
4. Non-Surgical Specialty Capability Availability **a. Anesthesiology**				
1. Anesthesiology (full, unrestricted anesthesiology privileges)	D	D	R	R
ATLS* and *Advanced /equivalent course in India* **reverification or** *16,* **17 hours of trauma-related AMA CME I education every four years.**	D	D	D	D
2. Certified Registered Nurse Anesthetist (current national certification essential)				
ACLS and trauma life support course	D	D	D	D

The following table shows levels of categorization and their *(R) equired* (D) esirable characteristics	**IV**	**III**	**II**	**I**
3. Anesthesiologist: In-house and immediately available to the patient upon arrival in the Emergency department (assumes fifteen-minute prehospital notification). * *A PGY 3 4 or higher resident in anesthesiology may be used to fill this requirement with the approval of the chief of Anesthesiology				*R*
4. Anesthesiologist: On-call and promptly available to the patient upon arrival in the Emergency Department (assumes fifteen-minute prehospital notification).			*R*	
5. Anesthesiologist **OR** Certified Registered Nurse Anesthetist: On-call and promptly available.	D	*R*		
b. Cardiology (on-call and promptly available)-		D	*R*	*R*
c. Chest Medicine			D	*R*
d. Gastroenterology			D	*R*
e. Hematology		D	*R*	*R*
f. Infectious Disease			D	*R*
g. Internal Medicine		*R*	*R*	*R*
h. Nephrology		D	*R*	*R*
i. Neuroradiology				D
j. Pathology		D	*R*	*R*
k. Pediatrics (on-call and promptly available)		D	*R*	*R*
l.. Psychiatry			D	*R*
m. Radiology (on-call and promptly available)	D	D	*R*	*R*
B. SPECIAL FACILITIES/RESOURCES/CAPABILITIES				
1. Emergency Department a. Personnel				
1. Designated Physician Director	D	*R*	*R*	*R*
2. Emergency Physician				
a. Full-time emergency medicine practitioner with special competence in the care of the critically injured patient.	D	D	*R*	*R*
b. Physicians who are qualified and experienced in caring for patients with traumatic injuries and who can initiate resuscitative measures.	*R*	*R*		

The following table shows levels of categorization and their *(R) equired* (D) esirable characteristics	IV	III	II	I
c. ATLS* *At least once*	*R*	*R*	*R*	*R*
d. In-house and immediately available to the patient upon arrival in the emergency department.	D	*R*	*R*	*R*
e. On-call and promptly available.	*R*			
3. Emergency Department Registered Nurse				
a. ACLS *or* / *Pediatric Advanced Life Support* (PALS) PALS *or* / *Emergency Nursing Pediatric Course (ENPC)* ENPC (as appropriate)	*R*	*R*	*R*	*R*
b. Initial sixteen-hour Health Department approved Trauma Life Support course	D	*R*	*R*	*R*
c. In the Emergency Department and immediately available.	*R*			
d. In-house and immediately available.				
b. Equipment for resuscitation and to provide life support for the critically or seriously injured shall include but not be limited to:	*R*	*R*	*R*	*R*
1. Airway control and ventilation equipment including laryngoscope and endotracheal tubes of all sizes, valvemask resuscitator, sources of oxygen, pulse oximeter, CO_2 monitoring, mechanical ventilator.	*R*	*R*	*R*	*R*
2. Suction devices	*R*	*R*	*R*	*R*
3. Electrocardiograph-oscilloscope-defibrillator	D	*R*	*R*	*R*
4. Apparatus to establish central venous pressure Monitoring	*R*	*R*	*R*	*R*
5. Standard IV fluids & administration devices, including IV catheters.	*R*	*R*	*R*	*R*
6. Intravenous fluid and blood warmers	*R*	*R*	*R*	*R*
7. Sterile surgical sets for standard ED procedures	*R*	*R*	*R*	*R*
8. Gastric lavage equipment				

The following table shows levels of categorization and their *(R) equired* (D) esirable characteristics	**IV**	**III**	**II**	**I**
9. Drugs and supplies necessary for emergency care	*R*	*R*	*R*	*R*
10. a. X-ray capability 24 hours coverage by in-house Technician	D	*R*	*R*	*R*
b. Technician on-call and promptly available to patient upon arrival in the emergency department.	*R*	*R*	*R*	*R*
11. Two-way radio linked with vehicles of the prehospital EMS system.	*R*	*R*	*R*	*R*
12. Skeletal Traction device for spinal injuries (spinal or backboard immobilization devices may be used as an alternative).	*R*	*R*	*R*	*R*
13. Special equipment needed for pediatric patients, readily available. (ref. ACEP Policy Statement, *September 2000* Pediatric Equipment Guidelines).	*R*	*R*	*R*	*R*
2. Intensive Care Unit (ICU) for Trauma Patients (ICU's may be separate specialty units).				
a. Designated Medical Director			*R*	*R*
b. Physician on duty in ICU 24 hours a day or immediately available		D	*R*	*R*
c. Nurse-patient minimum **average** ratio of 1:2 on shift for trauma patients		*R*	*R*	*R*
d. Immediate access to clinical laboratory services.		*R*	*R*	*R*
e. Equipment				
1. Airway control and ventilation devices		*R*	*R*	*R*
2. Oxygen source with concentration controls		*R*	*R*	*R*
3. Cardiac emergency cart		*R*	*R*	*R*
4. Temporary transvenous pacemaker		*R*	*R*	*R*
5. Electrocardiograph-oscilloscope-defibrillator		*R*	*R*	*R*
6. Cardiac output monitoring		D	*R*	*R*
7. Electronic pressure monitoring		D	*R*	*R*
8. Mechanical ventilator-respirators		*R*	*R*	*R*
9. Patient weighing devices		*R*	*R*	*R*

The following table shows levels of categorization and their *(R) equired* (D) esirable characteristics	IV	III	II	I
10. Pulmonary function measuring devices				
11. Temperature control devices		*R*	*R*	*R*
12. Drugs, intravenous fluids and supplies		*R*	*R*	*R*
13. Intracranial pressure monitoring devices		D	*R*	*R*
3. Postanesthetic Recovery Room (PAR); (surgical intensive care unit is acceptable).				
a. Registered nurses and other essential personnel 24 hours a day	D	*R*	*R*	*R*
b. Appropriate monitoring and resuscitation equipment	D	*R*	*R*	*R*
4. Acute Hemodialysis Capability (or transfer agreement)		D	D	*R*
5. Organized Burn Care	*R*	*R*	*R*	*R*
a. Physician-directed Burn Center Unit staffed by nursing personnel trained in burn care and equipped properly for the care of the extensively burned patient				
OR				
b. Transfer agreement with nearby burn center or hospital with a burn unit.				
6. Acute Spinal Cord Injury	*R*	*R*	*R*	*R*
Management Capability				
a. In circumstances where a designated spinal cord injury rehabilitation center exists in the region, early transfer should be considered; transfer agreements should be in effect.				
b. In circumstances where a head injury center exists in the region, transfer should be considered in selected patients; transfer agreements should be in effect.				
7. Radiological Special Capabilities				
a. Comprehensive range of angiography services		D	*R*	*R*
b. Sonography		D	*R*	*R*
c. Nuclear scanning			D	*R*

The following table shows levels of categorization and their *(R) equired* (D) esirable characteristics	IV	III	II	I
d. In-house computerized tomography				
e. In-house radiologic technician			*R*	*R*
f. Technician on-call and promptly available		*R*		
8. Rehabilitation Medicine	*R*	*R*	*R*	*R*
a. Physician-directed Rehabilitation service staffed by nursing personnel trained in rehabilitation care and equipped properly for the care of the critically injured patient.				
OR				
b. Transfer agreement when medically feasible to a near by rehabilitation service.				
9. Pediatric Service		D	*R*	*R*
Nursing personnel caring for pediatric patients are properly trained and equipped.				
C. OPERATING SUITE SPECIAL REQUIREMENTS				
Equipment-Instrumentation				
1. Operating Room adequately staffed and equipped for trauma care (promptly available).	D	*R*		
Immediately available to the patient upon arrival in the Operating Room or when requested by surgeon (may be satisfied by one RN in-house and immediately available to the Operating Suite with the remainder of the crew on-call and promptly available).			*R*	
In-house staff and Operating Room immediately available to patient upon arrival in the Emergency Department (assumes five minute prehospital notification).				*R*
2. Cardiopulmonary bypass capability			*R*	*R*
3. Operating Microscope			D	*R*
4. Thermal control equipment				
a. for the patient	*R*	*R*	*R*	*R*
b. for blood	*R*	*R*	*R*	*R*

The following table shows levels of categorization and their *(R) equired* (D) esirable characteristics	IV	III	II	I
5. Trauma Registry review	*R*	*R*	*R*	*R*
Documentation of severity of injury and outcome by trauma score, age, injury severity score, TRISS, survival, length of stay, ICU length of stay, with monthly review of statistics.				
Participation in the *Section* ~~**Office**~~ of EMS & Trauma Systems Trauma Registry and Quality *Improvement* Assurance activities as prescribed in thearea plan.				
Designated Trauma Registry Coordinator				
6. Review of prehospital and regional trauma systems	D	D	D	D
F. OUTREACH PROGRAM	D	D	*R*	*R*
Telephone and on-site consultations with physicians of the community andoutlying areas.				
G. PUBLIC EDUCATION	*R*	*R*	*R*	*R*
Injury prevention in the home and industry, and on the highway and athletic fields; standard first aid; problems confronting public, medical profession, and hospitals regarding optimal care for the injured. *Could bea collaborative effort by multiple hospitals or the region.*				
H. TRAUMA RESEARCH PROGRAM			D	*R* ~~E~~
I. *TRAUMA EDUCATION* **TRAINING PROGRAM**				
1. *Ongoing* **Formal continuing education program** *focused on trauma* **provided** *or sponsored* **by the hospital*****. The continuing education should include at least 16 hours every 4 years and must meet the standards for approved continuing education set by individual state licensing boards or certifying entities*** **for:**	*R*	*R*	*R*	*R*
a. Staff physicians	*R*	*R*	*R*	*R*
b. Nurses	*R*	*R*	*R*	*R*
c. Allied health personnel	*R*	*R*	*R*	*R*
d. Community physicians				*R*
e. Prehospital personnel				
2. Accredited general surgery residency program				

The following table shows levels of categorization and their *(R) equired* (D) esirable characteristics	IV	III	II	I
5. X-Ray capability				
6. Endoscopes	*D*	*R*	*R*	*R*
7. Craniotome	*D*	*D*	*R*	*R*
8. Monitoring equipment	*R*	*R*	*R*	*R*
D. CLINICAL LABORATORY SERVICES AVAILABLE 24 HOURS ADAY				
1. Standard analyses of blood, urine, and other body fluids	*R*	*R*	*R*	*R*
2. Blood typing and cross-matching	*R*	*R*	*R*	*R*
3. Coagulation studies	*R*	*R*	*R*	*R*
4. Comprehensive blood bank or access to a community central blood bank and adequate hospital storage facilities	*R*	*R*	*R*	*R*
5. Blood gases and pH determination	*R*	*R*	*R*	*R*
6. Serum and urine osmolality	*D*	*D*	*R*	*R*
7. Microbiology	*D*	*R*	*R*	*R*
8. Serum alcohol determination	*D*	*R*	*R*	*R*
9. Drug screening	*D*	*R*	*R*	*R*
E. QUALITY *IMPROVEMENT* **ASSURANCE**	*R*	*R*	*R*	*R*
1. Organized Quality *Improvement* **Assurance program**	*R*	*R*	*R*	*R*
2. Special audit for all trauma deaths and other specified cases	*D*	*R*	*R*	*R*
3. Trauma conference; multi-disciplinary Regular and periodic multi-disciplinary trauma conferences that include all members of the trauma team. This conference shall be for the purpose of quality *improvement* ~~**assurance**~~ through critiques ofindividual cases. *, and incorporated into the existing quality* *improvement /peer review program activities of the hospital.* **4. Medical nursing audit, utilization review, tissue review**	*R*	*R*	*R*	*R*