**New Application: Surgical Critical Care**

**Review Committee for Surgery**

**ACGME**

**Oversight**

**Length of Educational Program**

1. Will the length of the program equal 12 months of clinical education and training in surgical critical care? [PR Int.C.]  YES  NO

**Participating Sites**

1. Is there a Program Letter of Agreement (PLA) for each participating site providing a required assignment? [PR I.B.2.]  YES  NO  N/A
2. Has the program designated one faculty member at each participating site who is accountable for fellow education at that site? [PR I.B.3.a)]  YES  NO  N/A
3. Will clinical assignments to participating sites exceed three months in length? [PR I.B.4.a)]………

YES  NO  N/A

If YES, explain.

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1. Describe how the program will engage in practices that focus on the recruitment and retention of a diverse and inclusive workforce of fellows and faculty members. [PR I.C.]

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**Resources**

Are the following available at each participating site? [PRs I.D.1.a)-I.D.1.b).(4) and I.D.3.]

|  | Site Name | Site Name | Site Name | Site Name |
| --- | --- | --- | --- | --- |
| A simulation and skills laboratory | YES  NO | YES  NO | YES  NO | YES  NO |
| Provide a brief description of the simulation and skills laboratory resource. | Click or tap here to enter text. | | | |
| A critical care unit located in a designated area within the institution, constructed and designed specifically for the care of critically-ill patients | YES  NO | YES  NO | YES  NO | YES  NO |
| A common office space for fellows that includes a sufficient number of computers and adequate workspace | YES  NO | YES  NO | YES  NO | YES  NO |
| Online radiographic and laboratory systems | YES  NO | YES  NO | YES  NO | YES  NO |
| Software resources for production of presentations, manuscripts, and portfolios | YES  NO | YES  NO | YES  NO | YES  NO |
| Internet access to full-text journals | YES  NO | YES  NO | YES  NO | YES  NO |
| Electronic medical reference resources | YES  NO | YES  NO | YES  NO | YES  NO |

Comment on any deficiencies.

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1. Describe each care setting in which fellow education will take place. [PR I.D.1.c)]

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1. Will the program have an average daily census of at least 10 patients in each intensive care unit to which a fellow is assigned? [PR I.D.4.a)]  YES  NO

For each intensive care unit, identify the type of unit (i.e., surgical, medical, combined) and the average daily census in each unit.

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1. Will the program demonstrate an average daily census for each intensive care unit that ensures a fellow-to-patient ratio of 1:10. [PR I.D.4.b)]  YES  NO

**Other Learners and Other Care Providers**

1. Does the Sponsoring Institution sponsor more than one critical care program? [PR I.E.2.]

YES  NO

If YES, explain.

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1. If the institution sponsors more than one critical care program, describe how the program will coordinate interdisciplinary requirements to ensure that fellows meet the specific criteria of their primary specialties. [PR I.E.2.]

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1. Will there be other learners in the care settings where the fellows’ education takes place? [PR I.E.3.]  YES  NO

If YES, describe the other learners and explain how the program will ensure they do not interfere with the appointed fellows’ education.

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**Personnel**

**Program Director**

1. Will the program director be provided with at least 10 percent protected time or direct or indirect salary support, such as release from clinical activities? [PR II.A.2.a)]  YES  NO
2. Will the program director direct or co-direct one or more of the critical care units in which the clinical aspects of the educational program take place, and personally supervise and teach surgery and surgical critical care fellows in that unit? Describe where this will take place. [PR II.A.3.f)]

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1. Describe how the program will ensure that fellows have the opportunity to raise concerns and provide feedback in a confidential manner as appropriate, without fear of intimidation or retaliation. [PR II.A.4.a).(10)]

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**Faculty**

1. In addition to the program director, will there be at least one surgeon certified in surgical critical care appointed to the faculty for every critical care fellow enrolled in the program? [PR II.B.1.a)]

YES  NO

1. How often do faculty members participate in each of the following activities? [PR II.B.2.g).]
2. Organized clinical discussion [Frequency]
3. Rounds [Frequency]
4. Journal clubs [Frequency]
5. Conferences [Frequency]

**Program Coordinator**

1. Describe the administrative support available for program coordination. [PR II.C.1.]

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**Other Program Personnel**

1. Will staff members in the care sites where the fellows’ education will take place include specially-trained nurses and technicians skilled in critical care instrumentation, respiratory function, and laboratory medicine? [PR II.D.1.]  YES  NO

**Fellow Appointments**

1. Does the Sponsoring Institution also sponsor ACGME-accredited programs in the following? [PR III.A.1.b)]
2. General surgery  YES  NO
3. Pediatric surgery  YES  NO
4. Thoracic surgery  YES  NO
5. Vascular surgery  YES  NO

**Educational Program**

1. Will program aims be made available to program applicants, fellows, and faculty members? [PR IV.A.1.a)]  YES  NO

1. Will competency-based goals and objectives for each educational experience be made available to the fellows and faculty members? [PR IV.A.2.]  YES  NO
2. Describe how the program will delineate fellow responsibilities for patient care, progressive responsibility for patient management, and graded supervision in the specialty. [PR IV.A.3.]

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**ACGME Competencies**

**Professionalism**

1. Briefly describe one learning activity, other than lecture, through which fellows will demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. [PR IV.B.1.a)]

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**Patient Care and Procedural Skills**

1. Indicate the settings and activities in which fellows will demonstrate competence in each of the following critical care skills. Also indicate the method(s) used to assess competence.

| **Competency Area** | **Settings/Activities** | **Assessment Method(s)** |
| --- | --- | --- |
| Circulatory: performance of invasive and non-invasive monitoring techniques, and the use of vasoactive agents and management of hypotension and shock; application of trans-esophageal and transthoracic cardiac ultrasound and transvenous pacemakers, dysrhythmia diagnosis and treatment, and the management of cardiac assist devices  [PR IV.B.1.b).(1).(a).(i)] | Click here to enter text. | Click here to enter text. |
| Endocrine: performance of the diagnosis and management of acute endocrine disorders, including those of the pancreas, thyroid, adrenals, and pituitary  [PR IV.B.1.b).(1).(a).(ii)] | Click here to enter text. | Click here to enter text. |
| Gastrointestinal: performance of utilization of gastrointestinal intubation and endoscopic techniques in the management of the critically-ill patient; and management of stomas, fistulas, and percutaneous catheter devices  [PR IV.B.1.b).(1).(a).(iii)] | Click here to enter text. | Click here to enter text. |
| Hematologic: performance of assessment of coagulation status, and appropriate use of component therapy  [PR IV.B.1.b).(1).(a).(iv)] | Click here to enter text. | Click here to enter text. |
| Infectious disease: performance of classification of infections and application of isolation techniques, pharmacokinetics, drug interactions, and management of antibiotic therapy during organ failure; nosocomial infections; and management of sepsis and septic shock  [PR IV.B.1.b).(1).(a).(v)] | Click here to enter text. | Click here to enter text. |
| Monitoring/bioengineering: performance of the use and calibration of transducers and other medical devices  [PR IV.B.1.b).(1).(a).(vi)] | Click here to enter text. | Click here to enter text. |
| Neurological: performance of management of intracranial pressure and acute neurologic emergencies, including application of the use of intracranial pressure monitoring techniques and electroencephalography to evaluate cerebral function  [PR IV.B.1.b).(1).(a).(vii)] | Click here to enter text. | Click here to enter text. |
| Nutritional: performance of the use of parenteral and enteral nutrition, and monitoring and assessing metabolism and nutrition  [PR IV.B.1.b).(1).(a).(viii)] | Click here to enter text. | Click here to enter text. |
| Renal: performance of the evaluation of renal function; use of renal replacement therapies; management of hemodialysis, and management of electrolyte disorders and acid-base disturbances; and application of knowledge of the indications for and complications of hemodialysis  [PR IV.B.1.b).(1).(a).(ix)] | Click here to enter text. | Click here to enter text. |
| Respiratory: performance of airway management, including techniques of intubation, endoscopy, and tracheostomy, as well as ventilator management  [PR IV.B.1.b).(1).(a).(x)] | Click here to enter text. | Click here to enter text. |

1. Indicate the settings and activities in which fellows demonstrate competence in the application of each of the following critical care skills. Also indicate the method(s) used to assess competence.

| **Competency Area** | **Settings/Activities** | **Assessment Method(s)** |
| --- | --- | --- |
| Circulatory: transvenous pacemakers; dysrhythmia diagnosis and treatment, and the management of cardiac assist devices; and use of vasoactive agents and the management of hypotension and shock  [PR IV.B.1.b).(1).(b).(i)] | Click here to enter text. | Click here to enter text. |
| Neurological: the use of intracranial pressure monitoring techniques and electroencephalography to evaluate cerebral function  [PR IV.B.1.b).(1).(b).(ii)] | Click here to enter text. | Click here to enter text. |
| Renal: knowledge of the indications for and complications of hemodialysis, and management of electrolyte disorders and acid-base disturbances  [PR IV.B.1.b).(1).(b).(iii)] | Click here to enter text. | Click here to enter text. |
| Miscellaneous: performance of the use of special beds for specific injuries, and employment of skeletal traction and fixation devices  [PR IV.B.1.b).(1).(b).(iv)] | Click here to enter text. | Click here to enter text. |
| Evaluation and management of patients with end-of-life issues, and in palliative care  [PR IV.B.1.b).(1).(c)] | Click here to enter text. | Click here to enter text. |

**Medical Knowledge**

Indicate the settings and activities in which fellows demonstrate advanced knowledge in the following aspects of critical care, particularly as they relate to the management of patients with hemodynamic instability, multiple system organ failure, and complex coexisting medical problems. Also indicate the method(s) used to assess knowledge.

| **Area of Knowledge** | **Settings/Activities** | **Assessment Method(s)** |
| --- | --- | --- |
| Biostatistics and experimental design  [PR IV.B.1.c).(1).(a)] | Click here to enter text. | Click here to enter text. |
| Cardiorespiratory resuscitation  [PR IV.B.1.c).(1).(b)] | Click here to enter text. | Click here to enter text. |
| Critical obstetric and gynecologic disorders  [PR IV.B.1.c).(1).(c)] | Click here to enter text. | Click here to enter text. |
| Critical pediatric surgical conditions  [PR IV.B.1.c).(1).(d)] | Click here to enter text. | Click here to enter text. |
| Ethical and legal aspects of surgical critical care  [PR IV.B.1.c).(1).(e)] | Click here to enter text. | Click here to enter text. |
| Hematologic and coagulation disorders  [PR IV.B.1.c).(1).(f)] | Click here to enter text. | Click here to enter text. |
| Inhalation and immersion injuries  [PR IV.B.1.c).(1).(g)] | Click here to enter text. | Click here to enter text. |
| Metabolic, nutritional, and endocrine effects of critical illness  [PR IV.B.1.c).(1).(j)] | Click here to enter text. | Click here to enter text. |
| Monitoring and medical instrumentation  [PR IV.B.1.c).(1).(i)] | Click here to enter text. | Click here to enter text. |
| Pharmacokinetics and dynamics of drug metabolism and excretion in critical illness  [PR IV.B.1.c).(1).(j)] | Click here to enter text. | Click here to enter text. |
| Physiology, pathophysiology, diagnosis, and therapy of disorders of the cardiovascular, respiratory, gastrointestinal, genitourinary, neurological, endocrine, musculoskeletal, and immune systems, as well as of infectious diseases  [PR IV.B.1.c).(1).(k)] | Click here to enter text. | Click here to enter text. |
| Principles and techniques of administration and management  [PR IV.B.1.c).(1).(l)] | Click here to enter text. | Click here to enter text. |
| Trauma, thermal, electrical, and radiation injuries  [PR IV.B.1.c).(1).(m)] | Click here to enter text. | Click here to enter text. |

**Practice-based Learning and Improvement**

1. Briefly describe one example of a learning activity in which fellows engage to develop the skills needed to locate, appraise, and assimilate evidence from scientific studies and apply it to patient care. This should include an explanation of how this will be evaluated. [PR IV.B.1.d)] (Limit response to 400 words)

The description should include:

* Locating information
* Appraising information
* Assimilating evidence information (from scientific studies)
* Applying information to patient care

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**Interpersonal and Communication Skills**

1. Briefly describe one learning activity in which fellows demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. This should include an explanation of how this will be evaluated. [PR IV.B.1.e)] (Limit response to 400 words)

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**Systems-based Practice**

1. Briefly describe one learning activity through which fellows demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. This should include an explanation of how this will be evaluated. [PR IV.B.1.f)] (Limit response to 400 words)

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**Curriculum Organization and Fellow Experiences**

1. Will at least eight of the 12 months be in a surgical intensive care unit? [PR IV.C.3.a)]  YES  NO
2. Will at least five of the required eight months of clinical activities in a surgical intensive care unit be in a unit in which a surgeon is director or co-director? [PR IV.C.3.a).(1)]  YES  NO

Explain any “NO” responses.

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1. Will there be more than two months in a non-surgical intensive care unit, such as a medical, cardiac, or pediatric unit? [PR IV.C.3.b)]  YES  NO

Explain if “YES.”

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1. Will there be more than two months in elective rotations in areas relevant to critical care, such as trauma or acute care surgery? [PR IV.C.3.c)]  YES  NO

Explain if “YES.”

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1. Summarize the regularly scheduled didactic program based on the core knowledge content and areas defined as a fellow’s outcomes in the specialty. [PR IV.C.3.d)]

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1. Will fellows keep two written records of their experience: a summary record documenting the numbers and types of critical care patients; and an operative log of numbers and types of operative experiences, including bedside procedures? [PR IV.C.3.f)]  YES  NO

Explain if “NO.”

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1. Will a chief resident in surgery and a fellow in surgical critical care have primary responsibility for the same patient? [PR IV.C.3.g)]  YES  NO  N/A

Explain if “YES.”

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1. Describe how the program will ensure that fellows will be able to administer a surgical critical care unit and appoint, educate, and supervise specialized personnel; establish policy and procedures for the unit; and coordinate the activities of the unit with other administrative units within the hospital. [PR IV.C.3.h)]

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**Scholarly Activity**

1. Describe how the program’s mission and aims will guide the scholarly activities of the program director, faculty members, and fellows. [PR IV.D.1.a)]

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**Fellows’ Formative Evaluation**

1. Describe how the program will ensure that faculty members directly observe, evaluate, and frequently provide feedback on fellow performance during each rotation or similar educational assignment. [PR V.A.1.a)]

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1. Will the semiannual assessment include a review of case volume, breadth, and complexity, and the required written records maintained by fellows? [PR V.A.1.a).(1)]  YES  NO
2. Will the program use multiple evaluators as a component of an objective performance evaluation? [PR V.A.1.c).(1)]  YES  NO

If YES, identify the types of evaluators that will be routinely included in the fellows’ performance evaluation.

Faculty members (including the program director)

Peers

Residents and fellows in other specialties

Self

Patients and family members

Other professional staff members (e.g., nursing, respiratory therapy, administration, etc.)

**The Learning and Working Environment**

**Clinical Responsibilities, Teamwork, and Transitions of Care**

1. Will surgical teams include the following? [PR VI.E.1.b)]
2. Attending surgeons  YES  NO
3. Residents at various PG levels  YES  NO
4. Medical students (when appropriate)  YES  NO
5. Other health care providers  YES  NO
6. Describe how the work of the caregiver team is assigned to team members. [PR VI.E.1.c)]

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1. As fellows progress through levels of increasing competence and responsibility, will work assignments keep pace with their advancement? [PR VI.E.1.d)]  YES  NO
2. Describe how the program director will ensure fellows collaborate with surgical residents, and especially with faculty members, other physicians outside of their specialty, and non-traditional health care providers, to best formulate treatment plans for an increasingly diverse patient population. [PR VI.E.2.b)]

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1. Describe how the program director will ensure fellows assume personal responsibility to complete all tasks to which they are assigned (or which they voluntarily assume) in a timely fashion. Describe how these tasks are completed in the hours assigned, or, if that is not possible, how fellows learn and utilize the established methods for handing off remaining tasks to another member of the team so that patient care is not compromised. [PR VI.E.2.c)]

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1. Will lines of authority be defined by the program director to ensure that all fellows have a working knowledge of expected reporting relationships to maximize quality care and patient safety?   
   [PR VI.E.2.d)]  YES  NO

Explain if “NO.”

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**Clinical Experience and Education**

1. How many months, in succession, of night float are fellows assigned in each year of the program? [PR VI.F.6.b)] [ # ]
2. How many months of night float are fellows assigned in each year of the program? [PR VI.F.6.c)]  
    [ # ]

3. How many months are there between each night float rotation? [PR VI.F.6.d)] [ # ]

**Institutional Data**

On the following pages, supply the patient, procedural, and operative data for the surgical critical care service at each site to which the fellows rotate. The numbers should include all procedures performed at each site and may include the number of patients managed at each site as applicable. Site names must correspond to those in ADS and the block diagram. Provide data for the most recent complete academic year, or if incomplete, the most recent one year period.

Note for Surgical Procedures: Each operation may have credit for only one procedure. Choose the most significant component. Each operation can have only one primary surgeon; teaching assistants can be counted concurrently, as appropriate.

Patients may fit into multiple categories and may be counted more than once

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| **INCLUSIVE DATES:** | Click here to enter a date. To Click here to enter a date. |

| **PROCEDURES** | **Site Name** | **Site Name** | **Site Name** |
| --- | --- | --- | --- |
| Advanced Mechanical Ventilation | | | |
| Advanced ventilator management of patients with respiratory failure (mechanical ventilation >48 hours) | # | # | # |
| Airway Management | | | |
| Endotracheal or nasotracheal intubation | # | # | # |
| Fiberoptic or rigid bronchoscopy | # | # | # |
| Shock Management | | | |
| Management and resuscitation of patients with all types of shock, including performance of invasive and non-invasive monitoring techniques and the use of vasoactive agents | # | # | # |
| Continuous Renal Replacement Therapy | | | |
| Comprehensive management of patients with acute kidney injury, including use of renal replacement therapies; management of hemodialysis; management of electrolyte disorders and acid-base disturbances; and application of knowledge of the indications for and complications of hemodialysis | # | # | # |
| Dysrhythmias | | | |
| Diagnosis and interpretation of patients with dysrhythmias and complex cardiac disorders, including application of trans-esophageal and transthoracic cardiac ultrasound and transvenous pacemakers, and the management of cardiac assist devices | # | # | # |
| Neurologic Disorders | | | |
| Preventive management, diagnosis, and treatment of patients with coma, delirium, and other neurologic disorders; evaluation and non-operative management of severe traumatic brain injury and intracranial hypertension, including management of intracranial pressure and acute neurologic emergencies | # | # | # |
| Hepatic Failure | | | |
| Diagnosis and management of patients with acute and chronic hepatic failure, including management of ascites, assessment of coagulation status, and use of component therapy; and identification of appropriate candidates for orthotopic liver transplantation | # | # | # |
| Non-Invasive Cardiac Output Monitoring | | | |
| Diagnosis and treatment of complex cardiac disorders, including application of trans-esophageal and transthoracic cardiac ultrasound, and application and interpretation of non-invasive cardiac output monitoring | # | # | # |
| Nutrition | | | |
| Nutritional care of critically-ill and injured patients, including use of enteral and parenteral nutrition | # | # | # |
| Gastrointestinal Disorders | | | |
| Comprehensive management of patients with acute GI disorders (such as C. difficile colitis, GI bleeding, intestinal ischemia, intestinal fistulae, post-operative complications, pancreatitis), including utilization of gastrointestinal endoscopic techniques | # | # | # |
| Infection | | | |
| Comprehensive management of patients with infectious diseases and infectious complications, including application of isolation techniques, pharmacokinetics, drug interactions, and management of antibiotic therapy; diagnosis and management of nosocomial infections; and management of sepsis and septic shock | # | # | # |
| Miscellaneous Procedures | | | |
| Performance and supervision of ICU procedures, including central venous catheter placement, tube thoracostomy, thoracentesis, paracentesis, diagnostic peritoneal lavage, fasciotomy, escharotomy, and proficiency in management of procedural complications | # | # | # |
| Injury | | | |
| Comprehensive management of severely injured patients with complex co-morbidities | # | # | # |
| Endocrine Disorders | | | |
| Comprehensive management of patients with acute endocrine disorders, including those of the pancreas, thyroid, adrenals, and pituitary | # | # | # |
| Organ Failure | | | |
| Comprehensive management of patients with multiple organ failure | # | # | # |
| End-of-life Care | | | |
| End-of-life care, including declaration of brain death, palliative care, and withdrawal of support | # | # | # |
| **Summary** | | | |
| Total critical care patients managed | # | # | # |