

VUMC Multidisciplinary Surgical Critical Care Service

**Welcome to SICU! We hope your rotation here is a pleasant one.
Please don't hesitate to ask for assistance in any situation**

GENERAL OVERVIEW

Surgical Critical Care Team:

The Surgical Critical Care Team is a multidisciplinary team that consists of physician, nursing and ancillary members. The physician membership (consult team) consists of 3 – R1 residents (on average Q3 in-house call), a senior anesthesia resident and a second year surgical resident that alternate on days and nights, 3 Acute Care Nurse Practitioners, a Critical Care fellow, and a Critical Care Faculty member (either Anesthesia or Surgical Critical Care).

The Surgical Critical Care consult team evaluates and manages all patients. Residents should consider themselves as extensions of the primary service and manage all aspects of the patients care with in the SICU. All residents are expected to know all the details of the patients medical history, treatment and diagnostic plans initiated by the primary service and other consulting services and the results of those studies as they become available. It is not sufficient to only review the data from the studies that the Critical Care service has ordered. Comprehensive critical care is a collaborative process that involves ongoing discussions with the represented services to determine their concerns. It is the intensivist's job to integrate this information into a coherent plan, which has appropriately prioritized the input from the various services.

The surgical interns will be "on-call" on a modified Q3 schedule and will have at least 24 hours off for each 7 day period, (on average less than 80 hours per week in a 28 day period). This policy is consistent with the ACGME policy on resident work hours. The resident that is "on-call" will assume responsibility for directing the care of all patients (with supervision from fellows and faculty) for his/her 24 hour period. This resident must be available to the primary teams to discuss their patient's progress as the primary team rounds in the SICU. After completion of Surgical Critical Care team rounds in the SICU, the "post-call" resident is free of all responsibilities in the SICU. The resident that is "between-call" is available during the day to assist with procedures and patient care as directed by critical care fellow, or senior resident, and coordinated with the "on-call" junior resident, unless scheduled as an "out-day."

The third year anesthesia resident and second year surgical resident work either nights or days for a week (see call schedule). The night-time resident must be available to discuss patients with chief resident of primary team.

An "in-house" Critical Care Fellow will be available each night to supervise care across the Surgical ICU's. New admissions or deviations from anticipated course must be communicated directly to the fellow in a timely fashion. Responsibilities of the fellow in the TICU may limit the fellow's immediate availability. If needed, either the fellow, or the junior resident should communicate this circumstance to the Trauma and/or Critical Care Attending immediately.

General Schedule:

1. Rounds – Mon-Thur. - 7:30 am (timing may be altered at discretion of attending staff)
Friday - 9:00 am
Weekend - 8:00 am
Evening Rounds: 7:30-9:00 pm
 - Bedside rounds - These are essential for your practice in organizing your treatment approaches to complicated patients. They further engage the allied health staff to assist with the care of the patient. They provide a backdrop for interesting discussions, or interrogations (this assists with involving unit staff in the rounding process and allows some immediate changes to be made) orders are entered while rounding.
 - Rounds completed by ~10:00 am (this is set as a goal with length adjusted as needed). Mondays and Fridays without lectures may extend teaching on rounds as appropriate
 - Procedures performed directly after rounds and to be completed by 11:00 for conference(to allow supervision by the fellow or the attending, at their discretion)
 - Critical care lecture series – Tuesday, Wednesday, Thursday at 11:00 am (see lecture series below)
2. Afternoon rounds by the fellow with the residents – time to be determined by the fellow.
3. Afternoon rounds by the SICU ACNP and the fellow or designee.
4. Afternoon fellow's check out – SICU fellow to check out pending issues with "on-call" fellow.
5. Evening check out between anesthesia/surgery mid-level residents at 7pm-8pm.
6. Evening Rounds: review daily goals; adjust as indicated by patient's progress.

Responsibilities**Fellows:**

- Overseeing all care and procedures performed by Critical Care Service.
- Fellow going "off-call" should check out issues from the previous evening just prior to 6:30 am
- Fellows should briefly pre-round in the SICU and be available to discuss issues with the primary teams as they round from 6:30 to 7:30 am.
- Fellows that are primarily assigned to SICU should ensure that acute issues are resolved and that adequate check-out of patients to the "on-call" fellow is completed before departing for the day.
- Fellows should communicate any acute issues to faculty as appropriate. Any departure from previously established plans should be communicated to faculty.
- Direct the Critical Care lecture series
- Present at QI and be responsible for ensuring that those issues related to the CCS service are reported via proper format.
- Resident "on-call" schedule for the following month is to be completed at least one week prior to next month rotation. This is with the support of Dr. May's assistant and to be reviewed and approved by the SICU Medical Director (Dr. May).

Anesthesia 3/Surgery 2 - residents:

- Supervise care and procedures for all patients on consult service
- Available to communicate with primary team 6:30-7:30

Acute Care Nurse Practitioners:

- Direct care for 4-8 stable patients
- This is a new program and is under development

Interns:

- Direct patient care for all patients, except for those seen by the ACNP.
- Responsible for all order entry on these patients
- **On-call/post-call resident:**
 - Please place all patients on the "SICU consult service" group census in Star chart.
 - Please print up "patient list" and "CMR" in the "Trauma Style" for other's on the service
- Should consider themselves an extension of the primary service and be available to chief residents as they round in the unit.
- Daily notes (using "Critical Care Progress Notes" forms).
 - White (front sheet) to be given to fellow for final recommendations while on rounds
 - Yellow (back sheet) to be given to attending after presentations are complete.

- Residents on the Critical Care Service will perform all procedures within the unit that is under the purview of the CCS. Residents must have been supervised by faculty/fellow on all invasive procedures before performing without supervision. It is each resident's responsibility to ensure compliance with this policy.
- Resident should communicate **any deviation** from established plans or change in clinical status to appropriate supervisor in a timely fashion, either the fellow or attending intensivist.
- Residents must notify the ICU attending and/or fellow of all new admissions to the ICU.
- Residents and/or fellows must notify the primary service of significant changes in clinical status that has not been previously discussed or anticipated.
- Residents will be on-call in house on average Q3 with appropriate weekend time off. Any changes in schedules must be approved by the Medical Director.

Inter-service communication:

- Communication between services must be maintained at a level that ensures the best care for all critically ill patients. This is in fact, a key to effective critical care in the closed-collaborative model of the SICU.
- The primary team should directly communicate with the Critical Care team when new consults are obtained or changes in plans are made for patients. If this does not occur, please let your faculty know in a timely manner.
- The Critical Care team should communicate with the primary team daily during the primary teams morning rounds as well as when any significant changes in clinical condition occur.
- The primary team should communicate directly with either the R1 or the Fellow during their morning rounds. Any changes in an established plan of care will communicated to the primary team.

On-call Schedules:

The "on-call" schedule for the following month will be created by an administrative fellow for the SICU in consultation with Dr. May and is to be completed no later than one week prior to the following month. The fellow should obtain any scheduling needs of the junior residents and create the schedule accordingly. Final approval of the schedule is given by Dr. May. Changes to the schedule are to be approved by Dr. May. **It is the responsibility of the residents and fellows to ensure that adequate coverage is arranged in the event of their absence for their appropriate level of responsibility.**

DOCUMENTATION RESPONSIBILITIES:

- Invasive procedures require a consent form signed by a physician prior to performing procedure. Central lines, PA catheters, and bronchoscopies may have an original consent that documents the need for repeated procedures, i.e., maintenance of that line via changing over a wire or by a fresh access.
- All invasive procedures require an "brief procedure" note in the chart

EDUCATIONAL PROGRAM AND CONFERENCES:

Education on the SICU service comes in many forms: Socratic education on rounds, one-on-one education from fellows and faculty during delivery of supervised patient care, self directed reading, didactic lecture series and conferences. Socratic education on rounds - ICU rounds will serve an educational purpose each day. Monday and Friday rounds are specifically designated as days in which Socratic education is to be encouraged as no conferences are provided on these days. Self directed reading – no educational program can provide adequate education without individual reading programs. To assist in this, a critical text is provided to residents during their rotation. These will be required to be returned. If they are not, resident evaluations will reflect this and appropriate disciplinary actions will be undertaken. Dr. May's assistant in will provide texts to each individual and will maintain record of each text being returned. Additionally, a CD-ROM with important articles in Critical Care will be provided to you. Didactic lecture series and conferences – a number of lectures and conferences are provided for residents at all levels. An outline is provided below.

SICU/NICU Combined Critical Care conferences – Fundamentals of Critical Care Support (FCCS):

- Joint educational critical care conferences will be scheduled on Tues/Wed/Thurs each week. Some Mondays may be utilized for additional lectures. Monday and Friday teaching in a Socratic style on rounds will be primarily encouraged.
 - **Administrative fellow for the SICU is responsible for putting together and administering this lecture series**
 - A general topic outline will be followed over a one month period.
 - **Course Description** - Fundamentals of Critical Care Support (FCCS)

Dr. John Barwise (Course Director) and the Multidisciplinary Critical Care faculty would like to provide our ICU residents and medical students an opportunity to receive a certificate for the "Fundamentals of Critical Care Support (FCCS)." The course consists of a short evidence based medicine lecture series and practical skills stations designed by Society of Critical Care Medicine (SCCM) expert opinion to recognize and treat critically ill patients in the first 12 hours. The course will give the recipient a certificate that attests to their ability to demonstrate skills necessary to be first responders and treat critically ill patients in early period of decompensation.

Prior to the start of the course, the ICU residents will be provided with the FCCS text book and a pre test. *The FCCS book will be signed out by each individual and will need to be returned after the end of your rotation. Your FCCS certificate and evaluation for the month will not be released prior to the return of the book.* You are expected to read the book during your rotation. The pre test needs to be completed and handed over to our administrative coordinator at the start of your rotation, so you may want to read parts of the text book prior to the rotation.

This course will be spread out over the entire month that the residents and medical students are rotating in the Surgical and Neurosurgical ICU. It will be held from 11.00 am till Noon on Tuesdays, Wednesdays and Thursdays. Two 30 minute lectures will be presented on Tuesdays and Wednesdays, with the demonstration of 2 different skill stations (30 min each) on Thursdays.

On the last Thursday of the month you will have a Post Test to evaluate what you have learned during the month. This standardized FCCS test will be based on the lectures/ skill station covered during the month as well as additional material from the FCCS text book that you are expected to have read during your month on the rotation. A minimum of 70% correct answers are required to get a FCCS certificate.

- **Text:** *FCCS, Fundamental Critical Care Support, 3RD Ed., SCCM*
- This text will be provided as outlined above
- The lecture schedule will be provided to the residents by the fellows at the beginning of the rotation and posted on the trauma web site at <https://trauma.mc.vanderbilt.edu/kleydev/SICU/index.cfm>

Evaluation

In addition to being evaluated on a daily basis by the covering attending with whom you work, there will be a formal multiple choice examination at the end of your rotation. Hence it is imperative that you read, in addition to all you learn while rotating in the ICU.

PEOPLE TO KNOW:

Addison May, MD – Director, Surgical Critical Care- Pager 835-0679

John Barwise, MD – Director, Anesthesia Critical Care- Pager 835-5710

Mike Daly, RN, MSN, MBA – Nurse Manager, SICU - pager 835-4096

Ashley Staniewski, RN, BSN -Asst. Nurse Manager SICU – office 936-8078

Richard Benoit, RN, MSN, CCRN- Nurse Educator SICU - office 322-6565

Marcus Dortch, PharmD – Pager 835-9075

Katie Beasley, Sarah Valenti, and Jodie Cressler, ACNPs, cell-752-6234

SICU CRITICAL CARE FACULTY

Surgery

Addison May, MD

835-0679

Jose Diaz, MD

835-4002

Bryan Collier, DO

835-8182

Anesthesia

John Barwise, MD

835-5710

Arna Banerjee, MD

835-9843

Pratik Pandharipande, MD

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Lisa Weavind

831-8183

CRITICAL CARE CONSULTATION POLICY:

- All patients admitted to the SICU that
 1. require inotropic support
 2. are not discharged after 24 hours in the SICU (unless discharge is either imminent or discharge orders complete but bed availability prevents transfer)
 will undergo consultation by the CCS
- Consultations at the time of admission for patients not included above at the discretion of the primary service
- Consultation will be ongoing until critical care issues resolve

- Primary service and CCS interactions take place as outlined above
- SICU junior resident or ACNP enters all orders (as outlined above)

The critical care service model that is proposed assumes the following premises:

1. The Critical Care Service (CCS) should provide consultation and input into those patients who are critically ill and that utilize the most resources in the SICU.
2. CCS can improve the throughput in the SICU as demonstrated in the literature.
3. CCS does not assume primary responsibility for the patient or decisions regarding the patient, but should guide the minute to minute changes, drips, ventilator changes, etc as long as they are congruent with the primary team's plans.
4. Treatment recommendations that differ from the primary service should result in direct communication with chief resident/faculty to ensure that a common understanding of the patients underlying conditions and needs exists. When disagreement persists, the primary team maintains decision-making responsibility.

Critical Care Service coverage of patients outside of SICU:

A corner stone of the management of critically ill patients is the consistent and near constant availability of personnel of appropriate expertise to efficiently execute the plan of care, monitor progression, adjust plans of care, and rapidly deal with changes in a patient's clinical condition. SICU resident coverage of patients in ICU's that are geographically disparate locations tends to negate the benefit realized from a Critical Care Service. For this reason, the **VUMC Critical Care Committee passed a policy relegating coverage of patients boarding within a unit to the primary ICU team of that unit**. Implementation of this policy, at times, is problematic. This is particularly true in the Trauma Intensive Care Unit when the trauma team is fully deployed with the management of acutely ill trauma patients.

The following policies have been put into place to limit the difficulties encountered when critically ill patients are boarded in other ICU's

- The SICU triage guideline (see attached) is designed to place the most critically ill patients within the SICU and triage less acute patients to other ICUs. The triage officer will attempt to move acutely ill patients boarded in other ICUs back into the SICU as early as is possible. Please ensure that the triage officer (SICU Critical Care faculty) is aware of the patient's acute critical illness and the desire for consultation.
- Patient's boarded in the Trauma ICU for which the primary service desires a consultation **will be seen by the Critical Care Faculty and Fellow if notified directly by the primary service**. Junior resident coverage of such patients must be delineated at the time of consultation by the Critical Care Faculty/Fellow and the primary service.