

Crouse ICU Multidisciplinary Critical Care Trainee Curriculum

CROUSE INTENSIVE CARE UNIT ORIENTATION SUMMARY

INTENSIVISTS:

1. David Landsberg, MD, FACP, FCCP. Chief Medical Officer, Crouse Health | Professor of Medicine and Emergency Medicine, Upstate Medical University
2. Viren Kaul, MD, FACP, FCCP. Associate Program Director, IM Residency and PCCM Fellowship | Clinical Assistant Professor of Medicine, Upstate Medical University
3. Nauman Hamid, MD. President, Critical Care Associates of Syracuse
4. Ryan Dean, DO

NURSE MANAGER: David Falci, RN, DNP; **ICU NURSING SUPERVISORS:** Sam Cuda, RN and Amy Metcalfe, RN; **CLINICAL NURSE SPECIALIST (CNS):** Katie Swanson, RN: They are based out of their office next to the ICU conference room

RESPIRATORY THERAPISTS: Medical Director: Viren Kaul, MD. Manager: Wendy Fascia, RRT. RTs makes rounds with the team in the morning

PHYSICAL THERAPY: Jessica Parry, PhD: Provides on round and ongoing feedback and recommendation regarding plans for mobilization and PT engagement

CLINICAL DIETICIAN: Maria Meola: Makes dietary recommendations

CARE COORDINATORS: Sally Dulcic, RN: Assistance and recommendations with advanced directives, home care, rehab, financial concerns

CLINICAL PHARMACIST:

1. Andrea Call, RN: Follows vancomycin & gentamycin dosing & orders levels routinely. Follows Coumadin protocols for ICU pts. Leads the antibiotic stewardship program at Crouse
2. A staff pharmacist will join daily ICU rounds during weekdays and provide recommendations on medication appropriateness

ADVANCED CARE/PALLIATIVE CARE: Led by Dr. Melinda McMinn: Patient and family support for medical regimen and decision making

Welcome to the Crouse ICU!!!

This email is a guide for Crouse. Please read it in completion as the information here has been collected for your benefit based on feedback from previous classes of residents as well as current IM and EM Chief Residents. These documents can also be accessed here: [Resident Resources Drive](#).

THE MOST IMPORTANT GUIDANCE FOR THE CROUSE ICU ROATION IS: PLEASE CALL THE CROUSE ON-CALL ATTENDING ASAP AND 24 * 7 WITH ANY CONCERNS, QUESTIONS, PATIENT RELATED MATTERS, CONFLICTS, AND ACUTE/SEVERE PATIENT DECOMPENSATIONS

- Put in the new call structure
- Explain short and long call
- Update the night-time structure guidance
- Clarify role of Upstate fellows
- Infographic on clinicians on Crouse ICU team
- Infographic on Who's Who at Crouse ICU (Seating/Contact)
- Anatomy of Crouse Hospital: Jennifer

Announcements:

- If you have any concerns, you *must* reach out to the attending on call and/or the IM Chief Resident on call in real time based on urgency

Schedule:

Daily Workflow Guide:

- 7:00 – 7:30 am: Daily sign-out @ the ICU (3rd floor Irving Building) conference room
- 7:30 – 8:30 am: Pre-round on your assigned patients
- 8:30 am: May start later but please be prepared to round with the attending at 8:30 am and have the 4 large screen WOWs available
- During rounds, the pre-call resident & intern will input orders and pull up imaging studies/labs, unless they are presenting patients
- After rounds conclude, call consults, finish inputting orders, and follow-up on pending work-up
- 12 pm – 1 pm: Noon Didactics (For all IM interns). Seniors will manage the ICU/grab lunch during this time
- 1:00 – 2:00 pm: Wednesday and Thursday: Crouse ICU conference (see details below)
- 2:00 – 3:30 pm: Re-evaluate your patients, follow-up on pending work-up/consult notes, ensure all pending tasks for the day are addressed
- 3:30 or 4 pm (depending on service acuity): Afternoon *bedside rounds* with On-Call Attending and/or the PCCM/CCM Fellow
- Post PM rounds: Whomever is not on call may leave after confirming with the fellow and the long call senior resident. Prior to leaving, give a verbal sign-out to long call team

Call and Overnight Workflow:

- Two Crouse NF residents (PGY2 and/or PGY3) will serve on-site as night-time coverage from 7:00 pm – 7:00 am
- 7:00 – 7:30 pm: Sign-out between the long call team and the 2-night float seniors
- 9 pm (or when feasible): Night float team should meet with the overnight PA (if covering that night) and go over the patient care plans for the day, ideally at bedside. Feel free to call the on-call attending at this time to clarify plans
- 6 am: Run the list as a team (both seniors + PA) to ensure details are communicated about care of all patients overnight, so they can be shared with the morning team

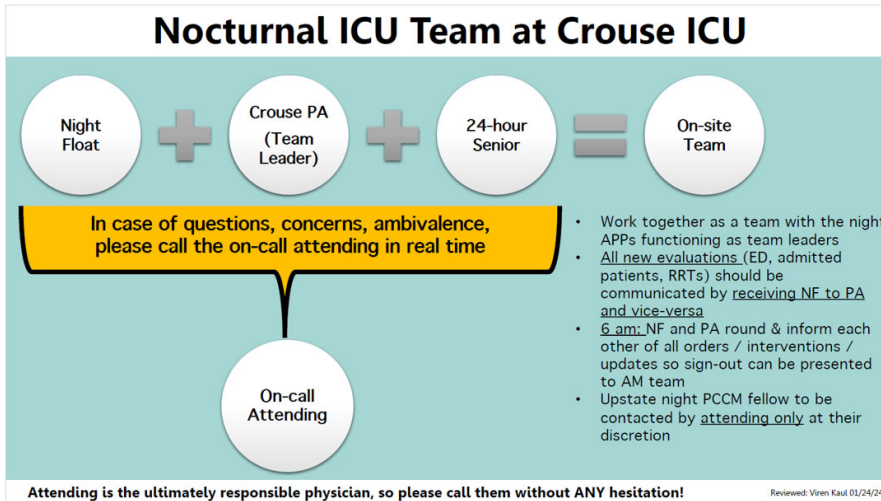
*** INFOGRAPHIC

***** SIGNING OUT OVERNIGHT WORK AND ADMISSIONS**

Patient ownership, admissions, and consulting on patients:

- **Admissions:**
 - **Residents are responsible for all H&Ps overnight. In case of multiple admissions at same time, please work with overnight PAs and each other for timely order placement**
 - **ED admissions** are called directly to the on-call attending. These admissions should be assessed and managed. If there are questions regarding the admission or care, please call the attending
 - **Consults from floors / RRTs / Codes:** These are primarily the responsibility of the responding ICU resident. Please make expeditious decisions regarding their care, disposition, and discuss ASAP with fellow during the day.
 - At night, work closely with the PA to admit to ICU as necessary and provide care
 - Use discretion regarding discussing with the on-call attending, with low threshold to inform the on-call attending in case of severely/rapidly decompensating patients
 - If you decide to refuse an ICU consult for admission, take note of the patient's name, MR#, write a note in the chart and inform the attending in the morning so they can review your decision. Please also follow up in on the patient to ensure they are stable
 - If you have a concern for a neurological issue, call a code B (stroke code)
 - If there is a code M (RRT) that needs ICU care, alert the ICU charge nurse ASAP (Ext: 7037 or call 315.470.7037)
- **Ownership of patients:**
 - **Medical and neurology** patients are typically admitted to the ICU with the on-call intensivist as the primary with the ICU team serving as primary service
 - **Surgical/neurosurgical (and sometimes cardiology)** patients: Are typically admitted to the ICU with the surgery service as primary service with ICU providing close consultative management (vent management, pressors, management of post op care, or multiple medical issues)
 - **If unsure** about who the primary service is or should be: Call on-call ICU attending immediately. In the meantime, provide all necessary care to ensure patient stability and safety
- **Escalating care:**
 - **Day shift:** Discuss patient care matters in an ongoing manner with the PCCM/CCM fellow or the attending, depending on patient severity or urgency of the question
 - **Night shift:** Please see the following infographic for night team care structure
 - Work closely with night-time PAs (when present): They will provide clinical experience and Crouse specific expertise
 - If PA is not available, please call the on-call attending
 - Call the attending with any significant acute decompensations: i.e. intubations, codes, patient deaths, change in code status, significant changes in hemodynamics without improvements

Commented [VK1]: Insert the delineation b/w PGY2 and PGY 3



Code/Consult Responsibilities:

- Short-call resident and intern: Hold the Code/Consult pager during rounds and respond to all pages until the conclusion of rounds
- Short-call group will hand off the pager to the long-call team after rounds and they will assume the same responsibilities
- Resident carrying the Code Pager responds to ALL Code M/RRT and Code B/Stroke Code (unless in ambulance bay)

Documentation responsibilities:

- Please sign all orders in the left pane and sign all your notes every single day at the end of the day

AMION On-Call Page:

- Resident Schedule accessible via Amion.com with password (upstate). The CICU schedule is found at the bottom of the page
- CICU attending schedule accessible with different password (crouse) → Look under Critical Care Associates and not Medicine

Calling out Sick:

- If for any reason you are sick or something comes up and you are not able to make it to work please contact the IM Chief Resident on Call (Listed on AMION as Chief On-Call) to arrange appropriate jeopardy coverage
- EM Residents should also inform EM Chief Resident

Designated Spaces for Residents:

- Utilize the locked call room opposite the Critical Care office in the 3rd floor corridor, adjacent to the elevators (Code: 2-1-4-3): All your bags and belongings must be kept in this safe room and not in the ICU or the conference room
- The work room on the right of the elevators is for ALL residents at Crouse, not just Surgery residents

Conference Schedule for Crouse Hospital:

Wednesday's PM Conference is a didactic from 1 pm-2 pm presented by the CICU On-Call Attending.

Thursday's PM Conference is located in the Cardiac Cath Conference Room and is a combined presentation by the Senior Resident & Intern who are pre-call (meaning that they are the Call Residents for FRIDAY with the weekend off). Please make every effort to be there on time, however, we completely understand that urgent patient care issues take precedence. You are allowed to answer your pages during the conference. Inform the Crouse chief if you will be late for the conference.

The conferences have typically been a brief case description by the senior resident of an interesting case in CICU followed by a topic discussion by their intern peer. However, this structure may be adjusted based on the preferences of this pre-call team.

If you are ever uncertain about anything at Crouse ICU, please discuss with your medicine peers or reach out to us for clarification.

We hope you enjoy the rotation!

TRAINEE COVERAGE:

**Crouse ICU coverage from July 2024:
Chief's version for scheduling purposes**

Monday-Friday

ZAM-7PM: CICU 2, CICU 3, CICU EM, 3 PGY-1s, Fellow
7PM-7AM: CICU 1 NF, CICU NF

Saturday

ZAM-7PM: CICU 2 (CICU 3 every other week), 1 PGY-1, ER PGY-1, Fellow
7PM-7AM: CICU 3 (CICU 2 every other week), PGY-3 IM on UH ER rotation (PGY-3 IM)

Sunday

ZAM-7PM: CICU EM Senior, 2 PGY-1s
7PM-7AM: CICU 1 NF, CICU NF

Assignments/schedule designations
CICU 1 NF (PGY-3)
CICU NF (PGY-2)
PGY-3 IM: The PGY-3 IM on UH ER rotation to cover Saturday night

CICU 2 (PGY-3)
CICU 3 (PGY-3)
CICU EM Senior
IM PGY-1s * 3
ER PGY-1

PCCM or CCM Fellow

Crouse ICU coverage from July 2024

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
7AM – 7PM (Long call)			Fellow			Fellow + PA (start Fri)	PA
7AM – 4 PM (Short call)			AM IM-3 * 2 EM-2/3 PGY-1 * 3			AM IM-3 * 1 IM-1 * 1 EM-1 * 1	EM-2/3 IM-1 * 2
7PM – 7AM (NF)			PA PM IM-3 IM-2			Crouse Fellow home call Other AM IM-3 IM-3 (from UH ER)	PA PM IM-3 IM-2

Simplified ICU coverage from July 2024

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
AM			Fellow/PA 3/4 seniors + 3 PGY-1s			Fellow/PA 1 senior + 2 PGY-1s	
PM			PA + 2 seniors			Fellow home call/PA + 2 seniors	

RESIDENT RESPONSIBILITIES:

Long call team: 7AM – 7 PM every three days
Senior resident + intern team rotate together
EM interns to follow EM senior's schedule

Short call team: Rest of residents will conduct bedside rounds with fellow starting 3:30 PM
Then sign out finalized plans/to-dos to long call team

NF team responsibility: Work with PA as team lead / home call fellow (the Crouse fellow) when PA not on (see following graphic)

*** PGY-2 NF:**

- Cross-cover all patients admitted to the service
- Perform new admissions from ED (already approved by attending)

*** PGY-3 NF:**

- Respond to stroke codes (code B), RRTs (code M), and code blues
- ICU consults on admitted patients
- Perform admissions arising from either of the above

Nocturnal ICU Team at Crouse ICU



In case of questions, concerns, ambivalence, please call the on-call attending in real time



- Work together as a team with the night APPs functioning as team leaders
- All new evaluations (ED, admitted patients, RRTs) should be communicated by receiving NF to PA and vice-versa
- 6 am: NFs and PA round & inform each other of all orders / interventions / updates so sign-out can be presented to AM team
- When PA's not on site (usually Saturday night), the Crouse ICU Fellow will be on home call: Contact them to staff admissions / decompensating patients

Attending is the ultimately responsible physician, so please call them without ANY hesitation!

Reviewed: Viren Kaul 05/21/24

GENERAL:

1. 28 beds mixed medical and surgical beds
2. **A summary of ICU expectations at Crouse along with pre-rounding and rounding resources will be provided to you by the Crouse Chief Resident every Monday morning (demonstrative samples of current resources at end of this document). They are periodically updated to provide you with what's new in Crouse ICU**
3. CENSUS BOARD WITH PATIENT NAME & MD & RN ASSIGNED IS LOCATED AT MAIN DESK BY SECRETARY: The patient census is determined by available nurses and beds...so an 'empty' bed can't always be filled
4. **CALL ROOMS: Crouse ICU will change from 24 hour call coverage to shift based coverage on 07/01/24. As such, there will no longer be any call rooms. However, a service room will continue to be available for on service resident (s). This room is located across from the Critical Care Associates office on 3rd floor connecting the Memorial and the Irving buildings**
5. **RESIDENT ROOM:** A dedicated room for **ALL Upstate residents** is available on the 3rd floor just prior to entering the Crouse West wing
6. Resident Resource Book: Provided by chief medical residents at orientation and available also from nursing leadership office inside the ICU conference room
7. UNIT PHONE: All Crouse phone #'s begin with 470. ICU: 470-7037. Operator: 470-7111
8. INFECTION CONTROL: Wash hands on entering unit and before and after entering rooms and/or touching patients & after removing gloves
9. COMPUTERS: please avoid using the secretary and charge nurse computers. We have several others available at each desk area
10. LECTURES: WED 1P-2P IN CONFERENCE ROOM A, THURS 1P -2P IN CARDIAC CONFERENCE ROOM. Location may change depending on daily clinical workload
11. CODES: Resident and intern carry a code beeper each. A daily code test page is sent out, please call the operator to inform them you received the test page. CODE BLUE: Unresponsive/pulseless patient, CODE B: Stroke code, CODE M: Equivalent of rapid response. Please respond to all codes except in the ED
12. BEDSIDE PROCEDURES: All invasive procedures need appropriate procedural consent. A "time-out" must be performed prior to starting the procedure. A procedure note must be completed after the procedure in a timely fashion. All procedures must be performed only by a credentialed physician or under the supervision of a credentialed physician or representative thereof
13. ORDERS: Please use the "ICU ORDER SET" on admission & during rounds. These include orders in the following points, curated to make ordering easy for you. Please ensure you discuss new orders or changes in existing orders with bedside RN, this ensures timely patient care and safe delivery of care. Avoid placing orders piecemeal: It can lead to delayed results and in case of serum studies, causes patient to suffer multiple needlesticks. Check with bedside RN before placing routine lab orders on rounds if patient is on CRRT, therapeutic hypothermia or other invasive interventions that require frequent labs, they may have already been drawn. This prevents unnecessary orders and errors. Nurses can place frequent labs based on written policies (CRRT, Hypothermia) protocols
14. STROKE PATIENTS: Stroke patients admitted to critical care service: Choose orders from the Stroke/TIA order set under the ICU order set

PROTOCOLS AND SPECIAL INFORMATION:

1. Insulin: Daily Lantus dose administered at 1800 must be ordered on morning rounds
 2. Restraints: Must be reassessed q4 hrs and ordered daily
 3. Sedation is generally kept to a minimum
 4. RER: Routine electrolyte replacement policy. Allows the bedside nurse replace electrolytes per order (s). Do not use in patients with renal failure or Creatinine > 2.0
 5. NO Verbal orders are allowed except during an emergency
 6. DIET ORDERS: Do not revise a diet order. You must discontinue the NPO/diet order and place a brand-new order.
 7. TPN orders must be completed on morning rounds or by 1200
 8. DNR order: A resident can sign as a concurring MD and get a verbal order from attending on call
 9. Use Transfer of Care tab when transferring patients out of ICU
 10. Every out of unit transfer needs an ICU attending to endorse the patient. Any patient leaving the ICU must have an order for discharge or transfer including deaths and AMA.
 11. Medication reconciliation has to be diligently performed at admission, on rounds, and at any transition in care
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Goals and Objectives

The Crouse Hospital ICU is a multidisciplinary ICU with a 50-year heritage of Multidisciplinary Critical Care. Residents will actively manage complex medical and surgical patients of every description except Burns and Immediate Post-Organ Transplant. The goals of the rotation are to improve skills and advance one's knowledge base in the essential methods of caring for critically ill patients. Upon completion of the rotation, trainees should be more skillful in diagnosing and treating patients with critical illnesses and be able to better manage the resuscitation of critically ill patients on the floors until they can be transferred to an intensive care unit. In addition, trainees should be capable of deciding about the utility and appropriateness of this advanced but invasive and expensive care in the overall treatment of patients. Finally, this unique and innovative critical care set-up requires the residents to work with experienced APPs who are embedded members of the team giving trainees real-world exposure to working in modern, multidisciplinary, and increasingly complex teams.

At the outset of traineeship, there is an expectation of facility with the basic principles of management of the critically ill medical patient. It is the explicit goal of this rotation to further those skills and expand judgment in the prioritization of diagnosis and treatment of these patients. It is also the explicit goal of this rotation to advance competence in the management of the complex surgical patient with significant emphasis on thoracic, abdominal, vascular, and neurological surgery. The Supervising Faculty for the rotation are Drs. Landsberg, Kaul, Hamid, and Dean.

We recognize six general areas where competency-based goals have been defined:

A. Patient Care: Designed to provide compassionate, appropriate, and effective care for the treatment of critically ill patients.

By the end of this rotation, you will have gained experience in the evaluation and management of the diverse systems encountered in critical care units that include the following demonstrative areas:

1. Circulatory and cardiovascular disorders, including acute coronary syndrome and hypertensive emergencies
2. Shock syndromes;
3. Sepsis and septic shock
4. Respiratory failure
5. Acute metabolic syndromes/disorders and toxidromes
6. Multiorgan failure
7. Metabolic, nutritional, and endocrine effects of critical illness
8. Rheumatological emergencies
9. Oncological disorders
10. Acute neurological disorders including neurosurgical/Neurointerventional states
11. Critical illnesses in the pregnant patient / obstetric critical illnesses

Within these areas, the attending staff will discuss with you the appropriateness of invasive modalities, and the balance between performing services for patients and those procedures that may not be helpful in reaching the family's or patient's goals for their care. We expect trainees to be able to diagnose these disorders and perform the initial steps in effective management.

B. Medical Knowledge: Designed to allow you to develop a knowledge base about evolving biomedical, clinical, and cognate sciences in an evidence-based pragmatic manner.

The field of critical care is extremely broad, and this rotation is designed to give you the opportunity to experience almost its entire breadth in one physical ICU guided by a multidisciplinary approach. Given the robust general and subspecialty presence of clinicians at Crouse, the multidisciplinary ICU at Crouse will provide you ample opportunity to learn about critical disease states as delineated in the [ABIM blue print for Critical Care Medicine](#) (see hyperlink). During your two-week rotation, you will also be exposed to and have the opportunity to learn from various consulting services.

Trainees will be able to acquire expertise regarding the indications for and utility of the procedures/skills listed below:

1. Temporary and permanent pacemaker placement, cardiac catheterization, mechanical cardiac support (including IABP, Impella devices, and ECMO/extracorporeal support), pericardiocentesis
2. Extracorporeal support (VV-ECMO, VA-ECMO, e-CPR) including variations
3. Variety of interventional procedures performed based on Seldinger technique (vascular access, pleural procedures, etc)
4. Endotracheal intubation and difficult airway management
5. Invasive and non-invasive ventilation
6. Renal replacement therapy
7. Plasma exchange, RBC/WBC exchange
8. Vascular access procedures including ultrasound guided IV, PICC, central lines, vascular catheter along with arterial line placement
9. Pharmacokinetics, pharmacodynamics, and drug metabolism, and excretion in critical illness
10. Ethical, economic, and legal aspects of critical illness
11. Recognition and management of the critically ill from disasters, including those caused by chemical and biological agents
12. Principles and techniques of administration and management of a critical care service and unit
13. Quality improvement and patient safety activities in the intensive care unit
14. Use of critical care ultrasound to diagnose and treat shock states, thoracic and pulmonary pathology, thromboembolic disease and abdominal assessment

C. Practice-based learning and improvement: Designed to improve your ability to investigate and evaluate the care that occurs here on our critically ill patients to assimilate evidence and improvements in patient care.

Every Monday morning, the medical chief residents will meet with the ICU resident team to provide structured orientation to the Crouse ICU and Crouse Hospital System. They will provide you with practical guidance to navigate our unique multidisciplinary system. You will learn structured methods for pre-rounding, consulting with various services, and managing patients as the primary service as well as consulting critical care service for our surgical patients. This orientation is also an avenue to provide feedback regarding system-based issues and quality improvement ideas. We also want you to make suggestions about areas for improvement based on your observations in our units, compared with evolving clinical literature; and you will have the opportunity to study their implementation or develop practice algorithms in conjunction with our various quality improvement teams embedded in the critical care structure. Finally, Dr. Kaul is the Associate Program Director representing Crouse on the Educational Program Office and your longitudinal resource to engage with in terms of developing QI/PI and medical education initiatives. You will be provided Crouse specific succinct orientation material by the chief resident every Monday morning. Please review these thoroughly and provide ongoing feedback and this material is rapidly updated to improve the learning environment for oncoming rotators. Additionally, the Site Director and chief residents have developed pre-rounding and rounding resources for you to use and these are available on Google Drive provided by the chief's office.

D. Interpersonal and Communication Skills: Designed to improve the effective exchange of information and collaboration with patients, their families, and other health professionals.

Weekly multidisciplinary rounds with allied professionals allow you to participate in multidisciplinary approaches that emphasize consensual and collaborative models of patient care. You will also have the opportunity to work with highly experienced critical care APPs on the critical care service in our innovative pragmatic practice model that will prepare you well for real-life practice. Biomedical ethics consultations are available for difficult issues. Effective communication with consultants is also an art that must be developed and can be challenging. At the end of this rotation, each trainee will be able to demonstrate the ability to:

1. Communicate in a collaborative approach with allied professionals
2. Effectively participate in a family conference where you deliver necessary information to patient surrogates
3. Develop receptivity to others' views and contributions during consults
4. Manage conflict effectively and safely

E. Professionalism: Designed to inculcate ethical principles, reinforce professional responsibilities, and develop ability to provide patient-centric care to critically ill patients of diverse backgrounds.

By the end of this rotation, each trainee is expected to develop skills in the following areas:

1. The fluent demonstration of respect, compassion, integrity and kindness to patients, families and other care-givers, including those with whom you may disagree
2. The ability to recognize and avoid conflicts of interest
3. Strict adherence to confidentiality and the provision of informed consent that is understandable and within context
4. Sensitivity to the gender, age, culture, religion, socioeconomic class, disabilities, sexual preferences and other characteristics of our diverse patient group. Professionalism optimizes our effectiveness, lends us credibility, and permits us to work in complex environments

F. Systems-based practice, as manifested by actions that make you responsive to and interactive with the larger context and system of health care, and make you knowledgeable about how to call effectively on resources within our system.

By the end of this rotation, each trainee will learn to:

1. Collaborate with case workers and social workers in identifying post-discharge planning congruent with the economic means and prerogatives of our patients, to optimize their chance of a durable good outcome
2. Work in a collaborative and collegial manner with practitioners with various expertise and experience levels
3. Determine how to use the resources of Crouse Hospital, the University, the School of Medicine and legal consultants at your disposal to optimize patient care

Methods of Instruction

Daily AM rounds are at 8:30 am - 11 a.m. Afternoon rounds are expected to be led by the PCCM/CCM fellow at 3:30 PM and include patient-based teaching to improve patient care and medical knowledge base. The trainees are expected to progress into the role of directing rounds and committing to management plans that will be critiqued in real time by the supervising attending. **All rounds must be conducted bedside with plans communicated with the bedside RN.**

The core curriculum is on Wednesdays and Thursdays from 1:00 pm. – 2:00 pm and includes all of the topics described above under the core competency of Medical Knowledge.

Daily radiographic and imaging interpretation is taught during AM rounds concurrent with review of our patients' radiographic studies.

After rounds in morning, the ICU fellow, senior resident and/or rounding attending will supervise procedures, consults, and coordination of care.

Professionalism should be demonstrated daily and practiced in interactions with nursing, other allied health care professionals, families, consultants and referring physicians.

Level of Supervision

Attending physicians will maintain an independent familiarity with and knowledge base of each patient on our service, separate from your own, designed to assure adequate oversight. The Attendings write daily progress notes that capture their plans, developed consensually with you. Whenever present, senior resident/critical care APPs will supervise and guide you when performing procedures. Please only perform procedures independently if you are credentialed in performing them by the EPO. Wherever circumstances and/or patient safety allow the trainee will see patients and formulate plans ahead of the attending to get a true assessment of the trainee's progress towards clinical independence. The trainee's degree of autonomy and expectation of mastery will graduate through their levels of training with the

Pulmonary and Critical Care Fellow expected to be capable of independently initiating management on the majority ICU admissions.

Evaluations

The MedHub system will allow you to document hours of duty, procedures performed and to register your evaluations of our teaching functions. Doing this documentation, it is very important, but does not supplant direct discussions with the faculty, to document about any concerns or suggestions you may have to improve our rotation. Faculty are expected to provide an ongoing, situational, or end of rotation evaluation and discussion with you, so please expect this and use it as an opportunity. Electronic evaluations of each trainee will be performed by the faculty attendings. Professionalism and interpersonal and communication skills are also assessed by other health care professionals by direct communication with the Site Director. Expect feedback regarding these skills from nursing staff, respiratory therapists and pharmacists to be routed through the Site Director.

**Demonstrative resident resources for rounding at Crouse ICU and single page orientation material
(both regularly updated)**

Demonstrative Orientation Tip Sheet: Used by chief residents on Monday mornings to orient new rotating residents

Crouse ICU Guidance Tip Sheet

1. **Clinical rounds:** Rounds will start at 8:30 AM, sign out is at 7 AM sharp. Pre-rounding is advised.
 - a. Pre rounding, please check the following: **Please use the pre-rounding template.**
 - A. Awakening / sedation
 - B. Breathing: O2 requirements, non-invasive ventilation settings, MV settings, SBT
 - C. Circulation: A line report/BP, rhythm, pressors, inotropes, POCUS
 - D. Drug review and anti-delirium measures: Lights, sound, action, & sleep
 - E. Extraneous devices: Lines, tubes, devices: Indications, what can come out today
 - F. Familiar stuff: **FASTHUGS BID:** Feeding, analgesia, sedation, thromboprophylaxis, HOB elevation, ulcer prophylaxis, glycemic control, spontaneous awakening and breathing trials daily (SAT/SBT), bowel movement, indwelling catheters, drug de-escalation
 - G. Go over problem list
 - b. **New patients: HPI style presentation** w/ pertinent pos/neg findings
 - c. **Known patients:** Yesterday's plan → response, overnight events → vitals (pressors, respiratory status) today's exam, labs, imaging → prioritized **problem-based plan**
 - d. When presenting: Don't report, interpret and translate.
 - e. Be deliberate with the plan: Either organ-system or problem-list based
 - f. Post round, regroup with fellow to go over plan for your patients
2. **Patient ownership:**
 - a. Patients on MICU service: These can come via the ED or from floors, the Crouse intensivists and the resident team is the primary team for these patients
 - b. Surgical patients: Including but not limited to: Gen surg, acute surgery, neurosurgery, gynecological oncology, sometimes cardiology: If any of these patients are ventilation, on pressors, or have acute ongoing medical issues, or we are asked by the primary team to consult, the resident team will perform an initial assessment and then daily follows ups till it is decided on rounds to sign off. In case there is questions about who the primary service should be, please call the on-call intensivist.
3. **Education:**
 - a. Asking questions is encouraged
 - b. By asking you questions, the faculty is seeking commitment to a knowledge or concept element. No judgement: "why", "what", "how" questions purely to allow recall and discussion!
 - c. Always be curious, don't just accept what's being told. Read up, double check literature, share
 - d. **Every Wednesday:** Dedicated didactics from attending. Typically, 1 PM to 2 PM in the Main Conference Room on the 1st floor of the Memorial Building
 - e. **Every Thursday:** Pre-call resident presents a clinically challenging case with a specific clinical question (s) followed by a evidence based 30 – 45 minute presentation by the pre-call intern. Typically, 1 PM – 2 PM in Cardiology Conference Room on the 1st floor of the Memorial Building
4. **Update sign-out daily** post rounds as a group with clear to-dos. This needs to be done at the charge nurse computer. As a courtesy, please ask the charge nurse if the computer is free to use. Always save and close that word document to prevent data loss
5. Complete D/C summaries for all patients that are discharged from ICU. This does not include floor transfers
6. If not sure about something, ask!
7. If you have questions on how to reach a service at Crouse, please ask the Clerk or the charge RN. If they are not available, call the operator by dialing 0 and they will be able to connect you to the appropriate service.
8. **Questions / concerns? Always reach out to the fellow and if needed, the on-call intensivist at:**

Dr. David Landsberg: (315) 256 – 6341
Dr. Nauman Hamid: (786) 304 – 4303
Dr. Ryan Dean: (315) 436 – 3557
Dr. Viren Kaul: (315) 395 – 4717



Please scan this code to join WhatsApp group where Dr. Kaul sends regular post round updates on literature discussed on rounds or during rotation.

ICU Rounding Presentations Guidance:

One workstation will be used to open images and review labs. The other workstation should be used by the pre-call team to place orders and next day labs (use the order set)

- Short introduction: 1-2 sentences to include the following Hospital Day# and ICU day#
- Ex: This patient is a 40 y/o F admitted for intractable seizures who has been loaded with Dilantin and is now seizure-free for 24 hours. She has an ongoing EEG assessment and is both hospital day and ICU day #3.
- Core Values on EVERY patient
 - Add 1A from Dr. Kaul's document
- Major events over the last 24 hours
 - Including ventilator changes, changes in hemodynamics, fevers, results of major tests
- Past medical, social history, family history and ROS do not need to be restated daily unless they are relevant to acute medical problems or events over the last 24 hours
- Physical Exam
 - Vital signs (Temp, BP, HR, RR, SpO2 and I&Os). Do not say "vitals are stable or normal"
 - Ranges are misleading so give trends
 - Pertinent positives - reiteration of normal findings is not necessary; focus on relevant findings that are abnormal and/or pertain to active medical issues
 - Inspect and examine every patient head-to-toe (especially on your first encounter)
 - You will be able to notice daily changes
- Labs
 - Same as physical exam. Interpret trends and pertinent positives
 - Ex]. "Hemoglobin is 7.2 from 9.2"
 - DO NOT say labs are normal
 - When reporting ABG make sure to note the ventilator settings or oxygen requirements of when it was drawn
- Radiology
 - Read the x-ray yourself! Bring your interpretations of the imaging on your patients. This is how you will get better at identifying patterns. Compare with old films.
- Medications
 - Look for reduce redundant or unnecessary medications
 - Look to see antibiotic duration. Know the drips that your patient is receiving and the doses
 - Ensure medications are being administered (antibiotics, dvt ppx for example).
- Consults
 - Know what your consultants write and what they recommend. If you have a question then do not be afraid to call and clarify with them
- Invasive procedures or Surgery
 - Know the interventions your patient received the day before and what the findings were
- Assessment and Plan
 - 1-2 sentence summary on why patient is here and what happened in last 24 hours
 - Ex: This patient is a 65 y/o M admitted with community acquired pneumonia who failed CPAP trial but is afebrile on antibiotics
 - Prioritized problem-based plan
 - Organ-based plan
 - Neurologic
 - Pulmonary & Ventilator
 - Cardiology & Hemodynamics
 - Gastrointestinal & Feeds
 - Renal
 - Infectious Disease
 - Hematology & Oncology
 - Musculoskeletal
 - Skin

ICU PRE-ROUNDING & PRESENTATIONS

C O R E

- **Awakening/sedation:** Daily sedation vacation, unless C/I
- **Breathing:** O2 requirements, NIV settings, MV settings, SBT
- **Circulation:** A-line report/BP, rhythm, pressors, inotropes, POCUS
- **Drug review and anti-delirium** measures: Lights, sound, action, sleep
- **Extraneous** devices: Lines, tubes, devices: Indications and what can be removed
- **Familiar** stuff: "FASTHUGS BID"
 - Feeding
 - Analgesia
 - Sedation
 - Thromboprophylaxis
 - HOB elevation
 - Ulcer prophylaxis
 - Glycemic control
 - Spontaneous awakening and breathing trials daily (SAT / SBT)
 - Bowel movement
 - Indwelling catheters / lines
 - Drug de-escalation

Use the
pre-rounding
checklist!

P R E S E N T A T I O N

OPENING

- New patients: HPI style with pertinent (+) and (-)
- Known patients: 1-2 sentence summary. Why patient is in ICU, important past history & major active medical problems

MAJOR EVENTS IN THE LAST 24 HOURS

- Include VS, vent, hemodynamic status changes
- Major lab, imaging, or microbiology updates

PHYSICAL EXAM

- Inspect & examine every patient head-to-toe (esp on the first encounter)
- Vital signs (Temp, BP, HR, RR, SpO2, and I&Os): Avoid saying "vitals are stable or normal". Give trends
- Pertinent positives and negatives

LABS

- Interpret trends and pertinent positives
 - Ex. "Hemoglobin is 7.2 from 9.2" or
- DO NOT need to report all lab values

RADIOLOGY

- Read the x-ray yourself! Bring your interpretations of the imaging. This is how you will get better at identifying patterns. Compare with old films

MEDICATIONS

- Thorough home med rec
- Daily ICU med rec
- Remove redundant or unnecessary medications
- Confirm antibiotic durations
- Know the drips

CONSULTS

- Know what your consultants write and what they recommend
- Have a question? Do not be afraid to call and clarify with them

INVASIVE PROCEDURES

- Know the interventions your patient received the day before and what the findings were

P L A N

- 1-2 sentence summary on why patient is here and what happened in last 24 hours
 - Ex: *This patient is a 65 y/o M admitted with community acquired pneumonia who failed CPAP trial but is afebrile on antibiotics*
- **Prioritized problem-based plan OR Organ-based plan: Check with attending**
 - Neurologic
 - Pulmonary: Including ventilator plan
 - Cardiology and hemodynamics
 - Gastrointestinal and feeds
 - Renal
 - Infectious Disease
 - Hematology & Oncology
 - Musculoskeletal
 - Skin
 - DVT / GI PPx

Created By:
Joachim Saville, MD
Viren Kaul, MD

ICU ROUNDING SHEET

Pt name:
 Code status:
 Reason for ICU admission:
 Overnight events:
 Subjective:

Vitals:
~~T~~max _____ (@ ____)HR _____ BP _____ (pressor ____)
 RR ____ O₂ ____ on _____

I/O
 UOP: 24in/24out _____ Net 24 _____ Net admit _____

Drains:
 BM:

WBC	Hgb	Hct	Plt	INR	PT	PTT	Micro:	
Na	Cl	BUN	Gluc	K	CO ₂	Creat	Imaging:	
Ca	TP	AST	LDH	PO ₂	Alb	ALT	AP	Cardiology

Assessment:

Plan:

Feeding:
 Analgesia:
 Sedation:
~~Thromboppx:~~
 Head-Up:
 Ulcer ppx:

Glycemic control:
 SBT:
 Bowel Regimen:
 Indwelling catheter:
 De-escalation of Abx:

Pt name:
 Code status:
 Reason for ICU admission:
 Overnight events:
 Subjective:

Vitals:
~~T~~max _____ (@ ____)HR _____ BP _____ (pressor ____)
 RR ____ O₂ ____ on _____

I/O
 UOP: 24in/24out _____ Net 24 _____ Net admit _____

Drains:
 BM:

WBC	Hgb	Hct	Plt	INR	PT	PTT	Micro:	
Na	Cl	BUN	Gluc	K	CO ₂	Creat	Imaging:	
Ca	TP	AST	LDH	PO ₂	Alb	ALT	AP	Cardiology

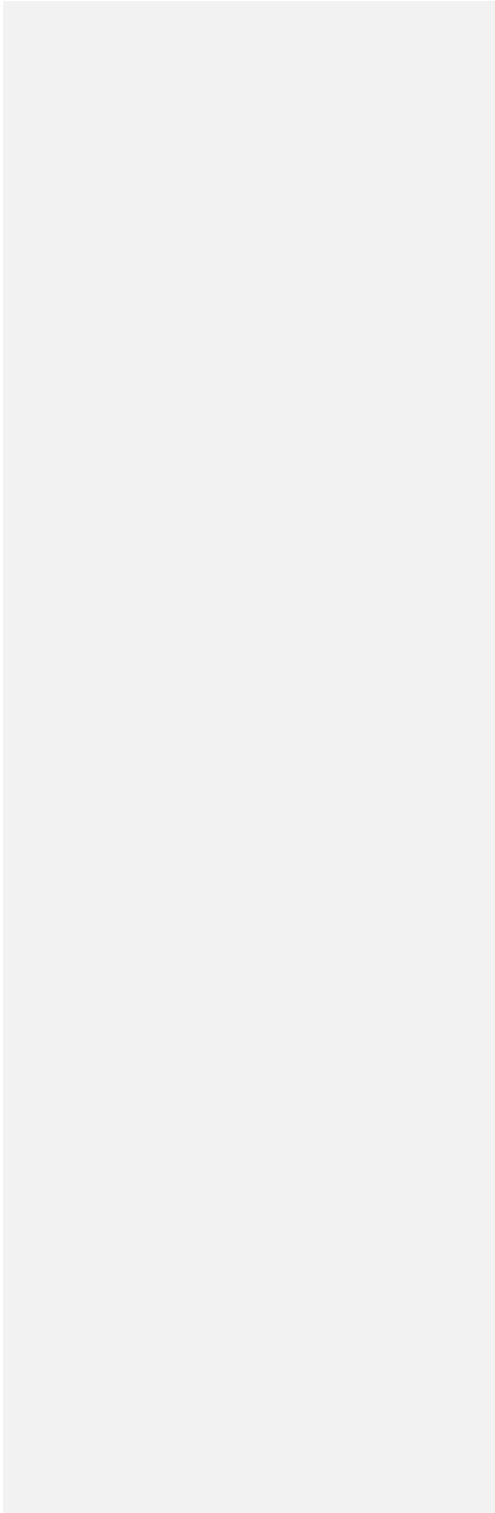
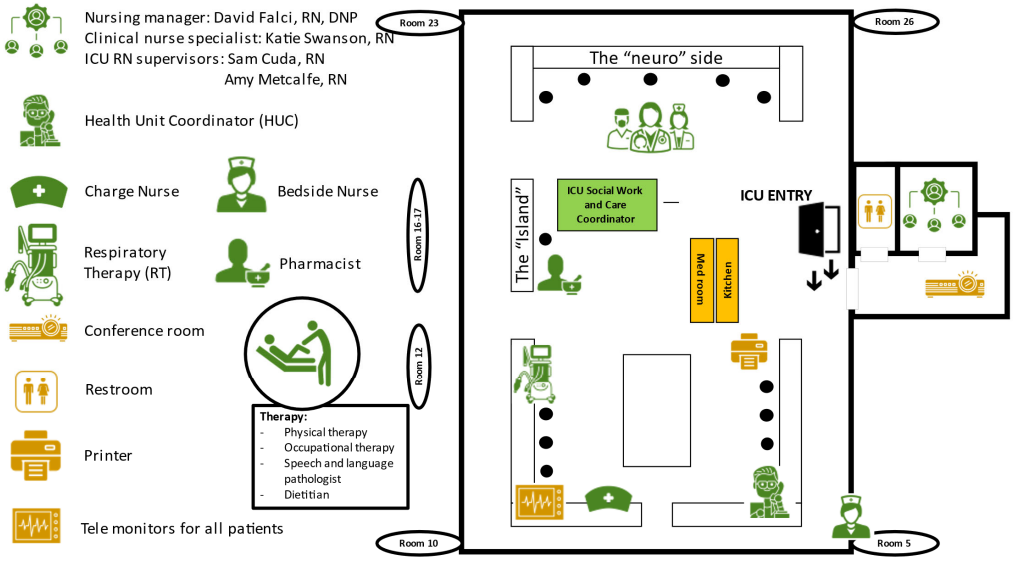
Assessment:

Plan:

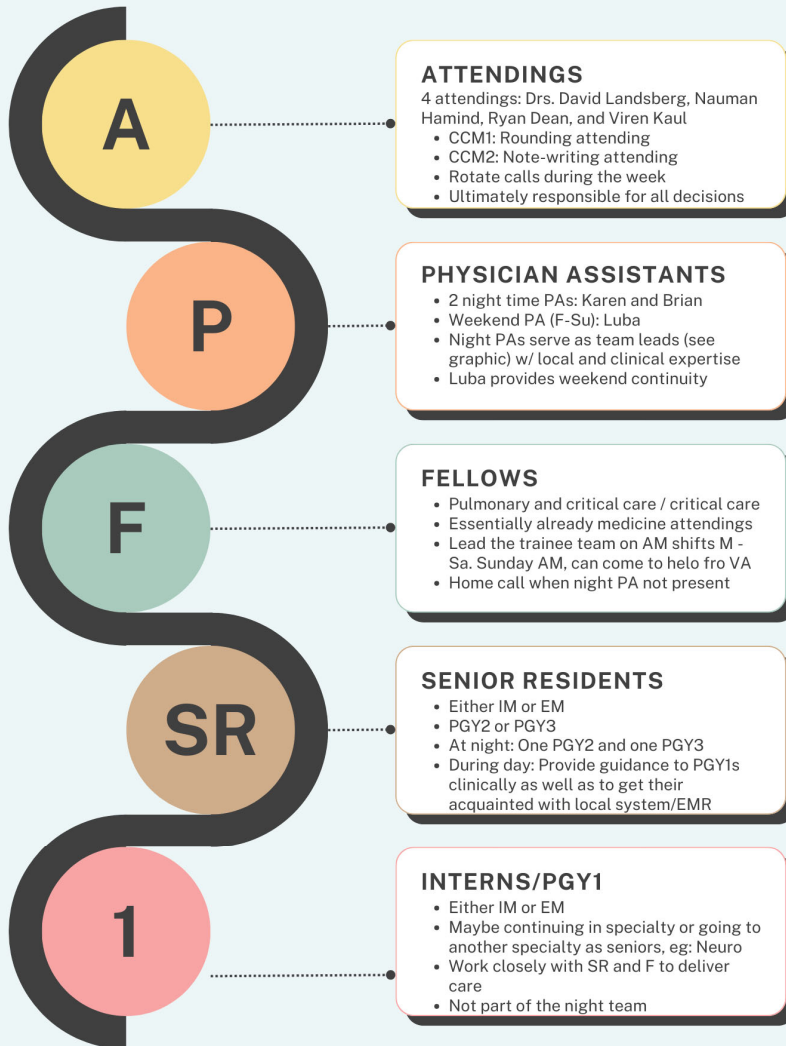
Feeding:
 Analgesia:
 Sedation:
~~Thromboppx:~~
 Head-Up:
 Ulcer ppx:

Glycemic control:
 SBT:
 Bowel Regimen:
 Indwelling catheter:
 De-escalation of Abx:

Updated and reviewed by: Viren, Kaul MD
Date: 05/21/24



CROUSE ICU CLINICAN TEAM



For patient care issues:

- **Start** with 1 or SR responsible for patient in **AM** or PGY-2 in **PM**
- **Need more help**/time-sensitive matter? Involve F in **AM** or PA in **PM** (or home call fellow if no PA)
- **Call on-call ICU attending at all times if needed as they are ultimately responsible**

