

Pediatric PICU Prep Rotation

Welcome to the PICU! During this rotation, residents will have the opportunity to build their foundation of knowledge regarding ICU management of critically ill pediatric patients. We encourage residents to use this rotation to become familiar with the PICU and develop your confidence to take on full clinical responsibility during your senior years.

Contact Person: Stefanie Gauguet, MD PhD
Email stefanie.gauguet@umassmemorial.org

Curriculum

PICU Prep will be divided into 4 different themed weeks. During each week, you will learn about topics pertinent to that theme. Education will include virtual recorded lectures, in-person lectures, hands-on sessions, and simulation cases. Themes include Respiratory, Cardiology, Shock, and Neurology. Weeks can vary in order based on individual preferences and availability of ancillary staff to provide “hands-on” sessions. When residents are making their schedule, they can determine the order of the themed weeks. There are a variety of hands-on sessions that should be attended during PICU Prep. Some sessions are related to themes (i.e. meet with respiratory therapy during respiratory week) but others are not related. Review the example schedule below to see which hands-on sessions are recommended for each week. If you are unable to schedule a specific hands-on session (i.e respiratory therapy) during a certain themed week (i.e respiratory week), you may reschedule it for a different week.

Residents will be tasked with creating their own schedule for the month during the first week of the rotation. Please submit this schedule so the PICU staff can keep track of which educational experiences you will be attending on different days.

For days when you have nothing scheduled, please report to the PICU for sign-out and expect to follow the schedule listed below. You may follow 1-2 patients and practice presenting on rounds. You should assist with consults on your patients and any new admissions/discharges if available. The PICU resident should be the first provider of the patient, but this is an opportunity to become familiar with the PICU flow.

Please have each of the PICU team members that you meet with sign off on your activity completion checklist.

PICU Schedule

- 7am: Sign out/Pre-rounds (8am on weekends)
- 8am-9am: Conference
- 9am-12pm: Rounds
- 12pm-4pm: Afternoon tasks (teaching, admissions, transfers/discharges, consults, re-evaluating patients, etc)
- 4pm-5pm: If census is high and the unit is active, PICU prep residents are expected to stay until 5pm. If there are no active tasks, PICU prep residents may be excused at 4pm.

Example Schedule:

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Week 1 Shock		AM: Rounds PM: OpenPeds	AM: Rounds PM: Pharmacy with Ann Considine	AM: Rounds PM: Lines with Lauren Fortier	Clinic	AM: Rounds PM: PICU	Overnight Call
Week 2 Respiratory		AM: Rounds PM: PICU	AM: Respiratory Therapy PM: OpenPeds	AM/PM: Anesthesia with Peter Foley	Clinic	AM: Rounds PM: PICU	
Week 3 Cardiology		AM: Nursing PM: OpenPeds	PEDI-Pals community day	AM: Rounds PM: PICU	Clinic	AM: Nutrition PM: PICU	
Week 4 Neurology		AM: Rounds PM: PICU	AM: Sedation Team PM: OpenPeds	AM: Rounds PM: PICU	Clinic	Overnight Call	

Online Resources

Woo Insider (umassmed.edu)

To log in you can use

woo@umassmed.edu

password: Insider1!

OpenPediatrics (<https://www.openpediatrics.org/>)

Residents should make a free account on OpenPediatrics with their umassmemorial email address and then let the chief residents know so they can add you to the UMass online channel. The online channel has 5 different categories (Respiratory, Cardiology, Neurology, Shock, and Miscellaneous). During your themed weeks, you are expected to complete the core mandatory lectures associated with the theme. For example, during respiratory week you are expected to complete all the core mandatory online lectures located in the respiratory categories.

- Residents may schedule 1 protected afternoon per week to complete the online lectures
- Residents may also watch the online lectures on afternoons when they are in the PICU and the unit is not very active/busy

Simulation

You will participate in weekly simulation sessions run by the PICU attendings. The simulation session will most likely pertain to the weekly theme. Please discuss with your attendings when the simulation sessions will be held. Simulation examples include respiratory failure, cardiac arrest, shock, etc.

Notes

During your month, take the opportunity to learn how to write PICU admission and progress notes. This is to gain practice and experience with ICU style of documentation. You are NOT expected to write daily notes.

Overnight Call

Residents are expected to take overnight call twice during their block – one weekday night and one weekend night. Please arrive on the call day at 6pm and plan to stay until 10am the next day to present on rounds. This is an opportunity to learn how to manage critically ill patients with less supervision.

Hands-On Sessions

Plan to schedule learning sessions with different members of the PICU multidisciplinary team.

1. Sedation Team

- a. Contact: Kim Generelli (kim.generelli@umassmemorial.org)
- b. Schedule $\frac{1}{2}$ day to 1 full day
- c. Goals
 - i. Learn how to perform pre-sedation assessments
 - ii. Identify NPO guidelines
 - iii. Discuss informed consent for sedation procedures
 - iv. Learn the levels of sedation, including the risks and benefits
 - v. Identify the properties of commonly used sedatives and reversal agents
 - vi. Monitor patients during sedation
 - vii. Learn airway management for sedations
 - viii. Discuss recovery and discharge criteria

2. Anesthesia

- a. Contact: Peter Foley, MD (peter.foley@umassmemorial.org)
- b. Schedule 1 full day
- c. Goals
 - i. Become efficient and comfortable with bag valve mask ventilation
 - ii. Appreciate the preparation for airway management and intubation
 - iii. Perform elective intubations (child or adult)
 - iv. Appreciate the physiology of anesthetic agents

3. Respiratory Therapy

- a. Contact: Rachel Carragher (rachel.carragher@umassmemorial.org)
- b. Schedule ½ day
- c. Goals
 - i. Understand the benefits of different oxygen delivery systems, including nasal cannula, HiFlow, facemask, non-rebreather, CPAP, RAM cannula/BiPAP
 - ii. Appreciate the techniques of nebulization of medications
 - iii. Understand the fundamentals of ventilators and endotracheal tube management

4. PICU Nursing

- a. Contact: Kaylee Mathieu (kaylee.mathieu@umassmemorial.org)
- b. Schedule ½ day to 1 full day
- c. Goals
 - i. Understand nursing bedside assessments
 - ii. Appreciate the process from MD order to nursing administration of medications
 - iii. Participate in bedside care including ETT suctioning, pulmonary toilet, chest PT
 - iv. Understand the fundamentals of monitoring devices (CR monitor, arterial line, CSF drainage – EVD, chest tube, foley)
 - v. Participation in daily routine patient care

5. Nutrition Support

- a. Contact: Melanie Maletta, RD (melanie.maletta@umassmemorial.org)
- b. Schedule ½ day
- c. Goals
 - i. Understand the principles of a nutritional assessment of a critically ill child
 - ii. Develop caloric goals for patients
 - iii. Learn about the choices of enteral nutrition and formula
 - iv. Understand the fundamentals of parenteral nutrition

6. Pharmacy

- a. Contact: Ann Considine, Pharm D (ann.considine@umassmemorial.org)
- b. Schedule ½ day
- c. Goals
 - i. Appreciate the use of medication infusions and medication pumps
 - ii. Understand the rationale and methods of electrolyte replacement
 - iii. Learn about medication dispensing from the pharmacy and tour the facility
 - iv. Review code cart medications

7. Lines, Tubes, Kid's Comfort Promise

- a. Contact: Lauren Fortier (lauren.fortier@umassmemorial.org)
- b. Schedule ½ day
- c. Goals
 - i. Learn about specific pain free techniques for IV placement and phlebotomy
 - ii. Understand the principles and practical aspects of IV insertion
 - iii. Learn about the different indications for central lines and procedural techniques
 - iv. Learn about G-tubes and tracheostomy tubes, and the outpatient coordination of services for children with special needs

8. Pedi-Pals community day

- a. Contact: Jill Jeffers (JJeffers@NotreDamehealthcare.org)
- b. Schedule one full day (ideally a Tuesday)
- c. Goals

- i. Learn about the community resources available to children with chronic medical needs or at the end of life
- ii. Attend a multidisciplinary Pedi-Pals conference
- iii. Visit patients in the community and see a different side of pediatric care

PICU PREP CHECKLIST

Please turn this in to Dr. Stefanie Gauguet at the end of your rotation. (may leave in mailbox in the PICU)

<u>Category</u>	<u>Activity</u>	<u>Date completed</u>	<u>Team member sign-off</u>	<u>Notes</u>
OpenPediatrics	Respiratory			
	Cardiovascular			
	Neurology			
	Shock/misc			
Clinical care	Patient H&P			
	Progress note			
	Overnight call (weekday)			
	Overnight call (weekend)			
Hands-on with multidisciplinary team	Sedation service			
	Anesthesia			
	Nursing			
	Respiratory			
	Nutrition			
	Pharmacy			
	Lauren			
	Pedi-Pals Jill Jeffers			
Simulation	Respiratory			
	Cardiovascular			
	Neurology			
	Shock/misc			