

Perioperative Anesthesia Consult Service Rotation

OVERVIEW:

The Perioperative Anesthesia Consult Service (PACS) Rotation is a two-week rotation that provides residents an immersive experience in co-management of surgical patients alongside their surgical colleagues. As the scope of our field is expanding, anesthesiologists must be prepared to manage surgical patients during the entire perioperative period, from preoperative preparation through postoperative management. The ABA has therefore suggested the creation of a rotation focused on perioperative medicine, with a particular emphasis on postoperative care. In addition to instruction from anesthesiology attendings, residents should have experiential learning in the provision of perioperative care of surgical patients, which will also maximize continuity of patient care.

Prior to this rotation, residents completed rotations in pre-operative medicine, immediate post-op care (PACU), perioperative critical care, and acute and chronic pain management. The Perioperative Anesthesia Consult Service rotation extends care beyond the ICU and PACU. Residents will round on post-operative surgical patients to provide consultation to the surgical team, will evaluate admitted patients to optimize their clinical status prior to surgery, and then follow patients through their post-operative course to discharge.

EDUCATIONAL PURPOSE:

1. To expose the residents to the rapidly growing field of perioperative medicine
2. To immerse in day to day co-management of surgery patients during the perioperative period, with an emphasis on the postoperative period
3. To learn effective ways of working with the surgeons, surgery APPs, and nurses on the floor and help improve patient care
4. To perform preoperative optimization of medically complex patients presenting for surgery
5. To attain confidence in evidence-based selection of perioperative testing
6. To review the current evidence based practices in perioperative management
7. To become involved in quality improvement projects pertaining to perioperative medicine, including but not limited to enhanced recovery protocols
8. To follow patients during the rotation during the perioperative continuum, from preoperative visit to surgery and then to postoperative ICU/floor care.
9. To learn about common postoperative and perioperative medicine topics through daily lectures by attendings and also to present a fifteen minute talk by the end of the rotation
10. Integration of bedside TTE into daily/weekly schedule

ROTATION COMPONENTS:

- Residents will pick from a varied list of meetings and huddles that provide a broader perspective on perioperative care and hospital operations related to surgery
- Readings on OR and perioperative leadership, management, and health policy will be available to develop "integrated management competencies" with particular emphasis on developing strategies to work within highly specialized teams and on resource utilization
- Collaborate with VA perioperative team via weekly conferences with journal club, case presentations, in-depth topic coverage (e.g. pre-op opioid management)

TENTATIVE DAILY SCHEDULE:

- Tuesday / Thursday 6:00am-7:15am: rounds with Urology service, will expand to other services
- 7:30am: E2 Code Team huddle with ICU fellow, anesthesia airway resident, nursing supervisor, pharmacy, respiratory therapy
- 7:45am – 12pm, 1:00 PM – 4:00 PM: see new preop patients and discuss with anesthesia team taking patient to OR; follow-up on old patients; bedside echo with attendings on PACU or floor patients; attend various meetings and huddles as opportunity allows; perform bedside sedation (Trach&PEGs, TEEs, etc.); perform invasive lines; evaluate complex post-op patients when their course deviates from the routine, as consulted by surgical service
- 12:00 PM – 1:00 PM: Libero and Lunch

Residents are expected to have either a 4 or 5 call each week while on service.

Residents will be excused at 4:00 PM for their weekly resident lecture.

High-risk Anesthesia Group: select high-risk patients, especially pulmonary hypertension, adult congenital heart disease, will be discussed every second Tuesday of the rotation at 11:00 AM. The Perioperative resident and the Preoperative resident will be assigned a list of patients on the first Monday on service, and will prepare a document (essentially a complex Pre-OP report) and present these patients on the High-risk conference, which will be attending by: Cardiac anesthesia (usually Dr. Charles Hill), Cardiac surgery NP, Preoperative clinic attending and head NP, Lisa Cianfichi, Pulmonary Hypertension attending and fellows.

CLINICAL ACTIVITIES AND WORKFLOW: (this section is still in development)

1. Provide **preoperative consultation**, *triggered by*
 1. Surgical service: who recognize complex pt may require optimization in days prior to surgery e.g. correcting volume status, obtaining TTE
 2. Anesthesiologist: primarily for admitted patients. Is pt safe to proceed? Any red flags? Further work-up?
2. Provide **postoperative consultation**, *triggered by*
 1. Surgical service: for acute care, or non-routine post-op course
 2. Anesthesiologist: for complicated anesthetic / intraop course
3. Provide **Code and RRT coverage** M-Friday during daytime, *triggered by*
 1. Code pager
 2. *need a trigger for RRTs, e.g. surgical service identifies AF RVR on rounds vs ?nursing staff identify pre-code / RRT scenario
4. Provide **invasive line placement**, *triggered by*
 1. Surgical services (shortens In-OR to Incision time)
 2. ?Anesthesiologist service, is this billable? (even just large-bore US-guided PIV in difficult access pt)
5. Provide **bedside sedation**, e.g. for ICU trach & PEGs with IP service, particularly painful wound dressing changes (this may be too easily misused), etc.

PACS Rotation Attendings: Drs. Schmiesing, Lu, E. Hennessey, M. Chen, Lorenzo

PACS PATIENT LIST:

When we evaluate a complex patient preoperatively, or are consulted post-operatively, please add PACS as a Treatment Team in EPIC; this will add the patient to the shared patient list. There are several ways to do this, including opening the patient's chart, going to the Summary tab -> Homepage -> Treatment Team, then type "TT Periop" and set the Relationship to *CONSULTING SERVICE*, not Primary Team (or you'll get a lot of unnecessary pages!) The patient will then be on our Perioperative Anesthesia Consult Service list.

Add "Periop Anes Consult Svc TT"

The screenshot shows the EPIC interface with two panels. The left panel is the 'Summary' tab, and the right panel is the 'Treatment Team' tab. Red arrows and numbers 1 and 2 indicate the navigation path: 1 points to the 'Homepage' button in the Summary tab, and 2 points to the 'Treatment Team' link in the left sidebar. In the Treatment Team tab, another red arrow and number 2 point to the 'Consulting Service' dropdown menu in the 'Relationship' field.

Provider	Relationship	Specialty
Gotlib, Jason Robert, MD	Attending	--
Cardiology, Con	Consulting Service	--
Hematology, Case Manager	Case Manager	--
Hematology, Social Worker	Social Worker	--
Saini, Anil, RN	Registered Nurse	--
Santa Maria, Naomi	Respiratory Care Practitioner	--
Tt, Acute Care Surgery Gen Surg - Pgr 22911	Consulting Service	--
Tt, Hematology Resident C - Pgr 27092	Primary Team	--
Tt, Ortho Hand - Pgr 27149	Consulting Service	--

Treatment Team

Search for provider: + Add + Add Me

List view: Do not group Team Choose Columns

Provider Relationship

New Provider

Provider: PERIOP ANES CONSULT SVC TT [G1120001]

Relationship: Consulting Service

Start: 4/18/2018 11:18 AM

End:

Specialty:

Comment:

From Available Lists, click Stanford Health Care, and scroll to Perioperative Anesthesia

The screenshot shows the 'Available Lists' section in EPIC. On the left, a tree view shows 'Stanford Health Care' expanded, with 'MD Primary Team' selected. On the right, a list of services is shown, with 'Perioperative Anesthesia Consult Service' highlighted by a red arrow.

Available Lists

- Recent Searches
- System Lists
- Stanford Health Care
 - Nursing Units
 - Cardiology Labs
 - Case Management
 - Cast Room
 - Cath Angio
 - Census (No Psych ...)
 - Diabetes
 - Emergency Depart...
 - Guest Services
 - Infection Prevention
 - Interpreter Services
 - MD Consults Follow...
 - MD Consults New
 - MD Primary Team
 - Acute Care Surge...
 - Acute Care Surge...

Available Lists

- Ortho Spine
- Ortho Sports
- Ortho Trauma
- Pain Acute
- Pain Chronic
- Pain Consult Team
- PAMF Med 1
- PAMF Med 2
- PAMF Med 3
- PAMF Med 4
- PAMF Med 5
- PAMF Med 6
- PAMF Med/Cards...
- Perioperative Anesthesia Consult Service**
- Physical Med & R...
- Plastic Surgery

Course objectives and goals

a. Patient Care and Procedural Skills

- i. Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of post-operative surgical patients. Residents:
 1. Obtain a comprehensive medical history
 2. Perform a comprehensive physical examination
 3. Based upon the history, physical examinations, and the completed surgical procedure, obtain appropriate diagnostic information and consultation that may include any organ system for evaluation and appropriate diagnostic studies.
 4. Provide immediate postoperative anesthesia care management, including but not limited to:
 - a. Communication with patient's family
 - b. Ensuring optimal pain management
 - c. Return to normal functional activities
 - d. Management of hemodynamic abnormalities
 5. Provide postoperative consultation while the patient remains hospitalized to assist the surgical service with an optimal recovery period that insures patient comfort and return to baseline function, allowing for timely discharge

b. Medical Knowledge

- i. Resident must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences as it applies to post-operative patient care.
- ii. Understand how enhanced recovery after surgery protocols can be implemented for selected patient populations.
- iii. Must demonstrate appropriate medical knowledge in the topics related to post-operative management of patients including:
 1. Management of diabetes and perioperative glucose management, including insulin pumps
 2. Management of pain incorporating a multimodal approach
 3. Management of common postoperative dysrhythmias
 4. Management of blood pressure
 5. Resuming patient medication
 6. Wound management
 7. Management of ischemic cardiac disease, including management of antiplatelet therapy in perioperative setting
 8. Management of pulmonary function after surgery, including PFT interpretation and pulmonary disease management
 9. Management of perioperative renal dysfunction, including acute and chronic renal insufficiency/failure
 10. Management of postoperative cognitive dysfunction
 11. Management of perioperative anemia and blood transfusion guidelines/literature
 12. Common perioperative infections (e.g. UTA, SIRS, wound and line infections), including the epidemiology, detection, and treatment of these infections
 13. Management of perioperative fluid therapy, including evidence for goal-directed therapy
 14. Prevention of postoperative complications, including fall prevention

c. Practice-Based Learning and Improvement

- i. Residents must demonstrate the ability to investigate and evaluate their care of patients during the post-operative period, to appraise and assimilate scientific evidence, and to continuously improve patient-care based on constant self-evaluation and life-long learning. Residents are expected to develop the skills and habits to meet the following goals:

1. Identify strengths, deficiencies, and limits in one's knowledge and expertise
2. Set learning and improvement goals
3. Participate in the education of patients, families, students, residents, and other health professionals
4. Measure patient outcomes and compare versus standard
5. Perform a comprehensive literature search addressing a deficiency in knowledge concerning the perioperative management of a medical condition

d. Interpersonal and Communication Skills

- i. Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. Residents are expected to:
 1. Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds
 2. Work effectively as a leader coordinating the post-operative course of the patient
 3. Act as a consultant to the surgeon in the postoperative management of the patient
 4. Create a professional working relationship with medical and surgical colleagues that allows for the collaborative management of the patient
 5. Develop strategies for positive engagement of other healthcare professionals and support workers
 6. Develop strategies to work within highly specialized teams
 7. Demonstrates the ability to communicate clearly, promptly and effectively with colleagues by means appropriate to the urgency of the situation e.g. personal presence, telephone, email, letter; understanding and control of emotions when communicating with others
 8. Respond to cultural differences, including awareness of their own and their patients' cultural perspective

e. Professionalism

- i. Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate
 1. Compassion, integrity, and respect for others
 2. Responsiveness to patient needs that supersedes self-interest
 3. Responsiveness to surgical, obstetrical, and procedural needs
 4. Respect for patient privacy
 5. Work effectively in a care team that includes physicians, nurses, and allied health professionals during the perioperative periods.

f. Systems-based Practice

- i. Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to effectively call on other resources in the system to provide optimal health care. Residents are expected to:
 1. Coordinate patient care in the post-operative period
 2. Advocate for quality patient care, optimal pain management, placement if appropriate for discharge and timely discharge
 3. Participate in identifying areas of improvement in the post-operative period and implement solutions to these areas
 4. Incorporate considerations for cost-awareness in the post-operative management of the patient, performing appropriate risk/benefit analysis in the clinical decision-making in the management of the surgical patient.
 5. Resource utilization: efficient use of resources; identifying and reporting any significant deficiency of resources; contributing to discussions and planning for service and facilities development
 6. Implementation of Evidence-based Medicine and Implementation Science