



ACUTE PAIN AND OUT OF OR ANESTHESIA

THE ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF CANADA

Objectives of Training and Specialty Training Requirements in Anesthesia

Specific Objectives in CanMEDS Format

OVERALL GOALS

This rotation is a unique combination of the Pre-Admission Clinic at Victoria Hospital, the Acute Pain Service, and provision of anesthesia services outside of the operating room. The objectives for the Pre-Admission portion are the same as those for University Hospital and are included below. The objectives for the Acute Pain Service and out of OR anesthesia follow.

The Pre-Admission Clinic is a rotation that will occur at either University Hospital or Victoria Hospital over a four week period. The resident will spend the majority of time in the preoperative clinic of either hospital. Residents will be expected to complete an appropriate history and physical on each patient seen in the clinic. The resident will then present a plan for further investigation, optimization, and perioperative management of the patients seen. Written or dictated documentation of the consultations is expected.

ROTATION OBJECTIVES (PRE-ADMISSION CLINIC)

At the completion of the Pre-Admission portion of training, the resident will have acquired the following competencies and will function effectively as:

Medical Expert/Clinical Decision-Maker

General Requirements

The resident will be able to:

- Demonstrate appropriate and anesthesia specific history and physical skills, including assessment of the airway.

Specific Knowledge Requirements

The resident will be able to:

- Demonstrate internal medicine knowledge base as it applies to the etiology, natural history, and management of the following disease states that are common reasons for pre-admission clinic referral: coronary artery disease, chronic obstruction pulmonary disease, advanced kidney failure, advanced liver failure, cerebral vascular disease, typical congenital disease states, obstructive sleep apnea, obesity, rheumatoid arthritis, ankylosing spondylitis, and chronic pain.
- Demonstrate a working knowledge of indications and recommendations for ordering of invasive and non-invasive investigations preoperatively, including: ECG, pulmonary function testing, chest radiograph, investigations of underlying coronary artery disease, and investigations for cerebral vascular disease.
- Demonstrate the ability to synthesize a reasonable optimization/investigation anesthetic management plan based on nature and urgency of surgery, history, physical, and available investigations.



Communicator

The resident will be able to:

- Communicate well with patients and families in the Pre-Admission Clinic, with a good bedside manner.
- Verbally explain findings of history and physical with anesthesia faculty supervisor and provide a reasonable management plan.
- Provide a concise dictated note regarding patient assessment and plan.

Collaborator

The resident will be able to:

- Interact well with the multi-disciplinary team in the Pre-Admission Clinic.
- Work well with other physicians in the Pre-Admission Clinic including internal medicine and surgery.
- Consult other specialties (internal medicine) when required for patient care.

Leader

The resident will be able to:

- Apply the science of quality improvement to contribute to the improvement of patient assessment and preparation for surgery
- Apply evidence and management processes to achieve cost appropriate care in the Pre-Admission Clinic
- Demonstrate leadership skills that enhance the effective function of the Pre-Admission Clinic

Health Advocate

The resident will:

- Understand the anesthesiologist's role in optimization of the patient preoperatively.
- Take steps to improve perioperative safety of patients (aspiration prophylaxis, post-operative Critical Care admission, etc.).
- If appropriate, demonstrate willingness to communicate to the surgeon the anesthesia team's concerns regarding timing, scope, and appropriateness of proposed surgery.
- Understand the anesthesiologist's role in patient education preoperatively, including smoking cessation.
- Be able to provide risks and benefits of possible postoperative pain control options.
- Understand the anesthesiologist's role in blood conservation and should be able to describe the pros and cons of a variety of blood conservation strategies.

Scholar

The resident will:

- Critically evaluate the integrity, reliability, and applicability of health related research and literature.

Professional

The resident will:

- Display professional behavior and attitude while dealing with patients, families, and staff.



READING LIST

Required Reading:

1. Barash PG, Cullen BF, Stoelting RK, editors. Clinical Anesthesia. 7th ed. Philadelphia: Lippincott; 2013. Chapter 22: 583-612. Preoperative patient assessment and management.
2. Miller RD, editor. Anesthesia. 8th ed. New York: Churchill Livingstone; 2015. Chapter 38: 1085-1155. Preoperative evaluation.

Suggested Reading:

1. Committee on Standards and Practice Parameters, Apfelbaum JL, Connis RT, et al. Practice advisory for preanesthesia evaluation: an updated report by the American Society of Anesthesiologists Task Force on Preanesthesia Evaluation. Anesthesiology. 2012 ;116: 522-38

ROTATION OBJECTIVES (ACUTE PAIN SERVICE)

Upon completion of training, the resident will have acquired the following competencies and will function effectively as:

Medical Expert/Clinical Decision Maker

The resident will:

- Demonstrate the ability to assess patient and surgery specific needs and options for perioperative pain control.
- Have working knowledge of indications, contra-indications, and complications of narcotics, anti-inflammatory medications, antidepressants, sedatives, intrathecal medications, and epidural analgesia as they pertain to perioperative pain control.
- Understand the rationale for and deliver multimodal perioperative analgesia.
- Demonstrate the ability to assess and provide management for a patient with non-surgical acute pain issues.
- Demonstrate the ability to assess and modify acute analgesia management plan for patients with chronic pain disorders.

Communicator

The resident will be able to:

- Elicit appropriate input from patient or parents regarding effectiveness and concerns about perioperative pain control.
- Demonstrate effective and accurate written and verbal communication with nurses and surgical team regarding pain control.

Collaborator

The resident will be able to:

- Work well with the Acute Pain Service team and demonstrate respect for the roles of team members, including consultants and nurses with advanced training.



Leader

The resident will be able to:

- Apply the science of quality improvement to contribute to the improvement of the Acute Pain Service and patient care.
- Apply evidence and management processes to achieve cost appropriate post-operative pain management
- Demonstrate leadership skills that enhance the effective function of the Acute Pain Service

Health Advocate

The resident will:

- Demonstrate an understanding of the unique patient safety issues and complications that can arise with perioperative pain control strategies including nausea, vomiting, constipation, respiratory depression, delirium, hypotension, and neurological injury.
- Be able to counsel patients or parents on a variety of pain control options and describe the risks and benefits of each.

Scholar

The resident will:

- Critically evaluate the integrity, reliability, and applicability of health related research and literature for post-operative pain management

Professional

The resident will:

- Display professional behavior and attitude while dealing with patients, families, and staff.

READING LIST

Suggested Readings:

1. Barash PG, Cullen BF, Stoelting RK, editors. Clinical Anesthesia. 7th ed. Philadelphia: Lippincott; 2013. Chapter 56: 1611-1645. Acute pain service.
2. Miller RD, editor. Anesthesia. 8th ed. New York: Churchill Livingstone; 2015. Chapter 98: 2974-2998. Acute post operative pain.
3. American Society of Anesthesiologists Task Force on Acute Pain Management. Practice guidelines for acute pain management in the perioperative setting: an updated report by the American Society of Anesthesiologists Task Force on Acute Pain Management. Anesthesiology. 2012;116: 248-73.

ROTATION OBJECTIVES (OUT OF OR ANESTHESIA)

At the completion of training, the resident will have acquired the following competencies and will function effectively as:

Medical Expert/Clinical Decision Maker

The resident will be able to:

- Demonstrate location, patient, and procedure specific knowledge of unique anesthesia considerations when providing anesthesia services outside of the operating room including:
 - Available personnel with skills required to help anesthesiologist
 - Timely availability of back-up in case of an emergency



- Location and acceptability of resuscitation equipment
- Transport of patients to Post Anesthetic Care Unit after procedure
- Pros and cons of sedation versus general anesthesia for procedures

Communicator

The resident will be able to:

- Clearly communicate anesthesia specific requests and concerns to staff that may not be familiar with the anesthesia teams' needs.

Leader

The resident will be able to:

- Apply evidence and management processes to achieve cost appropriate post-operative pain management
- Demonstrate leadership skills that enhance the effective function of the Acute Pain Service

Health Advocate

The resident will:

- Ensure proper equipment and personnel are available prior to starting the provision of anesthesia services.
- Understand the principles of and complies with radiation safety for the patient, staff, and personally.

Scholar

The resident will:

- Critically evaluate the integrity, reliability, and applicability of health related research and literature for out of OR anesthesia

Professional

The resident will:

- Display professional behaviors and attitudes while dealing with patients, families, and staff.

READING LIST

Suggested Readings:

1. Barash PG, Cullen BF, Stoelting RK, editors. Clinical Anesthesia. 7th ed. Philadelphia: Lippincott; 2013. Chapter 32: 876-89. Nonoperating room anesthesia
2. Miller RD, editor. Anesthesia. 8th ed. New York: Churchill Livingstone; 2015. Chapter 90: 2646-2673. Nonoperating room anesthesia

Patient safety and Quality Improvement:

At the completion of training, the resident will learn about:

- The reduction of patient safety incidents (adverse events) during Acute Pain Service and Out of OR Anesthesia
- The importance of offering fair, equitable, timely, easy and affordable accessibility of care to all patients
- the accessibility of health care through meeting appropriate patient and societal needs
- the application of ethical care
- competence in using knowledge, skills, traits, abilities and behaviours to result in quality outcomes
- efficient use of minimal resources to achieve desired results
- effective methods in achieving desired health outcomes with the application of active therapies and treatments
- measuring possible outcomes against objectives, standards or expectations

READING LIST

Suggested Readings:

1. Barash PG, Cullen BF, Stoelting RK, editors. Clinical Anesthesia. 7th ed. Philadelphia: Lippincott; 2013. Chapter 4: 90-107. Quality Improvement
2. Agency for Healthcare Research and Quality. 2011. Health Care Efficiency Measures. Last retrieved April 25, 2011, from AHRQ website: www.ahrq.gov/qual/efficiency