

Master of Science in Anesthesia Program

Master of Science in Anesthesia Program Lakeside Suite 2533

11100 Euclid Avenue Cleveland, Ohio 44106-5007

phone 216.844.8077 fax 216.844.7349 case.edu/medicine/msa-program

# **Clinical Practicum Objectives**

The Master of Science in Anesthesia is a graduate-level program for students studying to be certified anesthesiologist assistants. At the completion of the program, each student earns a master's degree in Anesthesia. The program is clinically-oriented and is designed to provide superior clinical training, including elective rotations in the senior year that assure our graduates are on the cutting edge of the national trend in CAA education.

The clinical practicum objectives outlined below illustrate the skills our graduates master, and speak to the daily work of a certified anesthesiologist assistant. By the completion of the program, the student is expected to:

### I. Complete preoperative evaluation and patient assessment

- Comply with institutional protocol for identifying the correct patient, procedure and surgical site.
- Complete and document a physical assessment utilizing direct and indirect methods.
- Create a trusting relationship with patients and staff that creates a therapeutic environment.
- Demonstrate sensitivity and respect for diverse populations.
- Demonstrate professional and effective communication patterns with patients and staff.
- Demonstrate knowledge of the intended surgical and therapeutic procedure and the related anesthetic implications.

### II. Prepare the anesthesia care plan

- Identify and assess pertinent data when considering the anesthetic regime. This includes, but is not limited to, anticipated surgical procedure, laboratory reports, x-ray reports, vital signs, history and physical findings, associated medical conditions and family history and previous anesthetic experience.
- Evaluate the patient's drug regime and anesthetic implications.
- Actively consult with care team as to the status of the patient and the selection of an individualized anesthetic care plan.
- Calculate and communicate a fluid plan for each patient.
- Calculate and communicate an estimated blood volume, allowable blood loss volume and the availability of blood products for each patient.
- Prepare an anesthesia care plan for every patient cared for and prepare at least one written patient care plan per day.
- Consult with clinical preceptors to evaluate the proposed plan versus the actual care delivered.

## III. Select, prepare, organize and care for equipment

- Select, prepare and organize equipment and supplies appropriate to procedure and technique.
- Identify locations of anesthesia equipment and supplies, and ensure appropriate stock levels

- as necessary.
- Identify locations of emergency equipment, supplies and pharmaceutical agents, and ensures appropriate stock levels as necessary.
- Vocalize and comply with institutional policy for equipment safety protocols in terms of preparation, use, cleaning and storage. Equipment examples include anesthesia delivery systems, vaporizers, patient monitoring devices, intravenous fluid and syringe pumps, blood warmers and fluid infusion devices.

### IV. Prepare the patient

- Identify patients according to institutional protocol and document the process.
- Identify and document site of surgery according to institutional protocol.
- Ensure and document a legal informed consent for the administration of anesthesia.
- Use patient-focused methods of communication that recognize diversity and patient individuality.
- Transport patients in a safe and respectful manner.
- Position patients to optimize physiologic parameters, recognizing the safety and surgical implications of the patient's position and documents same.
- Initiate intravenous access and other required invasive monitoring devices.
- Manage appropriate fluid therapy regimes based on patient need.
- Prepare and initiate appropriate monitoring devices based on patient need.
- Prepare, select and utilize appropriate airway management devices.
- Document all aspects of patient care.
- Ensure a safe environment by understanding, eliminating or reducing fire, electrical and environmental hazards in the anesthetizing location that may affect the patient, self, staff or the environment.

#### V. Induce patient using anesthesia

- Select, prepare and utilize appropriate airway management devices.
- Select, prepare and utilize appropriate induction agents.
- Assess patient reaction to induction and adjust the process as necessary.
- Demonstrate comprehensive knowledge of all drugs utilized as part of the anesthetic, including anesthetic and ancillary preparations.
- Describe and recognize the signs and stages of anesthesia.
- Effectively utilize patient monitoring devices, including precordial stethoscope.
- Establish and maintain a patient airway.
- Document the patient reaction to induction, including drugs and airway devices.
- Recognize and treat adverse reactions to induction, including the obstructed airway.
- Demonstrate knowledge of the difficult airway algorithm including the rapid sequence induction process.

#### VI. Maintain anesthesia

- Recognize and intervene when presented with an obstructed airway.
- Utilize and interpret all physiologic and mechanical monitoring devices.
- Demonstrate an understanding of and strategies for maintaining appropriate depth of anesthesia.
- Integrate surgical or therapeutic procedure progress with anesthesia plan.
- Record pertinent anesthetic and physiologic data as per institutional policy.
- Demonstrate comprehensive knowledge of all pharmacologic agents used or proposed to use.
- Assess the patient's reaction to surgery and anesthesia, and communicate the patient's

status to the surgeon and other members of the anesthesia care team as appropriate.

- Recognize the need to change or adjust the anesthetic plan, and consult with the surgeon.
- Skillfully inserts a nasogastric or orogastric tube when indicated.
- Describes the physiologic effects of controlled, assisted and spontaneous ventilation and utilizes the appropriate technique.
- Monitors the level of neuromuscular blockade and adjusts as necessary.
- Evaluates urine output and adjusts fluid plan as necessary.
- Utilizes institutional protocol when administering blood or blood products.

### VII. Emerge patient from anesthesia

- Determine depth of anesthesia as necessary during emergence.
- Determine and prepare a post-operative pain control plan.
- Calculate, administer and evaluate the use of neuromuscular blockade reversals.
- Evaluate and maintain a patent airway.
- Use appropriate suction techniques.
- Prepared to treat a mechanical or physiologic obstructed airway.
- Assess and is prepared to treat laryngospasm.
- Complete the documentation as per institutional policy.

#### VIII. Complete post-operative assessment and care

- Safely transport patients to the appropriate post anesthesia care unit, utilizing monitors or supplemental oxygen as necessary and per institutional protocol.
- Deliver an accurate, complete report as to the patient's status.
- Complete a final patient assessment and determine the need for additional therapeutic interventions.
- Complete all required documentation.
- Decontaminate the anesthetizing location.
- Conduct and document a post-anesthetic patient visit and relays the findings to the appropriate person.

#### IX. Conduct themselves in a professional manner

- Describe the role and expectations of a certified anesthesiologist assistant.
- Accept responsibility for their relationships with patients and all other members of the care team that demonstrates awareness of multicultural and social differences.
- Display initiative, self-discipline and intellectual curiosity.
- Accept constructive criticism and develops an action plan to address deficiencies.
- Acknowledge gaps in knowledge or techniques and develops an action plan to correct deficiencies.
- Demonstrate ethical behavior in all relationships.
- Accept instruction from surgeons and other members of the care team.
- Display a willingness to perform all assigned duties.
- Display confidence appropriate to the level of the student.
- Utilize non-anesthesia time in a productive manner.
- Seek learning opportunities whenever possible.
- Comply with program policies, including attendance and record keeping.
- Comply with clinical site policies, including patient confidentiality, controlled substance use, and documentation.