CA 3 Curriculum for Ambulatory Anesthesia West Virginia University Department of Anesthesiology

Description of Rotation or Educational Experience

During the clinical experience in Ambulatory Anesthesia, residents will be working on our Same Day Care Unit (SDCU) and will be caring primarily for patients who are coming in for their surgical procedure and then going home the same day. The rotation will help them to understand the different needs of ambulatory patients and patients who are "in house" and to treat them appropriately.

Patient Care

Goals

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

Residents are expected to:

- Understand how to determine the appropriateness of a patient and a procedure for the ambulatory center
- Understand the issues involved in patient selection in an ambulatory setting
- Design an anesthetic plan suitable for an ambulatory patient
- Understand the need for preoperative preparation and premedication unique to the ambulatory patient
- Understand the discharge process for SDCU and explain the differences between Phase 1 and Phase 2 recovery

Competencies

- Perform a preoperative evaluation to determine the appropriateness of the patient and procedure for the ambulatory center
- Choose the appropriate type of anesthetic to allow for quick awakening and lack of side effects
- Appropriately prophylax against and treat undesirable side effects (PONV, shivering, post operative pain)
- Be conversant in describing the advantages and disadvantages of various types of anesthesia techniques for an ambulatory patient
- Describe the advantages of using an LMA vs. an ETT and the appropriateness of each
- Prescribe a management plan for difficult pediatric cases including congenital anomalies, ex-premature infants, asthmatics, the child with an URI, family h/o anesthetic complications
- Prescribe a management plan for difficult adult cases including pts with morbid obesity, mentally handicapped, poorly controlled hypertensives and diabetics.
- Evaluate the patients' anesthetic and overall SDCU experience

Objectives

- Perform pre-operative evaluations and prescribe pre-op medications
- Perform at least 30 GA's to the endpoint of patient being awake and responsive at end of procedure
- Prescribe appropriate interventions for prevention of PONV
- Call 15 designated patients for post-operative follow-up the day following their procedure

Medical Knowledge

Goals

Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care.

Residents are expected to:

- Learn the techniques associated with regional anesthesia that is appropriate for an ambulatory surgical unit
- Understand the causes and treatments of PONV
- Describe the differences in depolarizing and non-depolarizing muscle relaxants and the advantages and disadvantages of each
- Compare the pharmacokinetics of the short-acting anesthetic drugs commonly used in Ambulatory Anesthesia

Competencies

- Choose an appropriate drug regimen for prevention and treatment of PONV based on the most likely reason for N/V
- Prescribe an appropriate anesthetic plan for patients with coexisting diseases
- Know the anatomical and physiologic differences in adult and pediatric patients
- Understand the anesthetic implications of patients with malignant hyperthermia
- Know what drugs to avoid in a patient with porphyria
- Be able to perform a rapid sequence induction on a patient with pseudochoinesterase deficiency
- Compare the different modes of post operative pain relief and choose an appropriate one for each patient

Objectives

- Discuss at least 15 cases preoperatively with an attending anesthesiologist
- Formulate plans for optimizing the medical conditions of a 6 difficult patients so that they may safely undergo ambulatory anesthesia
- Manage the anesthetics of 10 pediatric patients

Practice- Based Learning and Improvement

Goals

Residents must demonstrate the ability to investigate and evaluate their care of patients, 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 skills and habits to be able to:

- Choose appropriate method of induction for each individual patient
- Critique individualized practice outcomes
- Evaluate causes of complications
- Investigate outcomes

Competencies

- Identify strengths, deficiencies and limits in one's knowledge and expertise;
- Set learning and improvement goals
- Systematically analyze practice, using quality improvement methods, and implement changes with the goal of practice improvement
- Incorporate formative evaluation feedback into daily practice

Objectives

- Demonstrate increasing knowledge of anesthetic techniques suitable for the SDCU
- Follow up and report on complications and unexpected outcomes
- Present a grand rounds lecture on an ambulatory subject

Systems Based Practice

Goals

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Residents are expected to:

- Understand the economics of different choices of anesthetic techniques
- Recognize the importance of different types of health care providers with the SDCU
- Work as a member of the SDCU team to improve patient care
- Understand and utilize the concept of throughput as it pertains to a busy ambulatory center

Competencies

- Incorporate considerations of cost awareness and risk-benefit analysis in patient care
- Advocate for quality patient care and optimal patient care systems
- Work in interprofessional teams to enhance patient safety and improve patient care quality
- Participate in identifying systems errors and in implementing potential systems solutions

Objectives

- Review and report total case costs of 3 patient encounters
- Present one untoward event in departmental M & M conference
- Assist in running the daily schedule of the SDCU
- Coordinate CRNAs, room assignments, and order of cases

Professionalism

Goals

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

Residents are expected to:

• Display highest level of professionalism through their behavior, verbal, and non-verbal conduct

Competencies

- Compassion, integrity, and respect for others
- Responsiveness to patient needs that supersedes self-interest
- Respect for patient privacy and autonomy

Objectives

- Demonstrate professional behavior in communicating with other members of the health care team
- Learn the differences needed to relate to pediatric patients of different ages
- Understand how to be a patient advocate in the SDCU setting

Interpersonal and Communication Skills

Goals

Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and teaming with patients, their families, and professional associates.

Residents are expected to:

- Discuss a patient's case with the attending anesthesiologist
- Communicate the patient' needs to the rest of the health care team
- Discuss the anesthetic plan with the patient and/or family
- Effectively address patient concerns

Competencies

- Communicate effectively with patients and families of varying socioeconomic and cultural backgrounds
- Communicate effectively with physicians, other health professionals, and ancillary health care workers
- Act in a consultative role to other physicians and health professionals
- Maintain comprehensive, timely, and legible medical records

Objectives

- Provide medical information concerning the case to the PACU
- Give informative report to other anesthesia personnel when being relieved from a case
- Effectively communicate with other physicians and consultants regarding the patient's operative course

Teaching Methods

What teaching methods are you using on this rotation or educational experience?

- Hands on anesthesia
- Lectures
- Modeling
- Self study
- Grand rounds
- Journal club
- M & M conference
- Direct Observation

Assessment Method (residents)

- Global Rating Scale
- Chart Stimulated Recall

All of the competencies are measured with a mixture of direct observation, case discussions, participation in formal conferences, and formative evaluations

	Patient	Med	Practice Based	System Based	Profess-	Communi-
	Care	Knowledge	Learning	Practice	ionlism	cation
Global Rating Scale	Weekly	Weekly	Weekly	Weekly	Weekly	Weekly
Chart Stimulated Recall (Proposed)	Weekly	Weekly	Weekly	Weekly		

Assessment Method (Program Evaluation)

How do you evaluate whether this educational experience is effective?

- Demonstration of increased knowledge base
- Improvement of technical skills
- Observation of informed decision making

Level of Supervision

How is the resident supervised on this rotation?

- Primarily by attending anesthesiology faculty
- Input from CRNAs, surgical and nursing personnel

Educational Resources

List the educational resources

- Faculty and staff
- Text books
- Journal articles
- Online resources

Social Justice

West Virginia University is committed to social justice. We concur with that commitment and expect to maintain a positive learning environment based upon open communication, mutual respect, and non-discrimination. Our University does not discriminate on the basis of race, sex, age, disability, veteran status, religion, sexual orientation, color, or national group. Any suggestions as to how to further such a positive and open environment in this rotation will be appreciated and given serious consideration.

Prepared Anne E. Hackett, MD on Feb 23, 2007 Approved by the Anesthesiology Education Committee on 2-26-2007