

Departmental Curriculum: Systems-Based Practice

Goals

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:

- understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice
- know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources
- practice cost-effective health care and resource allocation that does not compromise quality of care
- advocate for quality patient care and assist patients in dealing with system complexities
- know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance

Objectives

CA-1

1. Understands and practices multidisciplinary interactions in the immediate perioperative setting
 - a. PAT clinic (surgeons, primary care providers, cardiologists, etc.)
 - b. holding area (escort, nurses, surgeons, schedule coordinators, etc.)
 - c. OR (surgeons, nurses, techs/aides, housekeepers; includes equipment, instruments, supplies, pharmacy, blood bank, etc.)
 - d. PACU/ASU (nurses, surgeons, pharmacists)
2. Differentiates types of medical practices and delivery systems
 - a. types: solo practices, care team practices (residents, nurse anesthetists, anesthesia assistants)
 - b. delivery systems: academic, VA/military, HMO, private (corporate vs. independent hospitals)
 - c. settings: urban, rural, developing country
3. Recognizes and employs efficiencies of practice and cost-control strategies compatible with quality patient care
 - a. demonstrates timely starts and efficient turnovers in simple cases
 - b. chooses appropriate anesthetic technique for discharge goals (e.g., no tetracaine spinal for an ambulatory surgery patient)
 - c. specifically recognizes that postoperative complications are very costly (e.g., unplanned admission due to nausea or residual anesthetic) and employs strategies to avoid these complications
 - d. interprets drug costs in context of outcomes (e.g., desflurane, propofol, ondansetron, rocuronium)
4. Describes the anesthesiologist's role as patient advocate
 - a. identifies scope of arenas in which anesthesiologists advocate for patient care
 - i. individual patient selection and preparation
 - ii. policy/procedure development and education
 - b. discusses the purpose of quality management
 - c. participates actively in anesthesiology or multidisciplinary M&M or case conferences

- d. recognizes organizational strategies to reduce system complexity for patients (e.g., multidisciplinary evaluations in PAT clinic)
- 5. Recognizes the anesthesiologist's role as part of coordinated multidisciplinary teams
 - a. recognizes need for and participates in multidisciplinary coordination of individual patient care plans (e.g., rounds, family meetings, ethics consults)
 - b. lists opportunities for participation in multidisciplinary committees (e.g., sedation, ICU, code, transfusion, ethics)

CA-2

1. Understands and practices multidisciplinary interactions in the extended perioperative setting
 - a. ICU/ward (nurses, respiratory therapists, escort personnel, ward clerks)
 - b. pain management (acute and chronic; surgeons, nurses, psychologists, psychiatrists, etc.)
 - c. understands how to be a consultant and to work with other consultants
 - i. coordinates pre- and postoperative and pain care with primary care or inpatient team providers (includes beta-blockade, anticoagulation, and diabetes management)
 - ii. formulates cogent and practical responses to requests for anesthesiology consultation
 - iii. know when it is appropriate to ask for a consultation and how to formulate appropriate and specific questions
2. Describes how resources are generated in different delivery systems
 - a. recognizes how anesthesiology services are documented, coded, billed, and reimbursed in different medical practices
 - b. demonstrates appropriate documentation of delivered services
3. Recognizes and employs efficiencies of practice and cost-control strategies compatible with quality patient care
 - a. demonstrates timely starts and efficient turnovers in the setting of complex cases
 - b. chooses appropriate anesthetic technique for discharge and/or inpatient recovery goals (e.g., early ambulation, cardiac fast-tracking, glycemic control, postoperative anticoagulation)
 - c. specifically recognizes that postoperative complications are very costly (e.g., atrial fibrillation after cardiothoracic surgery, postoperative infections) and employs strategies to avoid these complications
 - d. interprets drug costs in context of outcomes (e.g., aprotinin, gabapentin)
4. Demonstrates the anesthesiologist's role as patient/quality care advocate
 - a. establishes multidisciplinary relationships needed to effect quality care
 - b. participates actively in coordinated multidisciplinary patient care plans
 - c. utilizes established quality management procedures to facilitate care (e.g., massive transfusion protocol, standard surgical blood order schedule, standing epidural orders)
 - d. participates actively in anesthesiology or multidisciplinary M&M or case conferences
 - e. recognizes organizational strategies to reduce system complexity for patients (e.g., multidisciplinary evaluations in pain clinic)
5. Outlines how different health care management systems may be structured and linked
 - a. outlines intra- and inter-departmental structures, and how they are connected (includes patient care service lines, centralized vs. decentralized support services)
 - b. describes the responsibilities of managers at various levels of an organization and how to partner with managers to achieve quality patient care

CA-3

1. Articulates how the practice of anesthesiology/medicine affects the healthcare organization, local community, and larger society, and vice versa
 - a. examines community systems for trauma, transplantation, other specialized care
 - b. analyzes the influence of third party payors and managed care
 - c. examines issues associated with universal health care/coverage of uninsured patients (e.g., Oregon Health Plan)
 - d. discusses implications of Oregon's Death with Dignity Act for anesthesiologists
2. Contrasts how different health care delivery systems (academic, VA/military, HMO, private, other) function
 - a. organizational missions
 - b. organizational structures
 - c. budgets, funding mechanisms, and resource allocation
 - d. cost control mechanisms
3. Practices multi-patient operational efficiency and coordination of associated resources
 - a. understands elements affecting how elective schedules are put together
 - b. practices "running the board" and triage of patients
 - c. manages clinical care in a PACU or ambulatory surgery area
4. Demonstrates the anesthesiologist's role as patient/quality care advocate
 - a. develops and coordinates multidisciplinary patient care plans (e.g., manages an OR team, coordinates care for patients with special circumstances such as pre-existing DNR order, Jehovah's Witness, hemophilia, postoperative complication, etc.)
 - b. recognizes the anesthesiologist's role in improving patient care in the broader healthcare organization
 - i. outlines a basic policy and plan for implementation for sedation by non-anesthesiologists
 - ii. trains others in airway management and resuscitative practices (e.g., other physicians, allied healthcare providers, students)
5. Recognizes the anesthesiologist's role in committees/policy and procedure development (e.g., describes work of at least one quality management, multidisciplinary, or regional/national committee meeting)