

Anesthesiologists

Administer anesthetic or sedation during medical procedures, using local, intravenous, spinal or caudal methods.

Confer with other medical professionals to determine type and method of anesthetic or sedation to render patient insensible to pain.

Coordinate administration of anesthetics with surgeons during operation.

Decide when patients have recovered or stabilized enough to be sent to another room or ward or to be sent home following outpatient surgery.

Examine patient, obtain medical history and use diagnostic tests to determine risk during surgical, obstetrical, and other medical procedures.

Monitor patient before, during, and after anesthesia and counteract adverse reactions or complications.

Record type and amount of anesthesia and patient condition throughout procedure.

Conduct medical research to aid in controlling and curing disease, to investigate new medications, and to develop and test new medical techniques.

Coordinate and direct work of nurses, medical technicians and other health care providers.

Diagnose illnesses, using examinations, tests and reports.

Inform students and staff of types and methods of anesthesia administration, signs of complications, and emergency methods to counteract reactions.

Manage anesthesiological services, coordinating them with other medical activities and formulating plans and procedures.

Order laboratory tests, x-rays and other diagnostic procedures.

Position patient on operating table to maximize patient comfort and surgical accessibility.

Provide and maintain life support and airway management, and help prepare patients for emergency surgery.

Provide medical care and consultation in many settings, prescribing medication and treatment and referring patients for surgery.

Instruct individuals and groups on ways to preserve health and prevent disease.

Schedule and maintain use of surgical suite, including operating, wash-up, waiting rooms and anesthetic and sterilizing equipment.

Required Knowledge for: *Anesthesiologists*

Medicine and Dentistry -- Knowledge of the information and techniques needed to diagnose and treat human injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.

Biology -- Knowledge of plant and animal organisms, their tissues, cells, functions, interdependencies,

and interactions with each other and the environment.

Chemistry -- Knowledge of the chemical composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.

Mathematics -- Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.

Skills Required for: *Anesthesiologists*

Judgment and Decision Making -- Considering the relative costs and benefits of potential actions to choose the most appropriate one.

Active Listening -- Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

Monitoring -- Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.

Critical Thinking -- Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Speaking -- Talking to others to convey information effectively.

Operation and Control -- Controlling operations of equipment or systems.

Writing -- Communicating effectively in writing as appropriate for the needs of the audience.

Reading Comprehension -- Understanding written sentences and paragraphs in work related documents.

Operation Monitoring -- Watching gauges, dials, or other indicators to make sure a machine is working properly.

Active Learning -- Understanding the implications of new information for both current and future problem-solving and decision-making.

Abilities Required for: *Anesthesiologists*

Problem Sensitivity -- The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.

Control Precision -- The ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions.

Speech Clarity -- The ability to speak clearly so others can understand you.

Near Vision -- The ability to see details at close range (within a few feet of the observer).

Information Ordering -- The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).

Deductive Reasoning -- The ability to apply general rules to specific problems to produce answers that make sense.

Written Expression -- The ability to communicate information and ideas in writing so others will understand.

Oral Expression -- The ability to communicate information and ideas in speaking so others will understand.

Written Comprehension -- The ability to read and understand information and ideas presented in writing.

Oral Comprehension -- The ability to listen to and understand information and ideas presented through spoken words and sentences.

Job Activities for: *Anesthesiologists*

Monitor Processes, Materials, or Surroundings -- Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems.

Updating and Using Relevant Knowledge -- Keeping up-to-date technically and applying new knowledge to your job.

Getting Information -- Observing, receiving, and otherwise obtaining information from all relevant sources.

Making Decisions and Solving Problems -- Analyzing information and evaluating results to choose the best solution and solve problems.

Controlling Machines and Processes -- Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).

Assisting and Caring for Others -- Providing personal assistance, medical attention, emotional support, or other personal care to others such as coworkers, customers, or patients.

Identifying Objects, Actions, and Events -- Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.

Analyzing Data or Information -- Identifying the underlying principles, reasons, or facts of information by breaking down information or data into separate parts.

Interpreting the Meaning of Information for Others -- Translating or explaining what information means and how it can be used.

Communicating with Supervisors, Peers, or Subordinates -- Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.