

General

1. Professionalism

- General principles of professionalism and ethics (including American Medical Association Standard of Conduct, Internal Medicine charter on Medical Professionalism, American Medical Association Principles of Medical Ethics, American College of Radiology Code of Ethics)
 - Conflict of interest
 - Clinical competence versus clinical performance
 - Malpractice testimony
 - Error reporting
 - Physician impairment
- Screening (including characteristics of successful programs; common biases of lead time, length time, detection, overdiagnosis; outcome measures)
- Practice guidelines and technical standards (including appropriateness of tests and documentation of medical necessity)
 - American College of Radiology Guidelines for Communication
 - American College of Radiology Practice Guidelines
- Consultation with referring physician/communication (including consent for procedures, reporting of results, disparities between preliminary and final reports)
- Risk management/legal issues (including establishment of malpractice, reporting of child abuse, use of chaperones, sexual harassment, IRB approval)
- Regulations/HIPPA (including definition of HIPPA, patient privacy, treatment of human subjects in research, Joint Commission sentinel event)
- Practice management (including electronic health record, verbal orders, general concepts of billing and coding, due diligence, commoditization of radiology, SWOT framework, RVUs)
- Health care policy/socioeconomic issues (including Pay for Performance)
- Lifelong learning (including practice-based learning and improvement, self-assessment, purpose of CME, systems-based practice)
- Critical review of literature/statistics (including sensitivity, specificity, positive and negative predictive values, prevalence, study power, 2 x 2 tables, randomized control trial, standard deviation, median, mean, technology assessment hierarchy, reference/gold standard, evidence-based medicine, blinding, bias, meta-analysis, ROC curve)

2. Patient safety and life support

- Patient care (including DNR orders, TNM staging, nosocomial infections)
- Patient safety and radiation protection (including organ sensitivity to radiation, general concepts of radiation dose, critical times during pregnancy, dose reduction for CT, ALARA, call to order/patient identification)

- Medical error (including adverse event, error, near miss, reporting, sleep deprivation, “time out” procedure)
- Contrast reaction (including definition and prevention of contrast induced nephropathy and Metformin; prevention, recognition and treatment of urticaria, bronchospasm, laryngeal edema, hypotension, vasovagal reaction, circulatory collapse, premedication regimen; extravasation; nephrogenic systemic sclerosis)
- Conscious sedation (including commonly used medications, reversal agents)
- MR Safety (including zone system for magnet safety, MR safe labels, MR and gadolinium during pregnancy, thermal injury, nephrogenic systemic sclerosis, metallic objects, pacemakers)
- Life support principles (including basic CPR, defibrillation)

3. Quality, including image quality

- Quality improvement principles (including human error, Shewart/Deming process improvement cycle)
- Quality assurance (including common metrics, missed case conferences)
- Principles of image quality (physics)
 - Plain film (including kV, radiographic contrast, quantum mottle, tube-film distance, focal spot, scatter, beam filter, skin/glandular doses)
 - CT (including radiation dose, artifacts, pitch, window, level)
 - PET/CT (including advantage over PET and CT, artifacts)
 - US (including artifacts)
 - MRI (including 3.0T versus 1.5T, saturation pulses, common artifacts)
- CAD (including definition, uses)
- PACS (including definition, relative storage requirements for different modalities)

Sample Question:

Which of the following illustrates sensitivity?

- A. true positive cases / total disease-positive cases
- B. true negative cases / total disease-negative cases
- C. true positive cases / total disease-negative cases
- D. true negative cases / total disease- positive cases

Key = A