

information is used to identify potential process improvements and to make decisions about future contracts with the contracted radiology and diagnostic imaging services.

The hospital defines what measures the contracted radiology or diagnostic imaging service is required to collect and submit to the hospital, as well as how often data are submitted to the hospital. Examples of measures collected to evaluate contracted radiology or diagnostic imaging service include the following:

- Turnaround times for tests, meaning the time it takes for the radiology or diagnostic imaging to receive an order, obtain the imaging, and report the results
- Critical results reporting
- Problems with images such as missing identifiers or specimen rejections

### Measurable Elements of AOP.05.06

1. ① The hospital maintains a copy of the license from a recognized authority for all contracted radiology and diagnostic imaging services used by the hospital.
2. ① The hospital maintains a copy of the certificate or letter of accreditation or certification from a recognized authority for all contracted radiology and diagnostic imaging services used by the hospital.
3. The hospital determines the frequency and type of quality data from contracted radiology and diagnostic imaging services. (*See also* GLD.05.00, MEs 4 and 5)
4. The individual responsible for the radiology and diagnostic imaging services or a designee reviews the performance measure data from contracted radiology and diagnostic imaging services and takes action based on the results. (*See also* GLD.05.00, MEs 4 and 5)
5. ① An annual report of the data from contracted radiology and diagnostic imaging services is provided to those who make decisions about management and renewal of contracts.

## Nuclear Medicine Services

### Standard AOP.06.00

When applicable, the hospital establishes and implements a nuclear medicine safety program that complies with applicable professional standards, laws, and regulations.

#### Intent of AOP.06.00

Nuclear medicine is a branch of medical imaging and treatment that uses small amounts of radioactive materials, known as radiopharmaceuticals, to diagnose and treat various diseases. Due to the use of radiation, strict safety standards and guidelines are in place to ensure the well-being of patients, health care professionals, and the general public.

Nuclear medicine practices are regulated by various national and international organizations, such as the International Atomic Energy Agency (IAEA), the Nuclear Regulatory Commission (NRC) in the United States, and the European Medicines Agency (EMA) in Europe. These bodies establish and enforce safety standards, including licensing requirements, training guidelines, and equipment regulations. Medical professionals working with radioactive materials in nuclear medicine, such as nuclear medicine physicians, radiologists, and technologists, must undergo specialized training to ensure that they have the necessary knowledge and skills to handle radioactive materials safely. They should be trained in radiation safety, radiation protection, and proper handling and disposal of radioactive waste.

Nuclear medicine facilities are designed to minimize radiation exposure to staff and the public. Shielding materials, such as lead and concrete, are used to contain radiation within designated areas. Proper ventilation systems, monitoring equipment, and radiation shielding barriers are required to ensure safety. Quality assurance programs are established to ensure the accuracy and safety of nuclear medicine procedures. Regular

equipment calibration, performance testing, and quality control measures are undertaken to maintain the reliability and effectiveness of imaging and treatment equipment.

Patients scheduled for nuclear medicine procedures receive specific instructions regarding preparation, such as fasting requirements or discontinuation of certain medications. Patients are educated about the benefits, risks, and safety precautions associated with the procedure. Informed consent is obtained, and patient concerns or questions are addressed. Radiation exposure is monitored for both patients and health care professionals involved in nuclear medicine procedures. Personal dosimeters are worn to measure the amount of radiation received. Regular monitoring helps ensure that radiation doses are within acceptable limits and that appropriate safety measures are followed.

Proper disposal of radioactive waste is crucial to prevent environmental contamination and ensure public safety. Nuclear medicine facilities follow strict protocols for the collection, storage, and disposal of radioactive materials and waste. These procedures are in accordance with local laws, regulations, and guidelines.

### **Measurable Elements of AOP.06.00**

1. A qualified individual(s) is responsible for overseeing nuclear medicine services, and relevant staff members are properly trained, qualified, and certified to perform their respective roles in nuclear medicine safety and procedures.
2. The hospital implements radiation safety protocols, including the use of appropriate shielding, personal protective equipment (PPE), and monitoring devices for both patients and staff.
3. Radiation doses administered to patients are optimized for diagnostic and therapeutic purposes, and the procedure includes monitoring and minimizing radiation exposure while obtaining the necessary diagnostic information or therapeutic effect.
4. The procurement, storage, handling, and disposal of radiopharmaceuticals complies with laws, regulations, professional standards, and manufacturers' guidelines.
5. Patients and family are informed about the procedures and safety precautions.