



**AIUM Personnel  
Performance  
Quality Assurance**

# Introduction

The practice must show ongoing evaluation and improvement of the clinical practice's ultrasound personnel performance, including all interpreting providers and sonographers through regular, retrospective peer review. This includes systematic review of performance, documentation, and reporting.

## Who is responsible for your QA program in practice?

(e.g. sonographers and reading physician/provider) \*

## What is the frequency of review? (e.g. quarterly, semi-annually, annually) \*

## What tools, templates are used for evaluating the quality of exams?

(e.g. institutional template, AIUM Personnel QA template (link – in this document below) \*

## What metrics are you measuring or following?

(e.g. labeling, anatomy, report accuracy) \*

## What is the process if deficiencies are identified to increase education and skills?

(e.g. feedback, education, reevaluation, training, and follow up) \*

*\*Accreditation application response requirements*

# How to develop a Quality Assurance program

In the information below, the AIUM has given steps and examples to complete the Personnel Quality Assurance requirements in the application. Please read and design your own program based on these recommendations.

## DEFINITIONS:

**What is QA** - Quality assurance (QA) in healthcare is a process that ensures quality standards are met.

**What is QC** - Quality control (QC) in healthcare includes a variety of practices to ensure patient safety and improve the quality of care.

**What is QI** - Quality improvement (QI) in healthcare is the process of making measurable progress to improve patient care and outcomes.

# What is the purpose of the AIUM personnel performance quality assurance program?

The **AIUM (American Institute of Ultrasound in Medicine) Personnel Performance Quality Assurance (QA) Program** is designed to improve the **quality, safety, and consistency of ultrasound imaging** by focusing on the performance and competence of personnel involved in ultrasound examinations. Its main purpose is to maintain high standards of practice in medical ultrasound and to verify that the personnel (e.g., sonographers, physicians, and other staff) meet the [AIUM Training Guidelines](#), are competent, and are performing their duties according to established guidelines.

Here are the key purposes of the AIUM personnel performance QA program:

**Competency Verification:** Ensures that all personnel involved in ultrasound imaging have the necessary skills and knowledge to perform high-quality exams.


**Training and Continuing Education:** Encourages ongoing education and training to keep personnel up to date with the latest technologies, protocols, and techniques in ultrasound imaging.

**Consistency in Performance:** Establishes standards to maintain consistency in the performance of ultrasound exams across different individuals and departments, reducing variability and improving the accuracy of diagnoses.

**Error Reduction:** Helps in identifying and addressing errors in personnel performance, minimizing the likelihood of incorrect diagnoses or imaging problems.

**Adherence to Best Practices:** Promotes compliance with current clinical guidelines and best practices in ultrasound imaging.

**Documentation and Accountability:** Provides a framework for documenting personnel performance and quality, ensuring accountability for both individual and team performance.



By maintaining high standards, this QA program ultimately contributes to patient safety, accurate diagnoses, and overall improvement in clinical outcomes.



# Who should be in charge of the QA program?

The **Personnel Performance Quality Assurance (QA) Program** for ultrasound should be typically overseen by an Ultrasound Director (or designee) and usually includes a Lead Sonographer (or designee), or individual who has the expertise, authority, and responsibility to ensure the quality and safety of ultrasound imaging practices. According to best practices in healthcare and AIUM guidelines, the following individuals or groups are typically in charge of such a program:

## 1. Director of the Ultrasound Program:

- a. The **director** is usually a physician, often a radiologist, ob-gyn, or another specialist with extensive experience in diagnostic ultrasound. Where state laws allow, an advanced practitioner could be the ultrasound director of a limited ultrasound practice (e.g. POCUS).
- b. The director holds ultimate responsibility for the **oversight and implementation** of the QA program.
- c. Their role includes ensuring that personnel are meeting the [AIUM Training Guidelines](#) for their specialty, and are adequately trained, following protocols, and meeting performance standards.

## 2. Lead Sonographer:

- a. Typically, a senior **sonographer or ultrasound technologist** with managerial or leadership experience often handles the **day-to-day administration** of the QA program.
- b. They are responsible for monitoring and assessing the performance of the ultrasound staff, providing feedback, organizing training sessions, and conducting competency assessments.
- c. They ensure that sonographers follow best practices and guidelines, and they may also manage the documentation of the QA process.



# What is the frequency of review?

The **frequency of review** for the AIUM Personnel Performance Quality Assurance (QA) Program is essential for maintaining high standards of ultrasound practice. Although the AIUM provides general guidelines, specific review intervals can vary depending on the facility, type of practice, and regulatory requirements. However, the following review schedule is commonly recommended:

## 1. Performance Review:

- Annually is the minimum recommendation for a formal review of personnel performance.
- Depending on your program quarterly or semi-annually may be considered. During this review, the following should be assessed:
  - Competency and skills of sonographers and physicians involved in ultrasound.
  - Compliance with AIUM guidelines and protocols.
  - Continuing education and training completion.
  - Image quality and diagnostic accuracy through case reviews.
  - Documentation accuracy.
  - Patient feedback, if applicable.
- The annual review often includes a formal evaluation, feedback, and, if necessary, a development plan for improvement

## 2. New Employee Evaluation:

- A review should take place within **3-6 months of hiring** a new employee (sonographer or physician). This ensures that they have integrated well into the team and are following the proper procedures and protocols.

## 3. After Major Equipment or Protocol Changes:

- If there is a significant change in equipment (e.g., the introduction of new ultrasound machines or technology) or protocol updates, a review should be conducted shortly afterward to ensure personnel are properly trained and proficient with the new tools or methods.
- This review could happen **within a few weeks to months** after the change.

## 4. Special Reviews (Triggered by Issues or Incidents):

- Ad hoc reviews should occur if there are performance issues, patient complaints, or adverse outcomes that suggest a potential problem with personnel performance.
- These special reviews aim to address specific problems and implement corrective actions swiftly.

### Ultrasound Personnel QA

#### 1. PATIENT & EXAM INFORMATION

|  |  |
|--|--|
| Patient ID:                              |  |
| Patient Name:                            |  |
| Date of Exam:                            |  |
| Referring Physician:                     |  |
| Sonographer/Technologist:                |  |
| Referring Physician (if applicable):     |  |
| Study Type (e.g., Abdomen, OB, Cardiac): |  |

#### 2. IMAGE QUALITY ASSESSMENT

| Criteria                          | Satisfactory             | Needs Improvement        | Not Acceptable           | Comments/Documentation |
|-----------------------------------|--------------------------|--------------------------|--------------------------|------------------------|
| Equipment, Settings & Sonographer | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                        |
| Image Labeling                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                        |
| Workflow/Documentation            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                        |

## AIUM Template for Personnel Review

(This is a sample template to be used by your practice, not required) [Download Here](#)

# Recommendations: Below are steps you can follow to educate the personnel if deficiencies are found.

## 1. Identify and Analyze Deficiencies

- **Review QA Reports:** Analyze findings to understand specific deficiencies.
- **Root Cause Analysis:** Investigate the underlying causes of the issues, whether they stem from lack of knowledge, skills, or processes.
- **Prioritize Issues:** Rank the deficiencies based on severity, frequency, and potential impact.

## 2. Define Training Objectives

- **Set Clear Goals:** Define what the program aims to achieve (e.g., improve compliance, reduce errors, enhance skills).
- **Specific Outcomes:** Ensure objectives are measurable, such as achieving a specific adherence level such as image optimization and image accuracy.

## 3. Design the Training Program

- **Choose Training Methods:**
  - **Workshops:** Interactive sessions for hands-on learning.
  - **Online Modules/Webinars:** Self-paced training with videos and quizzes.
  - **On-the-Job Training:**
    - Focus on case studies and real examples from QA findings.
    - One-on-one instruction.
- **Customization:** Tailor the training to address specific deficiencies.

## 4. Implement the Training

- **Schedule Sessions:** Ensure minimal disruption to regular workflows.
- **Assign Trainers** or Preceptors
- **Provide materials, literature, and/or examples**

## 5. Reinforce Learning

- **Ongoing Support:**
  - Provide follow-up sessions or refreshers.
  - Create a knowledge base for easy reference.
  - [AIUM Practice Parameters and Image Library](#)
- **Mentorship and Coaching:**
  - Pair employees with experienced mentors for practical guidance.
- **Periodic Reviews:**
  - Regularly reassess QA performance and update training accordingly.

## 6. Continuous Improvement

- Use QA data to identify emerging gaps and continuously adapt the program.
- Encourage a culture of quality and safety by integrating training with performance appraisals and rewards for QA excellence.

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