

Guide for Establishing a Credentialing and Privileging Program for Users of Fluoroscopic Equipment in Healthcare Organizations

AAPM Task Group Report # 124

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ACMP Annual Meeting

May 3, 2009 Virginia Beach, VA

Membership of Committee

- Mary E. Moore, M.S., Chairperson
- Stephen Balter
- Joel E. Gray
- Alan M. Jackson
- Pei-Jan Paul Lin
- Melissa C. Martin
- Keith J. Strauss
- Lynne Fairobent, AAPM Staff

Need for Credentialing and Privileging Program

- Fluoroscopy usage continues to increase in all areas of medicine
- Training for the safe use of fluoroscopy has not kept pace with increasing clinical applications
- Lack of appropriate training has resulted in increasing number of injuries

Who Needs to be Trained?

Physician Specialists such as:

- Radiologists
- Cardiologists
- Gastroenterologists
- Orthopedic Surgeons
- Urologists
- Pain Management Specialists
- Vascular Surgeons

Who Needs to be Trained?

Non-Physician Groups such as:

- Radiology Assistants
- Speech Pathologists
- Nurse Practitioners
- Physician Assistants
- Radiologic Technologists

Who is at Risk?

- The Patient
- The Operator
- Support Staff
- Facility

Program Components

- Didactic Content
 - Radiation Biology
 - Radiation Protection Principles
 - Radiation Imaging Physics
- Formal Support by Facility Management
- Acceptance by the Medical Staff

Credentialing and Privileging Programs

- Process for Healthcare Facilities to assure the quality and safety of medical care provided by their staff
- Essential part of Healthcare Organizations today to meet Joint Commission (JC) requirements for accreditation
- Two separate and distinct programs

Credentialing Program

- Collection of relevant for the individual applying for privileges to perform specific medical procedures at an institution
- Collection of necessary documentation such as applicant's education, training, experience and continuing education
- Verification of supplied documentation

Privileging Program

- Delineation of Medical Procedures that an individual may perform - may be global in nature (diagnostic imaging procedures) or specific (CT, MRI, Interventional Procedures, etc.)
- Medical Director and/or Department Chair makes recommendations to Medical Executive Committee for Specific Privileges

JC Requirements for Privileging

- JC requires each facility to review and revise clinical privileges and appointments at least every two years
- Each facility must have a reprivileging process clearly defined in its bylaws and procedures manual

Basic Elements of Program

- Identification of Individuals to be trained
- Individuals trained at other institutions may not need further training or
- Individuals trained at other institutions may need to have their training further augmented

Training Program Content

- Level of training should be commensurate with level of risk of procedure to be performed by the trainee.
- Three levels of training are suggested.

Low Risk Procedures

Procedure/Equipment

- Mini C-arm
- Orthopedic Reduction or Extremity Surgery

Training Suggested

- 1.0 hours didactic lecture & exam, followed by 0.5 hour 'hands-on' demonstration & exam

Moderate Risk Procedures

Procedure/Equipment

- Mobile C-arm
- R/F Table
- GI/GU
- Pain Management
- Urology
- Bronchoscopy

Training Suggested

- 2.0 hours didactic lecture & exam, followed by 1.0 hour 'hands-on' demonstration & exam

High Risk Procedures

Procedure/Equipment

- Interventional Fluoroscope
- Interventional Procedures performed in Radiology, Cardiology or OR

Training Suggested

- 3.0 hours didactic lecture & exam, followed by 1.0 hour 'hands-on' demonstration & exam

Components of Training

- Basic Radiation Protection Considerations

 - Radiation Safety Principles

 - Radiation Health Effects

 - Personnel Monitoring

 - Patient Dosimetry

 - Hospital Policies

 - State Regulations

 - Practice Guidelines

Components of Training

- Other Program Contents

Basic X-Ray Physics

Fluoroscopic Imaging Physics

Equipment Design

Image Quality Improvement

Radiation Dose Reduction Techniques

Quality Control Practices

Components of Training

- After the fundamental principles are covered, trainees should receive “Hands-On” training on the equipment they will actually be using to optimize image quality and dose

Examinations & Assessment

- Student must pass a written exam with a minimum score of 70% prior to the initial clinical use of fluoroscopy
- If student fails test three times, he/she must repeat didactic course and retake the test

Hands-On Demonstration on Equipment

- All applicants must demonstrate ability to operate equipment properly while performing the type of procedure they will perform
- Review of the applicant will be done by a previously authorized fluoroscopy user or QMP or other qualified person.

Techniques to be Demonstrated

- Ability to achieve acceptable image quality
- Use available methods to reduce radiation dose to patient and staff
- Proper collimation, minimum patient-image intensifier distance, maximum patient-source distance, pulsed fluoroscopy mode

Frequency of Training and Duration of Privileges

- Duration of privileges should not exceed a period of two years
- Fluoroscopy privilege renewal should be synchronized with the physician's other privileging process to minimize administrative burdens
- Frequency must comply with state requirements

Renewals

- Requirements for renewals may vary according to state or local regulations
- Refresher didactic training may be optional prior to successful repeating of the written examination
- If new equipment, demonstration of competency must be completed prior to usage on patients

Trainers

- Variety of individuals may be involved in training such as:

Radiologist or other physician familiar with use of the equipment for specific procedures

QMP may develop curriculum and perform didactic lectures

Compliance Requirements

- Fluoroscopy training program must be compliant with local, state and federal requirements
- One goal of training program is to prevent the occurrence of a sentinel event defined by JC as the delivery of 15 gy (1500 rad) to a patient

Administrative Requirements

- Proper administrative elements of a fluoroscopy training program are necessary to ensure success of the program
- To receive privileging to use fluoroscopic equipment, applicant must demonstrate knowledge included in fluoroscopy training program

Administrative Requirements

- Individual at each institution that handles privileging program must be identified.
- Availability of didactic training is key component of program -
Live Lecture or Web-Based Module

Experienced Fluoroscopy Users

- Reasonable requirements may depend on previous training
- Experienced user may skip didactic training and/or demonstrate knowledge of didactic content by taking exam and demonstrating competency of equipment operations

Components of Privileging Program

- Medical Staff Office provides management and oversight of all medical staff privileging
- Credentials Committee is responsible for reviewing all initial and reappointment applications for fluoroscopy privileging

Components of Privileging Program

- Medical Staff Executive Committee is responsible for all clinical operational standards and policy
- Board of Directors approves physician privileges based on recommendations of the Medical Staff Executive Committee

Model Policy for Fluoroscopy Privileging Program

- Ad-hoc committee to write policy
- Training required - based on TG124/State regulations
- Who provides training
- Frequency and of re-training per TG124/State regulations specifics

Implementation of Fluoroscopy Privileging Program

- Procedure jointly developed by Medical Staff Office and Radiation Safety Officer and approved by both the Radiation Safety and Medical Executive Committee

Implementation of Fluoroscopy Privileging Program

- Tracking of Fluoroscopy Use in Institution
- Quality Management Program Policy for Fluoroscopy Usage
- Compliance with the Policy by Fluoroscopy Users
- Role of the Radiologic Technologist

Low Risk Fluoroscopic Procedures

- Complies with institution's clinical privileging requirements for clinical examinations, and
- Complete didactic training for low risk fluoroscopy, and
- Pass exam on didactic material, and
- Demonstrate competency using low risk units

Moderate Risk Fluoroscopic Procedures

- Complies with institution's clinical privileging requirements for clinical examinations and
- Complete didactic training for moderate risk fluoroscopy, and
- Pass exam on didactic material, and
- Demonstrate competency for moderate risk units

High Risk Fluoroscopic Procedures

- Complies with institution's clinical privileging requirements for clinical examination, and
- Complete didactic training for high risk fluoroscopy, and
- Pass exam on didactic material, and
- Demonstrate competency for high risk units

Trainees working under supervision of privileged users during training

- Shall successfully complete following during first six months of training:
- Complete didactic training at the appropriate level of fluoroscopy risk for their specialty, and
- Pass exam on didactic material, and
- Demonstrate competency at the level of fluoroscopy risk for their specialty.

Credentials Committee

- Should have written criteria for not renewing privileges
- Reasons for Review Prior to Renewing Fluoroscopy Privileges:

Excessively long procedures times and high patient doses

Unsafe radiation safety practices

High or missing personnel dosimeter readings

Credentials Committee

- Reasons for Review Prior to Renewing Fluoroscopy Privileges:
- Failure to successfully complete the didactic exam
- Failure to complete practicum requirements
- Failure to acquire continuing medical education (CMEs) requirements.
- Any other missing elements of the program

Delineation of Authority

- The Radiation Safety Committee has the authority to revoke or not to renew all approvals.
- The Medical Executive Committee also has the authority to revoke or not to renew privileges.

Organization Policy

- Since privileges are granted by an institution, the fluoroscopy privileging program needs to be an institutional policy, not a departmental policy
- Each facility must have its own review policy involving Department Chairs, the QMP, RSO and Medical Executive Committee/Staff

Thank You !!!

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