

Fluoroscopy Training, Credentialing and Privileging

Priscilla F. Butler, MS, FACR, FAAPM American College of Radiology, Reston, VA (Revised December 2014)

Introduction

Although fluoroscopy is an essential tool for diagnosing and treating disease, rare applications have resulted in deterministic effects such as skin burns and hair loss. Fluoroscopy also has the potential of increasing stochastic risk for cancer in both patients and operators. Training of physicians and ancillary personnel who use fluoroscopic equipment is essential in preventing or minimizing both deterministic effects and stochastic risks. This is even more critical as practitioners whose medical education originally did not include formal training in fluoroscopy are using this modality more frequently.

Guidance

Several professional organizations have developed guidance regarding qualifications, credentialing and/or privileging of individuals performing fluoroscopic procedures. They include the American College of Radiology (ACR) [1], American College of Cardiology Foundation [2], and American Association of Physicists in Medicine [1,3].

For example, the ACR and AAPM's collaborative technical standard recommends that each facility "have a policy for granting fluoroscopic privileges to all physicians who perform or supervise fluoroscopy. Local credentialing and privileging processes should include review of training records and of procedures that use fluoroscopy to determine that the physician is both properly trained and qualified in fluoroscopy."[1]

The National Council on Radiation Protection and Measurement's Report 168 [4] provided specific recommendations for facilities that perform fluoroscopic procedures. They include:

- Assuring that all operators of the system are trained and that they understand the operation
 of the fluoroscopic system, including the implications for radiation exposure from each mode
 of operation.
- Assuring that physicians performing fluoroscopic procedures are appropriately trained and credentialed, so they can, on a case-by-case basis, assess risks and benefits for individual patients, considering variables such as age, pregnancy status, beam location and direction, tissues in the beam and previous fluoroscopic procedures or radiation therapy.

Links to detailed guidance are provided in the references below.

Regulations

Some state radiation safety regulations require fluoroscopic equipment operators to obtain special permits to perform fluoroscopy. For example, in the state of California, a radiologic technologist or a physician assistant must hold a California fluoroscopic permit to participate in fluoroscopic examinations [5,6]. Each individual must show documentation of appropriate coursework and pass a state examination on fluoroscopy safety [7].

The State of Colorado fluoroscopy training requirement apply to physicians as well, stating that the "Department has determined that any licensed physician supervising or performing fluoroscopy must have adequate training documented." [8]

It is beyond the scope of this document to outline the fluoroscopy requirements within each state. All fluoroscopy operators should check with their state radiation control agency for their state's requirements. State and local radiation control program contact information is available at the Conference of Radiation Control Program Director's website [9].

Training and Credentialing

More and more hospitals and imaging facilities are developing in-house fluoroscopy credentialing and privileging processes. Links to a few of these are provided in the References [10,11,12].

References

- American College of Radiology. ACR–AAPM technical standard for management of the use of radiation in fluoroscopic procedures. 2013; Available at: http://www.acr.org/~/media/ACR/Documents/PGTS/standards/MgmtFluoroProcedures.pdf. Accessed December 12, 2014.
- Douglas PS, Carr JJ, Cerqueira MD, et al. Developing an action plan for patient radiation safety in adult cardiovascular medicine. J Am Coll Cardiol. 2012; 59(20):1833-1847. Available at: http://content.onlinejacc.org/article.aspx?articleid=1203157. Accessed December 12, 2014.
- 3. AAPM Task Group 124. A guide for establishing a credentialing and privileging program for users of fluoroscopic equipment in healthcare organizations American Association of Physicists in Medicine; 2012. Available at: http://www.aapm.org/pubs/reports/RPT 124.pdf. Accessed December 12, 2014.
- NCRP Report No. 168. Radiation dose management for fluoroscopically-guided interventional medical procedures: National Council on Radiation Protection and Measurements; 2010.
 Available at: http://www.ncrppublications.org/Reports/168. Accessed December 12, 2014.
- 5. State of California Department of Public Health. Radiologic Technologist Fluoroscopy Permit Application. Available at: http://www.cdph.ca.gov/pubsforms/forms/CtrldForms/cdph8218.pdf. Accessed December 16, 2014.
- 6. State of California Department of Public Health. Use of Fluoroscopy Equipment by Physician Assistants. Available at: http://carules.elaws.us/code/t.17 d.1 ch.5 subch.4.5 group4.6. Accessed February 26, 2019.

- 7. State of California Department of Public Health. Information notice on fluoroscopy examination preparation; 2014. Available at: https://www.cdph.ca.gov/Programs/CEH/DRSEM/CDPH%20Document%20Library/RHB/Certification/FluoroPermitExamPreparationNotice.pdf. Accessed February 26, 2019.
- 8. State of Colorado. Procedural guidance on interpretation of the operation of fluoroscopy equipment used in the examination of a living human in the State of Colorado and identified in 6 CCR 1007-1, Part 2 and Part 6 of the Colorado Rules and Regulations Pertaining to Radiation Control; 2010. Available at: https://www.colorado.gov/pacific/sites/default/files/HM_xray-interp-operation-of-fluoroscopy-equipment.pdf. Accessed December 12, 2014.
- 9. Conference of Radiation Control Program Directors. Radiation control programs map. Available at: http://www.crcpd.org/map/. Accessed December 12, 2014.
- Archer BR. Radiation management and credentialing of fluoroscopy users. Pediatr Radiol. Sep 2006; 36(Suppl 2): 182–184. Available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2663635/. Accessed December 12, 2014.
- 11. Medical College of Wisconsin. Fluoroscopy credential training. Available at: http://www.mcw.edu/radiationsafety/fluoroscopycred.htm. Accessed December 12, 2014.
- Emory Healthcare. Specific clinical privilege modules required for moderate sedation, fluoroscopy/C-arm and/or deep sedation privileges. Available at:
 http://www.emoryhealthcare.org/credentialing/credentialing-modules.html. Accessed December 12, 2014.