Conference of Radiation Control Program Directors

Regulatory Response to Media Influence
“Chipping Away at the Issues”
CRCPD Initiatives to Make the World a Safer Place
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Objectives
• Review current events that have impacted the radiation regulatory community
• Describe some of the activities CRCPD is supporting to improve the safety of radiation in medicine
  – Qualified Medical Physicists Registry
  – Updating Suggested State Regulations
  – NEXT Studies
  – Improving State Inspections for CT and Radiation Therapy
  – Participating in Federal Working Groups
  – Medical Event Reporting
• Describe the CRCPD activities to assure radioactive material is secure
• Describe the CRCPD activities to respond to a radiation incident or accident
• Demonstration of the Qualified Medical Physicists Registry

Media
California technologist faces testimony in CT overdose case (AuntMinnie.com September 18, 2009)
Hospital error leads to radiation overdoses After Cedars-Sinai reset a CT scan machine in February 2008, more than 200 brain scans on potential stroke patients were performed at eight times the normal dose of radiation, the hospital says. (LA Times 10/13/2009)
Cedars-Sinai finds more patients exposed to excess radiation LA Times 11/09/2009
Hospital officials apologize and offer to cover medical care needed because of overdoses (LA Times 11/21/2009)
Study: Heart attack patients receive radiation equivalent of 725 chest X-rays (CNN Health 11/17/2009)
Radiation overdoses found at second hospital (LATimes 11/21/2009)
GE sued in Alabama CT excess radiation case (Health Imaging, 12/09/09)
FDA finds new cases of CT radiation overexposure (Aunt Minnie 12/07/2009)
Unindicated CT Series Result In Unnecessary Radiation Exposure for Patients (PR Newswire 11/30/2009)
Two more hospitals report CT scan radiation overdoses (LA Times, August 3, 2010)
State Regulatory Activities

- Respond to public records request
- Respond to federal legislative request
- Provide testimony to federal agencies about state regulatory requirements
- Combine and coordinate public response with stakeholders and other regulatory agencies
- Look for ways to reduce patient dose and improve quality of radiation medicine

Qualified Medical Physicists (QMP) Registry

A central location to verify board certification and sub specialty, that does not depend on documentation from the applicant. Provides the ability to independently validate board certification for medical physics support.

Benefits to QMP

- Central location for ABR, ABMP, CCPM and ABHP information
- Free verification of medical physicists certification for employers
- Reduce paperwork for out-of-state employment verification
- No cost to AAPM members for participation in the registry

Benefits to State Programs

- Formalized independent verification for QMP
- Central location to confirm qualifications
- Reduce or eliminate "paper documentation" for QMPs
- Free access to public members
- Verification for volunteer corps
Qualified Medical Physicists (QMP) Registry

Benefits to the Patient

• Provides regulatory programs, employers, and patients independent validation of qualifications of medical physicists
• Promotes minimum standards to be qualified medical physicists based on successfully completing educational program
• Positive path forward to improving quality of radiation medicine
• Ultimate goal is to assure that health care providers have the ability to provide quality care with the patients best interest a priority!

State Regulatory Programs

37 Comprehensive Agreement State Radiation Protection Programs
11 Medical Radiation Device Programs Share responsibility with the Nuclear Regulatory Commission
2 States (WV and WY) with no identified radiation protection program

State Regulations

• Physicians are licensed as practitioners in all states
• Medical Physicists are licensed in TX, FL, and NY and certified in HI
• Medical Dosimetrists have no specific license required but many are RTTs
ASRT Tally of State Licensure, Certification or Recognition Standards by Discipline
https://www.asrt.org/Content/GovernmentRelations/TallyofStateLicensure.aspx

Radiography (39 States)
Radiation Therapy (35 States)
Limited X-ray Machine Operators (32 States) – Not permitted to perform fluoroscopy
Nuclear Medicine Technology (31 States)
Fusion Imaging (12 States)
Radiologist Assistant (28 States)
No Standards (6 States) – Alabama, Alaska, District of Columbia, Idaho, Missouri, North Carolina, South Dakota

Magnetic Resonance (3 states)
Mammography (distinct from radiography) (5 States)
Sonography (2 states)
Computed Tomography (distinct from radiography) (3 States)
Cardiovascular Technologists (RCIS)
Fluoroscopy Only (1 state)

Suggested State Regulations

• Is a Dynamic Document (revised/updated on an ongoing basis)
• They consist of a number of Parts that relate to various aspects of radiation regulation
• While each Part is complete as to its subject matter, each Part also displays a unique publication date
• Many Parts are dependant on other portions of the SSRCRs and as such should not be viewed as independent publications

Suggested State Regulations

• Part B Registration of radiation machines, facilities and services (2009)
• Part C Licensing of Radioactive Materials (2010)
• Part D Standards for Protection Against Radiation (2003) (federal concurrence)
• Part F Diagnostic X-rays and Imaging Systems in the Healing Arts (2009)
• Part G Use of Radionuclides in the Healing Arts (2009)
• Part X Medical Therapy (2009)
• Part ZZ Registration Requirements for Personnel Providing Medical Radiation Procedures (Medical Physicists (2010)

White Papers

December, 2010, Technical White Paper “Monitoring and Tracking of Fluoroscopic Dose”
with corresponding “Handout Monitoring and Tracking of Fluoroscopic Dose”

The Nationwide Evaluation of X-ray Trends (NEXT) program is a partnership between the Conference of Radiation Control Program Directors, Inc. (CRCPD) and the Food and Drug Administration (FDA) Center for Devices and Radiological Health (CDRH), with financial support from the American College of Radiology (ACR) since 1998, to characterize the radiation doses patients receive during diagnostic x-ray examinations.

**Dose guidelines for certain procedures (NEXT Study)**

**Inspector Training**
- CRCPD 2009 Annual Meeting
- CRDR Training for State Inspectors
- CRCPD 2011 Annual Meeting
  - Computed Tomography for State Inspectors
    - Saturday, May 14-15, 2011
- CRCPD 2012 Annual Meeting
  - Radiation Therapy for State Inspectors
  - And MQSA

**CRCPD Proposed Medical Event Registry**
- Voluntary Reporting
- Non Punititive
- Anonymous
- Reports medical events and near misses
- Objective is education and awareness in an attempt to prevent future medical errors
- Diagnostic doses that exceed 50 rem to the location of interest
State Regulatory Activities

- California Bill Passed 2010
- Texas Regulations in progress
- Colorado (CT Quality assurance requirements)
- New Jersey (Quality assurance and dose restrictions using NEXT data)
- Michigan
- Massachusetts
- New York
- Alabama
- Wisconsin

Federal Working Groups

- Nuclear Regulatory Commission
- Food and Drug Administration
- Environmental Protection Agency
- Department of Homeland Security
- Federal Emergency Management Organization
- Center for Disease Control

Participation with Professional Organization Activities

CARE Bill Legislation
Consistency, Accuracy, Responsibility and Excellence in Medical Imaging and Radiation Therapy

- Reduce health care costs with accurate diagnosis and fewer repeat exams and delays.
- Maximize patient safety by using certified individuals to perform exams and treatments safely, accurately and effectively while minimizing radiation exposure. Increase quality by allowing competent, educated and certified technologists and therapists to perform procedures.

Participation in QA Meetings

- Device Improvements to Reduce the Number of Under-Doses, Over-Doses, and Misaligned Exposures From Therapeutic Radiation
  June 9-10, 2010
- Radiation Medical Imaging Database Roundtable
  October 19, 2010
- AAPM CT Dose Summit: Scan Parameter Optimization
  April 29 and 30.
- 2010 Safety in Radiation Therapy, A Call to Action,
  June 25, 2010
Secure Disposition of Unwanted Sources

- Still registering sources
- Round ups continue in states with access to disposal sites
- Ultimate solution to securing sources is disposal
  www.CRCPD.org

Radiation Response Volunteer Corps

- 2009 ACMP Special Session on Radiation Response Volunteer Corps
- Increased awareness on gap in response to radiation emergencies
- New technology advancements that requires Medical and Health Physics Expertise
- Increase awareness in internal contamination and countermeasures
- Federal interest through HHS and CDC

Demonstration QMP Registry

THANK YOU

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