


PURSUIT OF SAFE AND EFFECTIVE IMAGING & RADIATION THERAPY/PLANNING PRODUCTS

MITA'S ROLE IN THE DEVELOPMENT OF SAFE & EFFECTIVE IMAGING & RADIATION PLANNING AND DELIVERY PRODUCTS

AAPM 2018
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MITA: A Standards Organization

The Medical Imaging and Technology Alliance (MITA) develops medical imaging standards to ensure safe, timely access to the most effective medical imaging equipment available



MITA Standards Activities

- MITA is the leading standards organization for medical imaging systems
- Our standards process always begins by listening to users and collecting information about their needs
- We work with user organizations (AAPM, ACR, CRCPD, etc) and government bodies (e.g., FDA) to ensure a cohesive standard
- We utilize subject matter experts within our member companies to ensure relevance and accuracy



MITA Believes

- MITA believes that international standards promote innovation and encourage growth
- MITA recommends reliance on consensus-based, recognized standards, such as the IEC, NEMA, AAMI, ISO, and MITA itself



XR27 *X-ray Equipment for Interventional Procedures*

User Quality Control Mode

- Developed to set design requirements on interventional x-ray equipment to assist user facilities in their quality control
- Consensus of seven major interventional equipment manufacturers
- Collaboration effort with AAPM stakeholders to facilitate quality control, including: physical testing of equipment, electronic audit of system configuration, and electronic reporting of relevant data and information



XR29 *Standard Attributes on CT Equipment Related to Dose Optimization and Management*

- Developed to identify four key features of CT scanners which contribute to, or help perform, optimization and/or management of doses of ionizing radiation while still enabling the system to deliver the diagnostic image quality needed by the physician
- Consensus of over 20 organizations



XR30 *Quality Control Tools for Digital Projection Radiography*

- Developed to support the work of AAPM Task Group No. 150 - Acceptance Testing and Quality Control of Digital Radiographic Imaging Systems
- Applies to digital projection radiography equipment and defines minimum requirements to facilitate facility quality control, in particular:
 - a) image quality analysis
 - b) means to identify image processing settings and validate their consistency over time



XR31 *Standard Attributes on X-ray Equipment for Interventional Procedures*

- Developed to identify key dose management features which contribute to enhancing patient care
- Eight attributes were identified for their ability to manage radiation dose as recommended by professional societies: dosimetric indications, additional filtration, range of air kerma rates in fluoroscopy, variable pulsed fluoroscopy rates, last-image-hold (LIH), virtual collimation, stored fluoroscopy, digital x-ray imaging device
- Healthcare facilities can leverage XR-31 when performing risk management evaluations of existing equipment and in assessing whether adequate dose management features are available



DICOM[®] (Digital Imaging and Communications in Medicine)

- the **international standard** to transmit, store, retrieve, print, process, and display **medical imaging** information
- **makes medical imaging information interoperable**
- **integrates** image-acquisition devices, PACS, workstations, VNAs and printers from different manufacturers
- is actively developed and maintained to meet the **evolving** technologies and needs of medical imaging
- is **free** to download and use



Conclusion

- MITA views its relationship with the stakeholder community as a way to achieve our shared common goal of greater patient safety with improved access to high quality innovative technologies
- We look to stakeholder organizations to help us determine what standards are needed, and to provide comments along the way
- We believe a direct pathway to achieve that goal is through a strong commitment of international harmonization of regulations and standards

THANK YOU, AAPM!

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