



Diagnostic Accreditation Program

ACCREDITATION STANDARDS

Medical Imaging
Informatics

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Introduction

Medical imaging informatics refers to the systems and processes which acquire, store, and transmit medical imaging data (i.e. digital medical images and reports).

Medical imaging informatics systems may include, but are not limited to, RIS, HIS, PACS, MIMPS, speech recognition report generation systems, advanced postprocessing systems, image archives, and servers.

If the facility only provides bone densitometry services, the MII1.0 standards are best practice recommendations.

Medical imaging informatics

| No. | Description | Risk | Reference | Change |
|---------------|---|------|---------------|--------|
| MII1.0 | MEDICAL IMAGING INFORMATICS | | | |
| MII1.1 | There are support resources for medical imaging informatics. | | | New |
| MII1.1.1 | M A designated individual, or team, is responsible for monitoring medical imaging informatic systems and processes (i.e. PACS/MIMPS, RIS). | M | II-DISP-AC-24 | New |
| MII1.1.2 | B Medical imaging informatic support calls are documented and reviewed. | | II-DISP-AC-24 | New |
| MII1.2 | There is a preventive maintenance program for medical imaging informatic systems. | | | New |
| MII1.2.1 | M There is a preventive maintenance program in place for medical imaging informatic systems. | M | II-DISP-AC-24 | New |
| MII1.2.2 | M Preventive maintenance of medical imaging informatic systems are performed by trained and competent staff. | M | II-DISP-AC-24 | New |
| MII1.3 | PACS/MIMPS and HIS/RIS technical specifications and integration. <i>Guidance: Medical image management and processing systems (MIMPS) is a new term to describe picture archiving and communication systems (PACS). PACS/MIMPS store and transport medical images. Radiology information system (RIS) is a medical imaging-specific software application for creating, storing and sharing medical imaging data. RIS is often used in conjunction with a hospital information system (HIS), which is an information system designed to manage all aspects of hospital operations. To ensure PACS/MIMPS meet the needs of the intended users and are compatible with the facility imaging systems, the DAP recommends that the medical director and medical imaging informatics leadership review the DICOM conformance statement, IHE integration statement and cybersecurity certificates prior to purchase.</i> | | | New |
| MII1.3.1 | M There is a picture archiving and communication systems (PACS) or a medical image management and processing systems (MIMPS). <i>Guidance: Medical image management and processing systems (MIMPS) is a new term to describe picture archiving and communication systems (PACS). PACS/MIMPS store and transport medical images.</i> | M | II-DISP-AC-24 | New |

| No. | Description | Risk | Reference | Change |
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| MII1.3.2 | <p>M There is a radiology information system (RIS).</p> <p><i>Guidance: Radiology information system (RIS) is a medical imaging-specific software application for creating, storing and sharing medical imaging data. RIS is often used in conjunction with a hospital information system (HIS), which is an information system designed to manage all aspects of hospital operations.</i></p> | M | II-DISP-AC-24 | New |
| MII1.3.3 | <p>M There is HL7 integration with HIS/RIS and PACS/MIMPS and imaging systems.</p> <p><i>Guidance: It is recommended that new systems have HL7 FHIR (fast health interoperability resources) specifications.</i></p> | M | II-DISP-AC-24 | New |
| MII1.3.4 | <p>M PACS/MIMPS are DICOM compatible, and the vendor has a DICOM conformance statement.</p> | M | II-DISP-AC-24 | New |
| MII1.3.5 | <p>M PACS/MIMPS support the IHE technical framework, and the vendor has an IHE integration statement.</p> | M | II-DISP-AC-24 | New |
| MII1.3.6 | <p>M PACS/MIMPS are Health Canada approved.</p> | M | II-DISP-AC-24 | New |
| MII1.3.7 | <p>B PACS/MIMPS are compliant with ISO/IEC 27001 – Information Security, Cybersecurity and Privacy Protection – Information Security Management Systems.</p> | | II-DISP-AC-24 | New |
| MII1.4 | PACS/MIMPS have image presentation support features (i.e. PACS viewer). | | | New |
| MII1.4.1 | <p>M PACS/MIMPS image presentation support features include hanging protocols.</p> <p><i>Guidance: Hanging protocols are a unique set of viewing instructions which determines the selection of image series and display format.</i></p> | M | ACR-AAPM-SIIM-TS.Electronic.MI | New |
| MII1.4.2 | <p>M PACS/MIMPS image presentation support features include window (contrast) and level (brightness) adjustment.</p> | M | ACR-AAPM-SIIM-TS.Electronic.MI | New |
| MII1.4.3 | <p>M PACS/MIMPS image presentation support features include zoom (magnification) and pan.</p> | M | ACR-AAPM-SIIM-TS.Electronic.MI | New |
| MII1.4.4 | <p>M PACS/MIMPS image presentation support features include display of linear measurements and pixel value determinations, appropriate for the modality (i.e. Hounsfield units for CT).</p> | M | ACR-AAPM-SIIM-TS.Electronic.MI | New |
| MII1.4.5 | <p>M PACS/MIMPS image presentation support features include the ability to rotate and flip images while preserving the orientation of the patient label.</p> | M | ACR-AAPM-SIIM-TS.Electronic.MI | New |
| MII1.4.6 | <p>M PACS/MIMPS image presentation support features include the display of DICOM overlay.</p> | M | ACR-AAPM-SIIM-TS.Electronic.MI | New |

| No. | Description | Risk | Reference | Change |
|---------------|--|------|---------------|--------|
| MII1.4.7 | M PACS/MIMPS image presentation support features include the ability to reproduce mammography images at 1:1 or 100% size (e.g. full resolution). | M | II-DISP-AC-24 | New |
| MII1.7 | DICOM overlays are configured. <i>Guidance: The term DICOM overlay refers to the DICOM tags which are configured to display on the image in a PACS viewer.</i> | | | New |
| MII1.7.1 | M DICOM overlay includes patient name. | M | II-DISP-AC-24 | New |
| MII1.7.2 | M DICOM overlay includes patient identifier. | M | II-DISP-AC-24 | New |
| MII1.7.3 | M DICOM overlay includes date and time of acquisition. | M | II-DISP-AC-24 | New |
| MII1.7.4 | M DICOM overlay includes name of acquisition facility (site or origin). | M | II-DISP-AC-24 | New |
| MII1.7.5 | M DICOM overlay includes modality. | M | II-DISP-AC-24 | New |
| MII1.7.6 | M DICOM overlay includes examination. | M | II-DISP-AC-24 | New |
| MII1.7.7 | M DICOM overlay includes data compression. | M | II-DISP-AC-24 | New |

References

| Abbreviation | Reference |
|--------------------------------|---|
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| II-DISP-AC-24 | 2024 DAP Imaging Informatics, Displays, PACS Advisory Committee Recommendation |

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