

Policy Title:	Breast Screening Standard for Digital Mammography Image Management/Archive (PACS)	
Section:	Quality Management	Reference No. SG-DG 800
Effective:	January 2012	Revision: February 2013

1. SCOPE

Breast Screening Program Chief Radiologists
Breast Screening Program Chief Technologist
Breast Screening Quality Assurance Support Group
IMITS
MI Informatics
Radiology Managers

2. POLICY

Hardware and software used must meet established standards. The BC Cancer Breast Screening program standards align with Diagnostic Accreditation Program (DAP) requirements. Breast Screening requires that all image archives (Picture Archiving and Communications System, PACS) used to store digital mammography images shall support the IHE Mammography Image Integration Profile as the "Image Manager/Archive actor, and must meet the following criteria:

- Any data compression scheme utilized for image or data storage shall be reversible and supported by DICOM standard. The definition of reversible means that any image or data in compression should be bit-preserving after decompression compared to the original image or data before compression.
- 2. There is a documented disaster recovery plan and associated risk assessment for recovery and access to data.
- 3. For information systems, database and diagnostic image back up is performed daily and the back up is securely located in a separate physical location.
- 4. Test procedures are performed to ensure accurate and consistent information exchange and to check the effect of software changes on the imaging modalities and/or PACS prior to clinical use.
- 5. Data access is restricted, controlled and monitored. Data stored on-site is accessible, but protected from unauthorized access and safeguarded against harm (e.g. water, fire, etc.)
- 6. Security incidents are reported, documented, investigated and resolved. Actions are taken to prevent recurrence.



- 7. High-availability servers exist to provide the maximum possible access to the applications.
- 8. A designated individual is responsible for monitoring and maintaining the system(s).
- 9. There is compliance with the DICOM standard for all new digital imaging equipment.
- 10. Communication protocols, file formats and compression conforms to the current DICOM (3.0) network standard.
- 11. Network and software security protocols are in place to protect the confidentiality of images, diagnostic reports and other data.
- 12. Test procedures are performed to ensure accurate and consistent information exchange, including but not limited to modality DICOM transfer verification, DICOM Modality Worklist and RIS verification and the validation of measurement tool accuracy.

Technical specifications for Full Field Digital Mammography (FFDM) systems and soft copy display workstations are available from the Breast Screening Physics support group. All imaging systems used for Breast Screening imaging must undergo initial acceptance testing by program physicist, as well as receive an annual physicist assessment.

3. RELATED POLICIES

SG-DG 600 – Breast Screening Standard Digital Mammography Interpretation SG-DG 400 – Breast Screening Standard for Soft Copy Display (Workstations) SG-DG 500 – Breast Screening Standards for DICOM Header Required Tags

4. RESPONSIBLE PARTY

Professional Practice Leader – Breast Screening Technologists Breast Screening Quality Assurance Support Group

References

IHE Mammography Handbook
DAP 2014 Diagnostic Imaging Accreditation Standards