COMP Canadian Organization of Medical Physicists
OCPM Organisation canadienne des physiciens médicaux

Canadian Association of Radiologists/Canadian Organization of Medical Physicists' Position Statement on Workstation Standards in Mammography Accreditation

September 29, 2022

On August 24th, 2022, it was reported that over the past 3 years, some mammograms were read using non-mammographic workstations in Newfoundland and Labrador, Central Health Regional Health Authority.

The Canadian Association of Radiologists and the Canadian Organization of Medical Physicists have put together the following background material related to the guidelines for the performance of high-quality mammography.

About the Mammography Accreditation Program

The Canadian Association of Radiologists Mammography Accreditation Program (MAP) is a quality assurance program that supports Canadian mammography services. Technical standards have been adopted in partnership with the Canadian Organization of Medical Physicists (COMP). These standards are based on internationally recommended best practices and been upgraded over the last 25 years. MAP supports mammography services by compiling peer-reviewed evidence into standards and best practices.

In Newfoundland and Labrador, participation in MAP is voluntary and not all facilities in Central Health are accredited by MAP.

Mammography is an important tool for reducing the impact of breast cancer and requires the highest levels of performance from healthcare providers, systems, and equipment.

Reading a mammogram is a highly complex task. Radiologists require in-depth training in breast imaging and continuing education once credentialed. The mammography equipment must be maintained to operate at the highest level. The resolution of the monitor used by the reporting radiologist contributes to finding the earliest signs of cancer and improves patient outcomes.

MAP requires all screening and diagnostic mammography studies to be interpreted from medical grade monitors which are calibrated annually. Specifically, MAP requires a minimum of two 5 megapixel or a single 8-megapixel monitor. There are numerous technical requirements for such monitors as outlined in ACR-AAPM-SIIM TECHNICAL STANDARD FOR ELECTRONIC PRACTICE OF MEDICAL IMAGING (revised 2022) and Health Canada Safety code 36. This standard applies to radiologists regardless of their location as the workstation monitors must be calibrated considering ambient lighting. The newest standard that CAR MAP has implemented is that workstation displays

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are to be calibrated according to AAPM report no.TG-270, Display Quality Assurance (2019). This standard has more stringent requirements for mammography workstations than for CT or digital image review workstations.

Ensuring radiologist mammography workstations are in optimal order is a shared responsibility between MAP, the radiologist using the workstation and the medical physicists tasked with surveying them annually.

The CAR and COMP recommend that any mammograms not read on a workstation which complies with best practices should be reviewed on by a second radiologist who is credentialed by the CAR, on a monitor meeting MAP standards to ensure accuracy. As announced by the province of Newfoundland and Labrador, this review is already underway. Some International screening programs have all mammography studies “double read” because it improves screening and diagnostic patient outcomes. At this time, the CAR and COMP recommend awaiting the end of the formal review and audit to understand the nature of reporting discrepancies.

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Dr Gilles Soulez

President of the CAR

Boyd McCurdy, PhD, FCCPM, FCOMP

President of COMP