Title	Documentation of Equipment Malfunction and Service Calls	**Policy #**	01-005

POLICY

It is the duty of the radiology staff and managers to identify and remove malfunctioning equipment from use. Documentation must be provided for:

1. All service requests, for all known or suspected malfunctioning imaging equipment
2. All repairs made to equipment
3. All calibrations, tests, surveys and/or medical physics surveys that will allow equipment to be deemed safe for use

PURPOSE

To ensure patient and staff safety by documenting all service requests for malfunctioning imaging equipment and to provide a procedure for the release of equipment for reuse.

PROCEDURE

1. Malfunctioning equipment that is taken offline or out of service will be reported to one or more of the following:
    - Equipment vendor
    - Lead Technologist
    - Modality Manager
    - Radiology Operations Director

    If the malfunction may be due to any of the components listed in item 2.b.1.(below), notification must also be made to:
    - Radiation Safety Officer (RSO)
    - Medical Physicist (MP)

2. Each modality will create equipment malfunction procedures. These procedures will contain the following elements:

    Severe Malfunction
    A system malfunction is declared "Severe" if the malfunction may injure a patient or employee. All Severe malfunctions will result in removing the equipment from service. If potential injury cannot be determined, the malfunction, or lack thereof, will be declared Severe.

    The service of all Severe malfunctions will be reported to the Manager, RSO and MP.

Non-severe Malfunctions

All other system malfunctions are declared "Not Severe". This includes, but is not limited to, malfunctions that may affect workflow, cosmetics, etc.

a. The documentation for all repairs directly affecting radiation and MRI safety must be reviewed. Some repairs require the review of a medical physicist (MP) prior to returning the equipment to patient use. These include:
   - Repairs directly affecting radiation safety, such as x-ray tube, x-ray tube power supply, high voltage generator, x-ray filters, Automatic Exposure Control, collimation, calibration, illumination, and exposure factors.
   - Repairs that affect the MRI's linearity, sensitivity, geometric characteristics, and Specific Absorption Rate (SAR), such as gradient sub systems, shim-control subsystems, radio frequency transmitter and radiofrequency receiver.

b. The person who identifies the malfunction will post a faulty equipment notice to the equipment in a prominent position.

c. There will be a record of the service request. This record will contain:
   - the date and time the malfunction was identified,
   - the contacted person(s),
   - a brief description of the malfunction,
   - initials of the person(s) who identified the malfunction and
   - service recommendations and repair.

d. If service may be required to any of the components listed in item 2.a. (above), a MP survey may be required. Coordinate the service scheduling with the RSO to ensure that a MP survey is scheduled and performed as close to the repair as possible, if required.

e. Equipment may only be returned to patient use after the MP or RSO, has confirmed that the equipment is performing properly, and patient use may resume.

Approved by:

Dorothy I Bulas, MD Division Chief, Diagnostic Imaging and Radiology	6/30/2021 Date
Laurie Hogan, MBA, CRA Director, Diagnostic Imaging and Radiology	6/30/2021 Date
Catalina Kovats, MS Radiation Safety Officer, Diagnostic Imaging & Radiology	6/30/2021 Date
Sunil Valaparla, Ph.D. Medical Physicist, Diagnostic Imaging & Radiology	6/30/2021 Date

Dates of review

Original: November 15, 1988
Revised: February 22, 2007
Revised: June 22, 2010
Revised: April 5, 2013
Revised: August 21, 2015
Reviewed: May 10, 2016
Reviewed: June 21, 2018
Revised: June 30, 2021