Name of Policy: Nuclear Diagnostic Instrumentation UTOLEDO HEALTH **Policy Number**: 3364-106-N12 **Approving Officer**: Chief Operating Officer Effective date: 3/24/2025 **Responsible Agent:** Director of Cardiovascular Services, Medical Director, Non-Invasive Cardiac Original effective date: 12/1992 **Imaging Scope**: University of Toledo Medical Center Key words: Radiation, Nuclear Testing, Stress Test, Diagnostic, Instrumentation New policy proposal Minor/technical revision of existing policy XMajor revision of existing policy Reaffirmation of existing policy

(A) Policy Statement

All diagnostic instrumentation associated with Nuclear Medicine procedures shall be inspected and checked according to the manufacturer's recommendations, the Ohio Department of Health-Bureau of Radiation Protection guidelines, and the Nuclear Regulatory Commission (NRC) guidelines.

(B) Purpose of Policy

To ensure that all equipment is calibrated and operating within specified parameters as stated by the manufacturer, the State of Ohio, and the NRC.

(C) Procedure

- 1. Perform a daily flood test on each nuclear gamma camera.
- 2. Perform daily CT phantom testing.
- 3. Perform weekly bar phantom testing on each nuclear camera.
- 4. Perform energy and/or flood calibration on gamma cameras when stipulated by the manufacturer.
- 5. Perform monthly center of rotation calibration on gamma cameras.
- 6. Perform daily constancy checks on dose calibrators and well counters.
- 7. Perform linearity checks quarterly on dose calibrators.
- 8. Perform accuracy checks on dose calibrators yearly.
- 9. Perform geometry dependence checks on dose calibrators at installation and after repairs.
- 10. Perform daily battery and source checks on all Geiger Mueller tubes.
- 11. Perform annual calibration checks on all Geiger Mueller tubes.
- 12. Perform annual checks on ECG gate modules.
- 13. Where applicable, check interface between gamma camera and computer.
- 14. Record all tests and checks in the proper logbook or computer file.
- 15. Record all Quality Control, Service calls and Repairs made on equipment in the proper logbook or computer file.
- 16. Perform all calibration or constancy checks when and where applicable according to the manufacturer or supplier's recommendations.
- 17. All equipment will be checked by UTMC Technology Support Services on an annual or semi-annual basis according to a preventative maintenance program developed by the vendor and or Technology Support Services.

Approved by:	Policies Superseded by This Policy:
	• None
/s/	
	Initial effective date: 12/1992
Todd Korzec, RN, BSN	
Director, Cardiovascular Services	Review/Revision Date:
	9/92
1/31/2025	12/95
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Date	3/99
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/s/ 	6/01
	5/04
Samer Khouri, MD	7/07
Medical Director, Non-Invasive	8/10
Cardiac Imaging	6/13
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3/7/2025	3/19
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Date	3/24/2025
/s/	
	Next review date: 3/24/2028
Christine Stesney-Ridenour, FACHE	
Chief Operating Officer	
3/24/2025	
Date	
Review/Revision Completed by:	
Director, Cardiovascular Services	