Evaluation Form

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NUCLEAR Cardiology Rotation- Faculty of Fellow rev 2020

Evaluator: _____

Evaluation of: _____

Date: _____

This evaluation uses a 10 point scale that ranges across six performance descriptors. Please select the radio button that most closely reflects your assessment of fellow performance. You are encouraged to provide additional feedback using the comments section of the form.

	Not Yet Assess…	Level 1	Level 2	Level 3	Level 4	Level 5
	Not able to assess or not applicable for level of training	Baseline performance - Direct supervision	Novice / early progress - Direct supervision	Substantial competency - Indirect supervision	Proficient / Independent competency - ready for autonomous practice	Advanced expertise

Collapse

1. Identify indications and contraindications for exercise treadmill testing (without imaging)	☐	☐ Knows basic uses of exercise stress testing (without imaging)	☐	☐ Demonstrates knowledge of indications and contraindications for exercise treadmill testing Explains advantages and drawbacks of exercise stress testing without imaging	☐	☐ Demonstrates knowledge of appropriate selection and use of stress testing for patients with common cardiovascular disorders Justifies selection of exercise stress testing without imaging based on individual patient presentation	☐	☐ Applies knowledge of appropriate selection and use of cardiovascular stress testing, without imaging, for patients with complex cardiovascular disorders	☐	☐ Advances knowledge in indications, contraindicati and appropriate use for cardiovascula stress testing

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2. Demonstrates an understanding of and is able to conduct exercise stress ECG testing with and without imaging

☐	☐ Discusses the key steps of ECG stress testing Interprets electrocardiogram (ECG) patterns for common clinical conditions	☐	☐ Performs and interprets ECG stress testing, with and without imaging, with guidance	☐	☐ Interprets complex ECG stress tests, with guidance	☐	☐ Independently performs and interprets ECG stress testing	☐	☐ Independently cross-correlates results of other common cardiovascula tests with ECG stress test results

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3. Identify indications and contraindications for pharmacological stress agents and protocols.

☐	☐ Knows the various types of pharmacological stress agents	☐	☐ Demonstrates basic knowledge of indications and contraindications for use of common pharmacological stress agents	☐	☐ Demonstrates knowledge of appropriate selection and use of a range of pharmacological stress agents for common cardiovascular disorders	☐	☐ Applies knowledge of appropriate selection and use of pharmacological stress agents for patients with complex cardiovascular disorders	☐	☐ Advances knowledge in indications, contraindicati and appropriate use for a range of pharmacologi stress agents

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4. Demonstrates an understanding of and is able to conduct pharmacological stress protocols.

☐	☐ Discusses the key components of how	☐	☐ Demonstrates knowledge of indications	☐	☐ Demonstrates knowledge of appropriate	☐	☐ Applies knowledge of appropriate	☐	☐ Advances knowledge in defining

	to perform stress testing, including patient set up and consent		and contraindications for various stress testing modalities; Knows the basic measurements obtained from the various testing modalities; Conducts stress testing protocols, w/guidance		selection and use of various stress testing modalities for common CV disorders Competently conducts stress testing protocols with indirect supervision		selection and use of various stress testing protocols for complex CV disorders Identifies key test findings in complex CV disorders Independently conducts various stress test protocols, including dobutamine stress and adenosine stress		the role of stress testing

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5. Identify indications for stress testing with myocardial perfusion imaging.	☐	☐ Knows basic uses of stress myocardial perfusion imaging	☐	☐ Demonstrates knowledge of indications for stress myocardial perfusion imaging Explains advantages and drawbacks of stress myocardial perfusion imaging	☐	☐ Demonstrates knowledge of appropriate selection and use of stress myocardial perfusion imaging for patients with common cardiovascular disorders Justifies selection of stress myocardial perfusion imaging based on individual patient presentation	☐	☐ Applies knowledge of appropriate selection and use of cardiovascular stress testing, with imaging, for patients with complex cardiovascular disorders	☐	☐ Advances knowledge in indications and appropriate use for stress myocardial perfusion imaging

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6. Can identify indications for stopping stress testing, both pharmacologic and exercise.

☐	☐ Discusses the key steps of the test Interprets electrocardiogram (ECG) patterns for common clinical conditions that preclude exercise stress testing (LBBB, WPW, etc)	☐	☐ Demonstrates knowledge of indications and contraindications for stress testing Knows the basic measurements commonly obtained from stress testing modalities and knows acceptable parameters for safe testing based on ASNC guidelines	☐	☐ Identifies and interprets measurements falling outside parameters of safety for various testing modalities, with guidance Understands implications of measurements exceeding safety limits for various modalities	☐	☐ Independently Identifies and interprets measurements falling outside parameters of safety for various testing modalities; Exercises independent judgment in stopping testing	☐	☐ Advances knowledge in defining the safety parameters of various stress testing modalities

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7. Demonstrates knowledge and appreciation of radiation safety.

☐	☐ Can identify in general terms that amount of radiation exposure from common cardiovascular imaging tests	☐	☐ Demonstrates basic knowledge of radiation safety protocols and radiation safety monitoring programs	☐	☐ Consistently demonstrates adherence to radiation safety protocols Able to explain radiation safety guidelines and reasoning	☐	☐ Able to identify/recognize gaps in radiation safety protocols and offer solutions for mitigation Able to explain in detail the	☐	☐ Participates in guidelines development for radiation safety improvements Actively coaches others in safety protocols

								amount of radiation exposure from both common and less common cardiovascular imaging procedures (SPECT, PET, various isotopes, CTA)		

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8. Demonstrates an understanding of the basic physics of nuclear imaging, including participation in nuclear cardiology 80 hour course

☐	☐ Demonstrates knowledge of the principles of radiation safety and how to minimize exposure	☐	☐ Knows the common uses radioisotopes used in nuclear cardiology (Tc99m, Tl-201, Rb-82, FDG). Has completed Week 1 of 80 hour course	☐	☐ Knows the basic radiation biology (t/12, dosimetry) of radioisotopes used in nuclear cardiology (Tc99m, Tl-201, Rb-82, FDG). Has completed Week 2 of 80 hour course	☐	☐ Is able to integrate knowledge of all radioisotopes used in nuclear cardiology (Tc99m, Tl-201, Rb-82, FDG) to tailor imaging protocols to the patient and question answered.. Has completed Week 3 of 80 hour course Demonstrates understanding of hybrid imaging modalities such as SPECT/CT and PET/CT	☐	☐ Has completed all requirements of 80 hour course and hands on training to be listed as an Authorized User of Radiopharma

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9. Is able to identify and describe limitations the appropriate test selection for patients based on the clinical question

☐	☐ Discusses the key steps of the determining the appropriateness various testing modalities (stress ECG, MPI, echo, CTA) Can list common limitations of the various testing modalities	☐	☐ Identifies standard protocols for various imaging modalities; Knows the basic data obtained from the various testing modalities and can identify abnormal parameters indicating possible artifacts; Can describe limitations of nuclear imaging studies in relation to one another	☐	☐ Can identify common artifacts in studies from various imaging modalities, w/guidance	☐	☐ Independently identifies common artifacts in studies from various imaging modalities; Recognizes artifacts in studies from unusual or complex presentations	☐	☐ Advances knowledge in defining the role of nuclear imaging Independently identifies the appropriate imaging study in patients with complex cardiovascular disorders

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10. Accurately interprets SPECT and PET myocardial perfusion imaging studies and compares to prior study when available.

☐	☐ Demonstrates how to access current images and use available evidence to provide a basic interpretation of perfusion images	☐	☐ Knows the how to get basic measurements of perfusion defect size and left/right ventricular size/function; Interprets stress	☐	☐ Competently interprets myocardial perfusion imaging and stress test results and routinely incorporates longitudinal data, with	☐	☐ Independently interprets and documents myocardial perfusion imaging, stress test results, and ancillary data (CTAC) in stress	☐	☐ Independently interprets and integrates complex features of myocardial perfusion imaging, stress test results, and CT

	to manage a patient with cardiac disease Understands standard tomographic views		test results, including incorporation of stress ECG data, with guidance		indirect supervision, including structured reporting of defect size		tests in common clinical conditions		attenuation correction data for patients with complex clinical conditions

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11. Accurately protocols and interprets FDG PET studies (sarcoid and viability)	☐	☐ Discusses the key protocols of FDG PET studies, including general knowledge of patient preps for viability and inflammatory imaging	☐	☐ Knows the basic measurements obtained from PET FDG studies; Interprets FDG PET study results for common clinical conditions, w/guidance Coordinates dietary preparation of patients undergoing FDG studies, with guidance	☐	☐ Competently interprets FDG PET study results for common clinical conditions, with minimal guidance, including use of hybrid imaging workflow; Recognizes limitations in interpretation of PET study results for complex clinical conditions	☐	☐ Independently interprets FDG PET studies results for common clinical conditions; Interprets FDG PET study results for complex clinical conditions, with guidance Coordinates dietary preparation of patients for FDG studies, with guidance	☐	☐ Independently interprets FDG PET study results for complex clinical conditions Coordinates dietary preparation for patients undergoing FDG studies for complex scenarios
12. Accurately protocols and interprets Tc99m PYP studies for cardiac amyloidosis	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

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13. Identifies indications for, performance, and interpretation of radionuclide equilibrium angiocardiogram	☐	☐ Discusses the key steps of the test, including basic knowledge of RBC tagging Interprets radionuclide angiography for common clinical conditions	☐	☐ Demonstrates knowledge of indications and contraindications for radionuclide angiography Knows the basic measurements commonly obtained from a radionuclide equilibrium angiocardiogram and knows acceptable parameters for safe testing	☐	☐ Identifies and interprets radionuclide equilibrium angiocardiogram measurements falling outside parameters of safety, with guidance; Understands implications of measurements exceeding safety limits and implications of halting chemotherapy	☐	☐ Independently Identifies and interprets radionuclide equilibrium angiocardiogram measurements falling outside parameters of safety; Exercises independent judgment in halting chemotherapy Able to identify artifacts related to processing of imaging and RBC tagging on RNA	☐	☐ Advances knowledge in defining the safety parameters chemotherapy in nuclear CV testing

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14. Processes and identifies abnormalities of PET myocardial blood flow imaging	☐	☐ Discusses the key steps of the test and normal study results, including identifying motion artifact and input function curves	☐	☐ Recognizes normal values for myocardial blood flow Knows the basic measurements obtained for myocardial blood flow	☐	☐ Demonstrates competency in interpretation of key measures and key functions, integrating myocardial blood flow and relative perfusion data	☐	☐ Independently quantifies myocardial blood flow measurements and evaluates key functions, including when and how to perform rate-pressure correction	☐	☐ Advances knowledge in nuclear studies and interpretation

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15. Learns and improves via feedback and participates in lab QA programs

☐	☐ Accepts responsibility for personal and professional development by establishing goals; Acknowledges limits and gaps between expectations and performance; demonstrates self-awareness Understands lab QA programs, including nuclear/cath correlation	☐	☐ Demonstrates openness to feedback and performance data in order to form goals; Analyzes the factors which contribute to limits and gaps; demonstrates appropriate help-seeking behaviors Responds to performance feedback from nuclear lab staff	☐	☐ Occasionally seeks feedback and performance data with adaptability and humility Presents nuclear-cath correlation conference effectively	☐	☐ Systematically seeks feedback and performance data with adaptability and humility	☐	☐ Coaches others to seek feedback and performance data

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16. Initiates follow up discussion of abnormal findings and interviews patient regarding symptoms.

☐	☐ Takes responsibility for failure to complete tasks and responsibilities; Demonstrates respect and establishes rapport	☐	☐ Performs tasks and responsibilities in a timely manner with appropriate attention to detail, including consenting patients	☐	☐ Attempts to minimize communication barriers, including reflection on any personal biases Adjusts communication style to	☐	☐ Proactively minimizes communication barriers and independently manages personal biases; Independently, uses shared decision making	☐	☐ Role models self-awareness to minimize communicatio barriers; Role models shared decision making

	in patient encounters; Knows barriers to effective communication (e.g., language, disability, health literacy, cultural, personal bias)		Identifies barriers to effective communication in patient encounters; Organizes and initiates communication with patient/family to facilitate shared decision making		facilitate communication and ensure patient comprehension during consent		to implement a personalized care plan		

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17. Communicates findings of stress testing and imaging to inter professional teams.	☐	☐ Accurately records information in the patient record; Uses language that values all members of the health care team Knows all members of the stress lab team (RNs, techs, PAs)	☐	☐ Demonstrates organized diagnostic and therapeutic reasoning through notes in the patient record; Respectfully and thoroughly completes effective documentation and communication; Communicates information effectively with all health care team members; Interacts effectively with chest pain center	☐	☐ Concisely reports diagnostic and therapeutic reasoning in the patient record; Adapts communication style to fit team needs Effectively uses electronic communication (MHB, EPIC messaging) to inform providers of test findings	☐	☐ Independently communicates timely information in a written format and verbally when appropriate; Coordinates recommendations from different members of the health care team to optimize patient care	☐	☐ Models written communicatio to improve others' performance; Role models flexible communicatio strategies that value input from all health care team members

18. COMMENTS: _____

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