

NUCLEAR/PET | ICANL

Improving health care through accreditation

IAC NUCLEAR/PET SITE VISITOR WORKSHEET

Site Visitor Name	Date of Site Visit
Lab Overview	
Lab Name	Application #
Address	Date of Decision
	Accreditation Cycle
City, State, Zip	Original Board Decision
Phone Number	Consultant Helped Prepare
Lab Type: Private Office	
Number of Sites:	Does this laboratory use a mobile service provider?
Site Addresses	

The following must be read before beginning the site visit:

Confidentiality Statement:

"As a participant in this accreditation site visit, I am aware that I have access to accreditation information which shall remain confidential. I agree to respect and protect the confidentiality of all patient and facility information, any recommendations, suggestions and discussions prior to, during and following this site visit."

I attest that I have read the above statement to the facility:

Site visitor signature:

Note to Site Visitor: Please indicate by highlighting or using an asterisk any issues discussed with the medical/technical director upon completion of site visit.

Part I: Overview

Medical Staff	<u>Su</u>	pervise	es St	<u>ress Tests</u>	s BLS or ACLS			<u>No Longer</u> <u>A Staff Membe</u> r		
Medical Director										
	0	Yes	0	No	C	Cur No	rrent ne	000	Expired NA	0
Interpreting Physicians										
	0	Yes	0	No	C	Cui	rent ne	0	Expired NA	Ο
	0	Yes	0	No	C	Cui	rent	00	Expired NA	Ο
	0	Yes	0	No	C	Cui	rent	00	Expired NA	Ο
	0	Yes	О	No	C	Cur Nor	rrent ne	000	Expired NA	О
Interpreting Physicans (Not Listed Above)										
	0	Yes	0	No	\mathcal{C}	Cur No	rrent ne	0 0	Expired NA	
	-0	Yes	0	No	C	Cur No	rrent ne	0 0	Expired NA	
	0	Yes	0	No	\mathcal{C}	Cur No	rrent ne	0 0	Expired NA	
	0	Yes	О	No	\mathcal{C}	Cur No	rrent ne	000	Expired NA	
Technical Staff					<u>BLS</u>	or ACL	<u>.S</u>			<u>No Longer</u> <u>A Staff Member</u>
Technical Director										
					0 0	Currer None	nt Q C) E:) N	xpired IA	0
<u>Technologists</u>					<u>BLS</u>	or ACL	<u>.s</u>			<u>No Longer</u> <u>A Staff Member</u>
					0 0	Currer None	nt C) E:) N	xpired IA	0
					0 0	Currer None	nt C) E) N	xpired IA	0
					0 0	Currer None	nt C) E) N	xpired IA	0
					0 0	Currer None	nt C) E) N	xpired IA	0

0	Current	0	Expired	0
0	None	0	NA	
0	Current	0	Expired	0
0	None	0	NA	
0	Current	0	Expired	0
0	None	0	NA	
0	Current	0	Expired	0
0	None	0	NA	
0	Current	0	Expired	0
0	None	0	NA	

Technologists (Not Listed Above)

	Direct	Patient	Care	Personnel
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(Stress Test Supervisor, nurse)

DPC (Not Listed Above)

0	Current	0	Expired
0	None	0	NA
0	Current	0	Expired
0	None	0	NA
0	Current	0	Expired
0	None	0	NA
0	Current	0	Expired
0	None	0	NA

BLS or ACLS

<u>No Longer</u> <u>A Staff Member</u>

0	Current	0	Expired
0	None	0	NA
0	Current	0	Expired
0	None	0	NA
0	Current	0	Expired
0	None	0	NA
000	Current None	00	Expired NA

Equipment

Does equipment present match list provided above?	0	Yes	0	No	0	NA	
New equipment added since time of application?	0	Yes	0	No	0	NA	

Facility Tour Facility Tour Notes:

Lab is accredited in the following areas: (Annual Volume)

Nuclear Cardiology	General Nuclear Medicine	PET
MPI: 0	Gastrointestinal System: 0	PET Cardiac: 0
ERNA: O	Central Nervous System: 0	Pet Neurology: 0
Other cardiovascular: 0	Endocrine System: 0	PET Oncology: 0
	Endocrine Non-Imaging: 0	
	Skeletal System: 0	
	Genitourinary System: 0	
	Pulmonary System: 0	
	Infection Imaging: 0	
	Tumor Imaging: 0	
	H R L Imaging: 0	
	Therapy: 0	

<u>Patient/Procedure Observation</u> Lab must provide a list of the day's schedule so site visitor can choose the procedures to observe.

Case/Procedure to be observed:								
Patient Initials	Type of Study	Patient Initials	Type of Study					

List of Protocols/Procedures to be Reviewed:

- BLS/ACLS documentation
- Staff competency documentation
- Patient schedule
- Emergency equipment documentation (crash, cart/kit, defibrillator and oxygen)
- Camera QC (floods, bar phantoms, COR, high count floods, PM)
- Radiation Safety Documentation (annual training records, film badges)
- Clinical procedure manual

- Other policies (Administration of radiopharmaceuticals, administration of nonradioactive pharmaceuticals, quality control manual, radiation safety manual, OSHA/infection control, informed consent, medical emergency, request for services, patient complaint, verification of qualifications, confidentiality/HIPPA, adverse drug events, drug administration errors)
- Patient ID and Pregnancy/Breast-feeding policies
- Quality improvement plan and meeting minutes

Original Accreditation Issues:

Part II: Personnel, Facilities and Instrumentation

Personnel

- Y / N Medical director provides active oversight of the facility operations and assures compliance with the Standards.
- Y / N / NA If the medical director delegates specific operations, this is documented in writing.
- Y / N Technical director is responsible for the day-to-day facility operations.
- Y/N/NA If the technical director is not full-time, an appropriately credentialed technologist is appointed in writing and carries out the duties of the technical director.
- Y / N Documentation of staff training/competence to perform relevant protocols
- Y / N Staff is knowledgeable on procedure to call the code or ACLS provider Comments:

Nuclear Medicine Assistants

Note: A nuclear medicine assistant is defined as staff members performing duties that are typically performed only by a certified/licensed nuclear medicine technologist (such as radiopharmaceutical preparation or administration, patient positioning, image acquisition or processing).

- Y / N Are nuclear medicine assistants working in the facility? If yes to above question:
- Y / N / NA Personnel who assist technologists have documented training, experience, and competency consistent with their duties
- Y / N / NA Certified/licensed nuclear technologist is identified in writing as the nuclear assistant's supervising technologist

Comments:

Physical Facilities

Safe and adequate facilities are provided for:

- Y / N Waiting areas
- Y / N Reception area
- Y / N Patient/staff bathroom Note: It is preferred but not required that patients and staff have separate bathrooms
- Y / N Diagnostic imaging and processing areas
- Y / N / NA Exercise and/or pharmacologic stress areas
- Y / N / NA Separate injected patient waiting area
- Y / N / NA Waiting area environment appropriate for patient studies performed (e.g., Quiet room for PET, SPECT Brain)
- Y / N Emergency transport of patients

Note: In the event of an emergency, there must be sufficient space to care for the patient and to move the patient for further care (e.g., via a stretcher or alternative)

Y / N Emergency safe exit of staff and patients Comments:

For mobile trailer/sites, adequate facilities for:

Y/N/NA Phone

Y / N / NA

Hand washing Comments:

Equipment and Instrumentation

Emergency Equipment

Emergency Response Cart or Kit:

- Y / N / NA Readily available
- Y / N / NA Appropriate for types of procedures being performed
 - Note: If facility performing cardiac stress testing ACLS drugs must be available
- Y / N / NA Documentation that all expected items are present (inventory checklist)
- Y / N / NA Verified at least monthly
- Y / N / NA All drugs unexpired

Comments:

Defibrillator/AED for cardiac stress facilities:

- Y / N / NA Readily available
- Y / N / NA Documentation of functionality check (e.g. Voltage and battery)
- Y / N / NA Verified/performed at least monthly
- Y / N / NA Staff able to demonstrate proper check of functionality Comments:

Oxygen (wall unit or portable cylinder) for cardiac stress facilities:

- Y / N / NA Oxygen readily available
- Y / N / NA If portable cylinder, tank filled
- Y / N / NA Supplies readily available (e.g., tubing and masks)
- Y / N / NA Documentation of availability and proper function
- Y / N / NA Verified at least monthly

Comments:

Imaging Equipment

The following equipment is present, maintained in good working condition, and QC/service records available:

- Y / N Dose calibrator or decay correction calculation system, as appropriate
- Y / N / NANon-imaging counting equipment (e.g. thyroid uptake probe, intraoperative probe, well counter)Y / NRadiation monitoring devices (portable survey meter required)

Comments:

Gamma Camera (for all cameras)

Intrinsic or extrinsic uniformity:

- Y / N / NA Performed daily or prior to use
- Y / N / NA At least 2 5 million counts acquired
- Y / N / NA Results reviewed
- Y / N / NA Comparison with previous results
- Y / N / NA Actions taken/documented for out-of-tolerance results
- Y / N / NA Protocol is equipment specific
- Y / N / NA QC is performed as per written protocol
- Y / N / NA Uniformity results acceptable Note: Acceptable uniformity results - No visible PM tubes (dark or cold areas); no cracks; no evidence of hydration ("measles"); no degradation over time; integral/differential uniformity should be < 5%

Comments:

Resolution/linearity (bar phantom):

- Y / N / NA Performed weekly
- Y / N / NA Performed in all quadrants
- Y / N / NA Results reviewed
- Y / N / NA Comparison with previous results
- Y / N / NA Actions taken/documented for out-of-tolerance results
- Y / N / NA Protocol is equipment specific
- Y / N / NA QC is performed as per written protocol
- Y / N / NA Resolution/linearity results acceptable

Note: Acceptable resolution/linearity results - lines should be straight with equal intensity along the line; no wavy lines; no degradation over time; FWHM of camera resolution should be < 6 mm (Smallest bars that can be resolved x 1.7 = estimated mm FWHM resolution)

Note: Resolution/linearity not required on solid state cameras (e.g. Digirad)

Comments:

Center of rotation:

- Y / N / NA Performed monthly
- Y / N / NA Results reviewed

- Y / N / NA Comparison to previous results
- Y / N / NA Actions taken/documented for out-of-tolerance results
- Y / N / NA Protocol is equipment specific
- Y / N / NA QC is performed as per written protocol
- Y / N / NA Center of rotation results acceptable

Note: Acceptable center of rotation results - no ring or tuning fork artifact; no blurring of point source; <0.5 pixel offset or < 2 mm offset

Comments:

High count calibration floods

Y / N / NA Performed as per manufacturer's recommendation Note: Typically >30 M counts acquired Comments:

Y / N / NA Flood stored for different isotopes used (if applicable)

Preventative maintenance:

Y / N Every six months

Note: Verify preventive maintenance done every six months from date of accreditation decision Comments:

PET Scanner

- Y / N / NA Blank Scan (daily)
- Y / N / NA Normalization (after hardware change or per manufacturer's recommendation)- PET Daily Phantom
- Y / N / NA Daily CT Phantom
- Y/N/NA Daily CT Warm Up
- Y/N/NA Daily CT Check up
- Y / N / NA Absolute activity calibration (after hardware change or per manufacturer's recommendation)
- Y / N / NA Preventative maintenance (every six months or per manufacturer's recommendation)
- Y / N / NA Glucometer accuracy (daily)

Comments

Note: If equipment is physically moved (other than planar mobile gamma cameras or non-PMT mobile systems used within a building) the above camera QC procedures must be repeated after each move and prior to use.

If frequency varies from standards listed above, justification must be based on published scientific data and documented. Any initial acceptance results should be retained for comparison. On-site visitors should review 6-12 months of QC records.

Comments:

Part III: Procedures and Protocols

Radiation Safety and Radioactive Materials Handling

Note: Facility operations must be in compliance with accepted federal, state and local standards. The facility must retain copies of inspections/surveys as well as evidence of corrections for deficiencies found. Many of the radiation safety regulations and practices are reviewed by government agencies.

Radiation safety program includes, as appropriate:

- Y/N Records of annual radiation safety training of all radiation workers (badged staff and authorized users)
- Y / N Staff radiation exposure records are available for review
- Y / N Radiation monitoring reports are reviewed by radiation safety officer
- Y / N Radiation doses are within ALARA limits
- Y / N / NA Staff radiation monitoring results above ALARA limits are investigated and documented Comments:

Signage:

- Y / N Appropriate signage for radioactive materials use and storage areas
- Y / N Signage to warn pregnant or breast-feeding patients
- Y / N Pregnant/breast-feeding signage is appropriately located in rooms where patients are injected (e.g. Not behind where patient sits or in rooms where injections don't occur)

Note: At a minimum, warning signs must be easily seen by the patient (and in a language understandable by most patients) in the area where initial radiopharmaceutical administration is performed.

Comments:

Injection areas/Storage:

- Y / N Radioactive materials use/injection areas and storage areas are appropriately configured to ensure security and control
- Y / N Areas containing radioactive materials (including hot lab, other radioactive use and storage/decay areas) locked when not under supervision of trained staff

Note: Facility must ensure that non-authorized personnel (including visitors, patients and non-authorized staff) cannot access any radioactive materials

Y / N Radioactive materials use/injection areas and storage areas are properly shielded and/or designed to avoid "crosstalk" with imaging or uptake equipment

Note: These areas should include adequate shielding based on the use of surrounding areas and type of stored materials.

Comments:

Manual(s)

Note: The facility may have one manual or separate manuals for the areas listed below. Note: There should be documentation of signature and date of review of each manual Note: Documentation of review may be done by signing individual procedures or by signing separate attestation of the review of all procedures for the specified manual.

Clinical procedure manual:

- Y / N A clinical procedure manual is present and readily accessible
- Y / N The clinical procedure manual is reviewed and updated at least annually by the Medical Director or appropriate designee
- Y / N The clinical procedure manual is organized to facilitate use
- Y / N The clinical procedures are site-specific (e.g., based upon staffing, equipment and software available at the facility)
- Y / N All clinical procedures performed by the facility are included in the protocol manual Comments:
- Y / N A policy for the administration of radiopharmaceuticals to patients is present
- Y / N / NA Pediatric doses are individually determined prior to administration
- Y / N A policy for the administration of non-radioactive pharmaceuticals (e.g., adenosine, regadenoson, aminophylline, furosemide, morphine, etc.) to patients is present

Comments:

Quality control manual:

- Y / N A quality control manual is present and readily accessible
- Y / N The quality control protocol manual is reviewed and updated at least every three years by medical director, physicist or other responsible person
- Y / N The quality control manual is organized to facilitate use Comments:

Radiation safety manual:

- Y / N A radiation safety manual is present and readily accessible
- Y/N The radiation safety manual is reviewed and updated at least annually by the Medical Director or appropriate designee
- Y / N The radiation safety manual is organized to facilitate use Comments:

Administrative and safety policies:

- Y/N Administrative policies (e.g. OSHA, Informed Consent, Medical Emergency, etc.) are available in one or more manuals which are readily accessible
- Y / N Administrative policies are site specific and reflect current practice
- Y / N Administrative policies are organized to facilitate use Comments:

The following administrative policies are available:

Y / N Request for services

Note: Site visitors must review the written policy for requesting clinical nuclear medicine procedures. The documentation of a request, including the identity of the patient, the referring health care provider and clinical information that indicates the rationale for the procedure must be present prior to performing any procedure.

- Y / N Patient complaint
- Y / N Verification of Qualifications

Note: There must be be a policy identifying how the facility verifies the medical education, training, appropriate licenses and current certifications of all physicians, as well as the training and current certification/licensure of all technical staff members and any other direct patient care providers. Sample policy located on the IAC nuclear/PET website.

- Y / N Confidentiality and HIPAA compliance
- Y / N Informed Consent (as required for therapeutic and stress procedures)
- Y / N Infection Control/Communicable diseases
- Y / N Medical Emergencies
- Y / N Adverse Drug Events (Pharmacologic and/or radiopharmaceutical FDA reportable or unexpected effects)
- Y / N Drug Administration Errors

Comments:

Site Visitor Observation of Patient Care

Note: Summary of all patients observed

Patient and Study Identification

- Y / N Technologist verifies that the procedure to be performed matches the procedure ordered
- Y / N Technologist identifies patient immediately prior to injection by two identifiers
- Y / N Technologist verifies appropriate request for services
- Y / N Facility/staff maintains confidentiality and HIPAA compliance

Comments:

Pregnancy Screening

- Y / N / NA Staff verifies that female patients are not pregnant
- Y / N / NA Pregnancy status verification documented
 Comments:

Breast-feeding Screening

- Y / N / NA Staff verifies that female patients are not breast-feeding
- Y / N / NA Breast-feeding status verification documented Comments:

Administration of Radiopharmaceuticals

Y / N Patient doses are assayed using a dose calibrator prior to administration

- Y / N / NA If site is using unit doses and does not have a dose calibrator, are dosages determined based on decay correction
- Y / N Doses are within dose range stated within facility protocol
- Y / N Expiration date/time are verified prior to administration
- Y / N Immediately prior to administration, the technologist verifies the radiopharmaceutical identity, dosage, and route of administration
 - The technologist documents the administration of radiopharmaceutical including:
- Y / N Substance
- Y / N Amount
- Y / N Route of administration
- Y / N Site of administration
- Y / N Date
- Y / N Time
- Y / N Identity of person administering
 - Comments:

Administration of Non-radioactive Pharmaceuticals (e.g., adenosine, regadenoson, aminophylline, furosemide, morphine, etc.)

- $\label{eq:relation} Y \slash Non-radioactive pharmaceuticals are properly stored (controlled substances must be locked with controlled access if kept on site).$
- Y / N / NA Non-radioactive pharmaceutical doses are properly calculated and prepared as directed in the protocol
- Y / N / NA Expiration date/time are verified prior to administration
- Y / N / NA Immediately prior to administration, the technologist verifies the non-radioactive pharmaceutical identity, dosage, and route of administration
 - There is clear documentation of the administration of non-radioactive pharmaceutical including:
- Y / N / NA Substance
- Y / N / NA Amount
- Y / N / NA Route of administration
- Y / N / NA Site of administration
- Y / N / NA Date
- Y / N / NA Time
- Y / N / NA Identity of person administering

Comments:

Infection Control:

Proper use of infection control measures to include:

- Y / N Aseptic technique
- Y/N Hand washing
- Y / N Biohazard materials disposal e.g., sharps containers, red bags, etc. (available and properly utilized) Comments:

Radiation Safety:

Proper use of radiation protection measures to include:

Y/N Gloves

- Y/N Protective clothing (lab coats)
- Y/N Syringe shields
- Y/N Film badges/TLD/Dosimeters
- Y/N Ring badges Comments:

Y/N Proper disposal of radioactive trash (wipes, syringes, alcohol swabs, etc.) Comments:

Clinical Protocol Compliance

Note: The following sections apply to all study types observed unless noted.

Indication/Contraindication

- Y/N Patient clinical indication matches indications listed in protocol
- Y/N Patient does not have a contraindication that is listed in the protocol

Comments:

Patient Preparation and Instruction

- Y/N Technologist determined whether the patient followed proper dietary instructions as listed in the protocol
- Y/N Technologist determined whether the patient followed proper medication instructions as listed in the protocol (premedication or withholding)
- If patient not properly prepared for the test was this documented (e.g., patient record, worksheet, or final Y / N / NAreport) and appropriate action taken
- Y/N/NA Glucose level appropriate as per protocol, if applicable

Comments:

Radiopharmaceutical:

- Y / N Identity matches protocol
- Y/N Amount matches protocol
- Y/N Route of administration matches protocol
- Y / N / NA Appropriate handling of patients post tracer injection (e.g., quiet room for PET uptake phase or isolation)

Comments:

Non-radioactive pharmaceuticals (e.g., furosemide, ACE inhibitors, SSKI, sincalide), other than cardiac stress agents :

Note: Pharmacologic stress agents assessed in section below

- Y/N/NA Identity matches protocol
- Y / N / NAAmount matches protocol
- Y / N / NARoute of administration matches protocol

- Y / N / NA Timing of administration matches protocol (relative to tracer administration)
- Y / N / NA Duration of administration matches protocol (e.g., length of infusion)
- Y / N / NA Patient care appropriate for the pharmaceutical administered (e.g. blood pressure checked pre- and post-ACE inhibitor administration)

Comments:

Image Acquisition

Note: There are separate acquisition and processing sections for cardiac/general nuclear medicine and PET below.

Cardiac and General Nuclear Medicine:

- Y / N Camera set-up matches protocol (e.g. collimator, orbit, acquisition type, gating, matrix size, zoom, kVp, mAs, transmission and emission times)
- Y / N Patient positioned per protocol (e.g., supine, prone, head in, head out, arms up, arms down)
- Y / N Camera positioned per protocol (e.g., anterior, posterior, starting angle, detector configuration, tilt, detector to patient distance)

Comments:

- Y / N Timing of imaging post tracer and/or pharmaceutical administration matches protocol
- Y / N Time between rest and stress (stress and rest) tracer injections matches protocol
- Y / N Views (stops) matches protocol (e.g., number and orientation)
- Y / N Time/stop or counts/image matches protocol
 Comments:

PET or PET/CT:

- Y / N / NA Scanner set-up/verification matches protocol (e.g., 2D vs 3D, number of beds, slice thickness, kVp, mAs, transmission and emission times)
- Y / N / NA Patient positioned per protocol (e.g., supine, head in, head out, arms up, arms down)
- Y / N / NA Table position and proper pallet as per protocol (e.g., RTP vs Standard)
- Y / N / NA Timing of imaging post tracer administration matches protocol

Y / N / NA	Time between rest and stress (stress and rest) imaging matches protocol
	Comments:

Processing

Cardiac and General Nuclear Medicine:

Y / N / NA Images evaluated for quality and potential artifact (e.g. attenuation, subdiaphragmatic activity,

normalization error, metal, flickering, patient motion, and count density) and appropriate action taken.

- Y / N / NA Images processed/reconstructed properly and as per protocol
- Y / N / NA Images aligned properly (e.g., stress/rest slices, SPECT/CT fusion, V/Q)
- Y / N / NA Attenuation correction used correctly
- Y / N / NA Motion correction applied appropriately
- Y / N / NA ROI/quantification/curve generation appropriate

Y / N / NA Images labelled and displayed properly

Comments:

PET or PET/CT:

- Y / N / NA Images evaluated for quality and potential artifact (e.g. attenuation, patient motion, metal, beam hardening, count density) and appropriate action taken.
- Y / N / NA Images processed/reconstructed properly and as per protocol
- Y / N / NA Images aligned properly (e.g., stress/rest slices, PET/CT fusion)
- Y / N / NA Attenuation correction used correctly
- Y / N / NA Motion correction applied appropriately
- Y / N / NA ROI/quantification/curve generation appropriate (e.g., SUV, cardiac data)
- Y / N / NA Images labelled and displayed properly

Direct Patient Care Personnel (Stress Test Supervision)

For sites performing cardiac stress:

- Y / N / NA An ACLS certified person or code team is immediately available during cardiac stress procedures.
- Y / N / NA Two staff members are in the stress room during tracer injections
- Y / N / NA If non-physician (except NP and PAs) staff are supervising cardiac stress testing, documentation of training and competency is available Comments:

Exercise/Pharmacologic Stress Protocols

- Y / N / NA Informed consent was obtained
- Y / N / NA Informed consent was documented
- Y / N / NA Appropriate stress or pharmacologic protocol chosen based on patient condition Comments:

Pharmacologic stress agent:

- Y / N / NA Identity matches protocol
- Y / N / NA Dose matches protocol and is calculated correctly
- Y / N / NA Route of administration matches protocol
- Y / N / NA Timing of administration matches protocol (relative to tracer administration)
- Y / N / NA Duration of administration matches protocol (e.g., length of infusion)
- Y / N / NA If low-level exercise is used with pharmacologic stress, this is specified in the protocol Comments:

During the exercise/pharmacologic stress, the patient is assessed as per protocol:

Y	/ N	/ NA	Heart rate
• •		/	nounciato

- Y/N/NA Blood pressure
- Y / N / NAECG tracings
- Y/N/NA

Symptoms Comments:

- Y / N / NA Appropriate stress end point achieved (e.g. symptom limited exercise test, not just injected at 85% MPHR; proper duration of pharmacologic agent infusion)
- Y / N / NATracer injected appropriately as per protocol (e.g. correct time of injection, exercise continues for 1-2 minute)
- Y / N / NAIf submaximal stress test, the patient switched to pharmacologic stress test (Note: If switched to pharm stress, this may be on the same day or another day) Comments:

During recovery the patient assessed as per protocol:

- Y/N/NA Heart rate
- Y / N / NABlood pressure
- Y/N/NA ECG tracings
- Y/N/NA Symptoms
- Y / N / NAProtocol duration/criteria for terminating post-stress monitoring met prior to patient's release Comments:
- Y/N/NA Common adverse effects of exercise and/or pharmacologic stress recognized and treated as appropriate

Comments:

Clinical Protocol Performance Summary

(Note: Patients appropriately cared for and imaged properly)

Comments:

PART IV:Case Studies Myocardial Perfusion Imaging Case Studies

	Case 1	Case 2	Case 3	Case 4	Case 5
PT Initials:					
Image Quality					
Excessive motion noted on raw cine data	Y N NA	Y N NA	Y N NA	Y N NA	Υ Ν ΝΑ
Artifact present (e.g. attenuation, subdiaphragmatic activity, normalization error, metal, flickering)	ΥN	ΥN	ΥN	ΥN	ΥN
Adequate count density	ΥN	ΥN	ΥN	ΥN	ΥN
Conventional Slice Display	ΥN	ΥN	ΥN	ΥN	ΥN
Note: From left to right: Short-axis from apex to b horizontal long-axis inferior to superior (anterior) explain in comments.	ase, vertio . If it can r	cal long ax not be dete	is from se ermined ar	ptal to late nswer no a	eral, and
Stress and rest slices aligned	ΥN	ΥN	ΥN	ΥN	ΥN
Time-volume curve (EF) without artifact (e.g. frame drop-off, gated on T-wave)	ΥN	ΥN	ΥN	ΥN	ΥN
Comment:					

	Case 1	Case 2	Case 3	Case 4	Case 5
Report Items:					
The report includes:					
Facility identification: name	ΥN	ΥN	ΥN	ΥN	ΥN
Facility identification: address	ΥN	ΥN	ΥN	ΥN	ΥN
Facility identification: phone number	ΥN	ΥN	ΥN	ΥN	ΥN
Patient gender	ΥN	ΥN	ΥN	ΥN	ΥN
Age or date of birth	ΥN	ΥN	ΥN	ΥN	ΥN
Requesting health care provider's name	ΥN	ΥN	ΥN	ΥN	ΥN
Interpreting physician name	ΥN	ΥN	ΥN	ΥN	ΥN
Name of the procedure (type of procedure e.g. Exercise myocardial perfusion imaging, myocardial viability)	Y N	Y N	Y N	Y N	Y N

Date of the procedure	ΥN	ΥN	ΥN	ΥN	ΥN
Clinical indication	ΥN	ΥN	ΥN	ΥN	ΥN
Description of the imaging procedure (e.g. stress/rest, rest/stress, two-day, SPECT, gated)	ΥN	ΥN	ΥN	ΥN	ΥN
Radiopharmaceutical(s): name (Tc99m sestamibi or Tc99m tetrofosmin, Thallium-201)	ΥN	ΥN	ΥN	ΥN	ΥN
Note: If radionuclide is not specified, please note	e in comm	ents to ed	ucate lab.		
Radiopharmaceutical(s): exact amount administered	ΥN	ΥN	ΥN	ΥN	ΥN
Radiopharmaceutical(s): route of administration	ΥN	ΥN	ΥN	ΥN	ΥN
Pharmacologic agent(s): name	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA
Pharmacologic agent(s): exact amount administered	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA
Pharmacologic agent(s): route of administration	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA
Manual or electronic signature of responsible physician (Stamps not acceptable)	ΥN	ΥN	ΥN	ΥN	ΥN
Date report approved and signed by interpreting physician (Date of report)	ΥN	ΥN	ΥN	ΥN	ΥN
Approved within 2 working days	ΥN	ΥN	ΥN	ΥN	ΥN
Comment:	-	-	-	-	-

	Case 1	Case 2	Case 3	Case 4	Case 5
Interpretation					
Stress Test Findings					
Stress protocol (e.g. Bruce, Modified Bruce, Naughton)	Y N NA				
Exercise stress duration	Y N NA	ΥΝΝΑ	Y N NA	ΥΝΝΑ	ΥΝΝΑ
Reason for termination of exercise stress	ΥΝΝΑ	Υ Ν ΝΑ	Y N NA	Υ Ν ΝΑ	ΥΝΝΑ
Rest and peak stress heart rate	ΥN	ΥN	ΥN	ΥN	ΥN
Rest and peak stress blood pressure	ΥN	ΥN	ΥN	ΥN	ΥN
Percent of maximum predicted HR or other adequate stress measure (e.g. pressure-rate product)	Y N NA				
Presence or absence of symptoms during stress	ΥN	ΥN	ΥN	ΥN	ΥN
Rest and peak stress (infusion) ECG finding	ΥN	ΥN	ΥN	ΥN	ΥN
Pharmaceutical administration duration (e.g. 6	Y N NA	Y N NA	Y N NA	ΥΝΝΑ	Y N NA

minute, 4 minute, 10 seconds)			
Comment:			

	Case 1	Case 2	Case 3	Case 4	Case 5
Image findings reported					
Defect location(s) (e.g. Basal anteroseptal, apical inferior)	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA
Defect size/extent (Small, medium, large)	Y N NA	Y N NA	Y N NA	ΥΝΝΑ	Y N NA
Defect severity/intensity (Mild, moderate, severe)	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA
Defect type (e.g. reversible, persistent, mixed)	Y N NA	Y N NA	Y N NA	ΥΝΝΑ	Y N NA
EF	Y N NA	Y N NA	Y N NA	ΥΝΝΑ	Y N NA
Regional/global wall motion	Y N NA	Y N NA	Y N NA	ΥΝΝΑ	Y N NA
Other pertinent findings (e.g. TID, lung uptake, LV dilatation)	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA
Comment:	-	<u>.</u>	-	-	•

	Case 1	Case 2	Case 3	Case 4	Case 5
Impression:					
Summary of LV perfusion (i.e. normal, equivocal, abnormal: ischemia, infarct)	ΥN	ΥN	ΥN	ΥN	ΥN
Summary of LV function (normal, abnormal, equivocal)	ΥN	ΥN	ΥN	ΥN	ΥN
Reviewer agrees with interpretation	ΥN	ΥN	ΥN	ΥN	ΥN
Comment:					

Part V: Interpretation and Reporting

Interpretation

- Y / N / NA Dynamic studies (e.g., gated, flow, etc.) are interpreted on a computer
- Y / N / NA Raw data images are reviewed when appropriate (e.g., SPECT, ERNA)
- Y / N / NA ROI's and quantitative raw data are reviewed to confirm quantitative results prior to reporting
- Y / N There is a system for identification and retrieval of a patient's prior studies for comparison

Comments:

Reporting

- Y / N Final reports are typed
- Y / N Final reports reviewed, signed and dated (manually or electronically) by the interpreting physician
- Y / N / NA Electronic signatures are password protected and indicate they are electronically recorded (e.g., "Electronically signed by X on (date and time)")
- Y / N Final signed report are transmitted to the referring health care provider within two working days. Note: Question how and when reports are sent to the referring physician.

Comments:

Y / N Critical findings are communicated as quickly as clinically indicated

Y / N Critical results communication is documented Comments:

Part VI: Quality Improvement

	<u>Plan</u>
Y / N	The plan contains administrative quality improvement measures (e.g., scheduling back logs; patient wait times; accuracy of patient information during scheduling; completeness of documentation; time from completion of procedure to distribution of final report; patient satisfaction or appropriate use)
Y / N	The plan contains technical quality improvement measures (e.g. image quality, reproducibility of processed images and/or quantitative results; image display/labeling; correct patient preparation as specified in clinical procedure; adequacy of stress test; or physiologic patient simulator study)
Y / N	The plan contains physician performance quality improvement measures (e.g. interobserver variability, intraobserver variability, correlation of interpretation to other diagnostic studies, pathology, surgical results and/or patient outcomes; physiologic patient simulator study or appropriate use study)
Y/N	

Facility is following quality improvement plan

Note: Annual physicist or radiation safety audits do not meet the quality improvement requirements. Standard radiation safety procedures and equipment quality control tests alone do not meet quality improvement requirements.

Comments:

Meetings

- Y / N Minutes document performance of at least one measure/data from administrative area annually
- Y / N Minutes document performance of at least one measure/data from technical area annually
- Y/N Minutes document performance of at least one measure/data from physician performance area annually
- Y / N At least two QI meetings documented annually

Comment

Y / N The facility has measured appropriate use at least once during the accreditation period. Comments:

Note: Annual participation in an appropriate use measurement program fulfills the annual quality improvement requirement for both administrative and physician performance Note: Annual participation in a relevant inter-facility patient simulator exercise fulfills the annual quality improvement requirement for both technical and physician performance

Part VII: Conclusion

Final Comments