COLLEGE OF PHYSICIANS AND SURGEONS OF BRITISH COLUMBIA

Diagnostic Accreditation Program

ACCREDITATION STANDARDS

Global Modality

Diagnostic Accreditation Program
College of Physicians and Surgeons of British Columbia
300–669 Howe Street
Vancouver BC V6C 0B4

Introduction

The global modality accreditation standards are applicable to all modalities and address activities surrounding the performance of medical imaging.

Examination requests

No.		Description	Risk	Reference	Change
GM1.0		**EXAMINATION REQUESTS ARE STANDARDIZED AND ENSURE THAT ACCURATE, COMPREHENSIVE AND APPROPRIATE INFORMATION IS RELAYED.** *Guidance: Requests for imaging referrals are to be completed for all imaging examinations. Requests may be verbal, written (requisitions) or electronic.*			
GM1.1		**Examination requests are processed to ensure patient safety.**			
GM1.1.1	**M**	Processing of the examination requests ensures examinations are only performed when requested by authorized individuals. Authorized individuals are identified by facility policy.	M		
GM1.1.2	**M**	Processing of the examination requests ensures verbal requests are immediately followed with an authorized electronic or written request.	M		
GM1.1.3	**M**	Processing of the examination requests ensures requests that lack the necessary information or contain errors are reconciled prior to the examination.	M		
GM1.1.4	**M**	Processing of the examination requests ensures authorized individuals requesting examinations are notified when examinations are cancelled by the imaging service.	M		
GM1.2		**The appropriateness of requested services is assessed.**			
GM1.2.1	**B**	The clinical indications for requesting examinations are made available to referring physicians. *Guidance: Canadian Association of Radiologists (CAR) published guidelines available through the CAR website.*			
GM1.2.2	**M**	Processes are in place to assess examination appropriateness.	M		
GM1.3		**Examination requests include accurate information that is received prior to an examination being undertaken.**			
GM1.3.1	**M**	The patient's first and last name is recorded on the requisition.	H		
GM1.3.2	**M**	A unique personal identifier number such as provincial health number (PHN) or facility-issued identifier number is recorded on the requisition.	H		
GM1.3.3	**M**	The patient's date of birth is recorded on the requisition.	H		

No.		Description	Risk	Reference	Change
GM1.3.5	**M**	The name and contact information of authorized individual requesting the examination is recorded on the requisition.	H		
GM1.3.7	**M**	Individuals who are to receive a copy of the diagnostic report are recorded on the requisition.	M		
GM1.3.8	**M**	The examination required and any specific instructions are recorded on the requisition.	H		
GM1.3.9	**M**	Pertinent clinical information including indications, history and provisional diagnosis are recorded on the requisition.	H		
GM1.3.10	**M**	The date the request is received is recorded on the requisition.	M		
GM1.3.11	**M**	An indication of urgency is recorded on the requisition.	H		

Patient preparation

No.		Description	Risk	Reference	Change
GM2.0		**PATIENTS ARE APPROPRIATELY PREPARED FOR THE EXAMINATION BEING PERFORMED.**			
GM2.1		**Patient preparation instructions are clearly communicated.**			
GM2.1.1	**M**	Patients and supporting individuals are advised of preparation instructions prior to the examination when required.	M		
GM2.1.2	**M**	Examination request guidelines, such as patient instructions, are available to patients and referring practitioners.	M		
GM2.1.3	**B**	Patient instructions are available in a variety of languages considering the population served.			
GM2.1.4	**B**	There are processes to identify and work with patients who do not speak English.			
GM2.1.5	**M**	Cultural sensitivities of patients and clients are acknowledged and respected without compromising examination quality or safety.	H		
GM2.1.6	**M**	Multi-lingual staff are identified and available where practical and in accordance with the imaging service policy.	M		
GM2.1.7	**B**	Patients are provided with information on how to access the service location, entry times and examination cancellation policy, as applicable.			New
GM2.2		**Pre-examination information is collected and assessed prior to commencing the examination.**			
GM2.2.1	**M**	There are processes in place to ensure that patients have followed the preparation instructions and to address situations where patients are inappropriately prepared.	M		
GM2.2.2	**M**	Any factors that may affect the examination are documented and considered.	H		
GM2.2.3	**M**	Processes ensure relevant prior examinations are available for comparison.	M		
GM2.2.4	**M**	There are procedures in place to deal with images received from external facilities.	M		

No.		Description	Risk	Reference	Change
GM2.2.5	**M**	The facility has a documented process or procedure to screen patients for their pregnancy status prior to imaging which includes the screening criteria and the method of screening. *Guidance: The facility pregnancy screening criteria may include all patients of childbearing potential (11 to 55) for irradiating examinations or be limited to certain examination requests. The facility's policy should also define the manner in which the patient is screened: verbally, as indicated on their examination request, or via their medical records.*	M		Revised
GM2.2.6	**M**	The facility defines the examinations where the patient's pregnancy status must be verified prior to imaging (i.e. hysterosalpingogram, interventional procedures). *Guidance: Pregnancy verification can be via clinical history (i.e. current birth control usage) or laboratory testing.*	M		

Imaging procedures

No.		Description	Risk	Reference	Change
GM3.0		**STANDARD PROTOCOLS RESULT IN IMAGES APPROPRIATE FOR THEIR INTENDED USE IN CLINICAL DECISION-MAKING.**			
GM3.1		**There is a comprehensive process in place for protocol adoption and development.**			
GM3.1.1	**M**	Protocols and procedures selected for use have been developed by experts in the appropriate fields, published in recommended textbooks, peer-reviewed literature, international consensus standards or guidelines, or have been recommended by national or regional agencies.	M		
GM3.1.2	**M**	Before new protocols or those not recognized as standard practice are used; they are validated by the medical leader to confirm they satisfy the intended use.	M		

Intravascular contrast agents

No.		Description	Risk	Reference	Change
GM4.0		**INTRAVASCULAR CONTRAST AGENTS ARE MANAGED AND ADMINISTERED SAFELY AND EFFECTIVELY.**			
GM4.1		**Emergency equipment and supplies are available for a response to a medical emergency.** *Guidance: See also patient safety accreditation standard DPS6.0.*			
GM4.1.1	**M**	When IV contrast is administered there is either an emergency crash cart or a modified emergency cart immediately accessible.	C		
GM4.1.2	**M**	If there is no emergency crash cart, a modified emergency cart is available.	H		
GM4.1.3	**M**	The modified emergency crash cart contains an oral airway set.	H		
GM4.1.4	**M**	The modified emergency crash cart contains suction equipment with tubing and catheter.	H		
GM4.1.5	**M**	The modified emergency crash cart contains an O_2 face mask (non-rebreather).	H		
GM4.1.6	**M**	The modified emergency crash cart contains a bag-valve-mask device (e.g. Ambu-bag with mask).	H		
GM4.1.7	**M**	The modified emergency crash cart contains an oxygen tank (“D” Cylinder) with flow valve and tubing.	H		
GM4.1.8	**M**	The modified emergency crash cart contains a pulse oximeter.	H		
GM4.1.9	**M**	The modified emergency crash cart contains a cardiac defibrillator.	H		
GM4.1.10	**M**	The modified emergency crash cart contains a stethoscope.	H		
GM4.1.11	**M**	The modified emergency crash cart contains a blood pressure cuff.	H		
GM4.1.12	**M**	The modified emergency crash cart contains intravenous supplies.	H		
GM4.1.13	**M**	The modified emergency crash cart contains a tourniquet, 4 x 4 gauze and tape.	H		
GM4.1.14	**M**	The modified emergency crash cart contains IV catheters (18 gauge or larger).	H		
GM4.1.15	**M**	The modified emergency crash cart contains an IV pole and tubing.	H		
GM4.1.16	**M**	The modified emergency crash cart contains normal saline (2 x 500 cc bags).	H		

No.		Description	Risk	Reference	Change
GM4.1.17	**M**	The modified emergency crash cart contains a flashlight.	H		
GM4.1.18	**M**	An emergency drug tray is available in the room.	H		
GM4.1.19	**M**	The emergency drug tray includes nitroglycerine, in tablet or aerosol spray.	H		
GM4.1.20	**M**	The emergency drug tray includes epinephrine.	H		
GM4.1.21	**M**	The emergency drug tray includes atropine.	H		
GM4.1.22	**M**	The emergency drug tray includes intravenous supplies.	H		
GM4.1.23	**M**	The emergency drug tray includes parenteral antihistamine.	H		
GM4.1.24	**M**	The emergency drug tray includes parenteral antiemetic.	H		
GM4.1.25	**M**	The emergency drug tray includes short-acting bronchodilator (e.g. salbutamol) either in a metered-dose inhaler with a spacer device or as a solution with a nebulizer administration unit, ventolin nebules or as a discus device.	H		
GM4.2		**Policies and procedures are in place for the administration of intravenous contrast agents.** *Guidance: See also patient safety accreditation standard DPS4.0.*			
GM4.2.1	**M**	Policies and procedures are in place for technologists who perform venipuncture. *Guidance: Policies and procedures should list the steps for starting an intravenous such as maintaining aseptic technique, assessing an existing intravenous, site selection and intravenous removal.*	M		
GM4.2.4	**M**	There are adult and pediatric contrast dose administration protocols consistent with the manufacturer's recommendations.	H		
GM4.2.5	**M**	Staff is trained in the management of adverse contrast reactions and intravenous extravasations.	M		
GM4.2.6	**M**	Documented procedures are in place for treating patients experiencing an adverse reaction after administration of a contrast agent.	M		
GM4.2.7	**M**	There are policies and procedures in place for the administration of contrast through advanced vascular access devices (VAD) which are only accessed by staff with appropriate training. *Guidance: Policies should speak to confirming device patency immediately prior to contrast administration and in the position the patient will be placed for the examination.*	C		

No.		Description	Risk	Reference	Change
GM4.2.8	**M**	There is a procedure for multi-dosing contrast that complies with infection control guidelines and manufacturer's recommendations.	H		
GM4.2.9	**M**	Storage of contrast agents complies with manufacturer's recommendations.	M		
GM4.2.10	**M**	Policies and procedures are in place for staff who administer intravenous contrast. *Guidance: Policies and procedures should list the steps for administering contrast such as patient screening, contrast preparation, safe injection rates for various intravenous lines, and management of adverse reactions.*	M		
GM4.2.11	**M**	Protocols for the preparation of intravenous contrast agents are readily available and include the name, dosage, injection rate, route of administration, and timing if applicable.	M		
GM4.2.12	**M**	Confirmation of pressure injection compatibility is conducted prior to connection to an advanced vascular access device (VAD). *Guidance: Confirmation of pressure compatibility is verified as per manufacturer's specifications.*	H		
GM4.2.13	**M**	Maximum flow and pressure rates of intravascular access devices are not exceeded.	H		
GM4.3		**The most responsible physician supervises all examinations that involve intravenous contrast agent administration.**			Revised
GM4.3.1	**M**	The most responsible physician is responsible to treat any potential complications that may arise.	H		Revised
GM4.3.2	**M**	The most responsible physician is available and can attend to the patient immediately for an adverse event.	H		Revised
GM4.3.4	**M**	The most responsible physician is aware of the specific relative contraindications and pertinent risk factors that might increase the likelihood of adverse events.	H		Revised
GM4.3.5	**M**	The most responsible physician is knowledgeable in the recognition and treatment of adverse events (e.g. idiosyncratic reactions, extravasations).	H		Revised

No.		Description	Risk	Reference	Change
GM4.4		**Policies and procedures are in place for screening and prevention of contrast induced nephropathy (CIN).** *Guidance: Common contrast enhanced scans include computed tomography, angiography, venography or intravenous pyelograms. The development of acute renal failure is a significant complication of intravascular contrast medium (CM) use and is linked with excess morbidity and mortality. The increasing use of CM, an ageing population and an increase in chronic kidney disease (CKD) will result in an increased incidence of contrast induced nephropathy (CIN) unless preventative measures are used. The major risk factor predicting CIN is pre-existing CKD, which can be predicted from estimated glomerular filtration rate (eGFR).*			
GM4.4.1	**M**	A process is in place to assess patients for contraindications or risk factors prior to being administered intravenous contrast.	H		
GM4.4.2	**M**	When assessment of renal function is required, facilities have established the maximum time interval between obtaining eGFR or SCr, and the administration of contrast.	M		
GM4.4.3	**M**	Renal function testing is conducted when risk factors for renal impairment are identified prior to contrast injection. This applies to both pediatric and adult patients. *Guidance: The CAR no longer recommends serum creatinine testing for renal function prior to administration of a Group II GBCA or gadoxetic acid (CAR 2019).*	H		
GM4.4.5	**M**	There are documented strategies in place to reduce post-contrast acute kidney injuries (PC-AKI) and nephrogenic system fibrosis (NSF) when administering intravenous contrast.	H		
GM4.4.6	**M**	The facility establishes processes for determining the appropriate off-label use of contrast agents.	M		
GM4.4.7	**M**	Patients with severe chronic kidney disease (CKD) where eGFR is less than 30mL/min/1.73m2 or are dialysis dependent are contraindicated from receiving gadopentetate dimeglumine, gadodiamide and gadoversetamide.	H		
GM4.4.8	**B**	Macrocyclic gadolinium contrast agents are used preferentially for MRI examinations.			
GM4.5		**Contrast power injectors are safely operated.**			**New**

No.		Description	Risk	Reference	Change
GM4.5.1	**M**	Contrast power injectors are capable of varying injection volumes and rates and have appropriate safety mechanisms to prevent over injection and to detect the presence of air.	H		New

Sedation and anesthesia

No.		Description	Risk	Reference	Change
GM5.0		**APPROPRIATE PATIENT MONITORING IS PROVIDED FOR PROCEDURES INVOLVING MODERATE SEDATION OR GENERAL ANESTHESIA.** *Guidance: Moderate sedation is commonly referred to as conscious sedation.*			
GM5.1		**Policies and procedures are in place for the use of moderate sedation and general anesthesia.**			
GM5.1.1	**M**	There are policies and procedures for obtaining informed consent prior to administering sedation.	M		
GM5.1.2	**M**	There are policies and procedures for administering sedation.	H		
GM5.1.3	**M**	There are policies and procedures for monitoring patients who have been sedated.	H		
GM5.1.4	**M**	There are procedures for discharging patients who have been sedated.	H		
GM5.1.5	**B**	The medical imaging staff follow care plans when patients have been sedated or received general anesthesia within the imaging service. *Guidance: A care plan is a carefully prepared outline of nursing care which identifies all of the patient's needs during the procedure and how to address those needs.*	H		Revised
GM5.2		**Patients are appropriately monitored during and after the examination when either moderate sedation or general anesthesia are administered.**			
GM5.2.1	**M**	Procedures are in place for arranging sedation.	H		
GM5.2.2	**M**	Monitoring equipment, resuscitation equipment and associated procedures are appropriate for the patient population (e.g. adults and pediatrics).	C		
GM5.2.3	**M**	Patients are monitored by qualified individuals (e.g. anesthetist, nurse, etc.) immediately before, during and after the examination.	C		
GM5.2.4	**M**	Emergency drugs and supplies are readily available.	C		
GM5.2.5	**M**	Suction equipment is readily available with appropriate attachments.	C		
GM5.2.6	**M**	Oxygen is available with appropriate delivery devices.	C		

No.		Description	Risk	Reference	Change
GM5.2.7	**M**	Patients have a functioning intravenous access in place.	C		
GM5.2.8	**M**	Instrumentation to monitor the stability of the patient immediately before, during and after the examination is available.	H		
GM5.2.9	**M**	Instrumentation to monitor the stability of the patient immediately before, during and after the examination includes oxygen saturation.	H		
GM5.2.10	**M**	Instrumentation to monitor the stability of the patient immediately before, during and after the examination includes blood pressure.	H		
GM5.2.11	**M**	Instrumentation to monitor the stability of the patient immediately before, during and after the examination includes cardiac monitoring. *Guidance: End-Tidal CO_2 during monitored anesthesia care (MAC) may be used, as determined by the anesthesiologist.*	H		
GM5.2.12	**M**	The patient's vital signs and medical stability are periodically evaluated and recorded by qualified staff.	H		
GM5.2.13	**M**	A list of peri-procedural complications is recorded.	H		
GM5.2.14	**M**	There is a procedure for reporting and retaining the records of adverse drug events.	H		
GM5.2.15	**M**	Records of drug administration errors are maintained.	H		
GM5.2.16	**M**	Processes are in place to treat patients who are slow to recover or who are experiencing complications as a result of the procedure.	H		
GM5.2.17	**M**	There is an appropriate physical location and setting to allow patients to recover.	H		
GM5.2.18	**M**	The recovery area is large enough to accommodate the necessary monitoring equipment for emergency management.	H		
GM5.2.19	**M**	There is a policy and procedure for when designated drivers are required for patients who have received sedation.	H		
GM5.2.20	**M**	Prior to discharge from the imaging service, the patient is monitored for a sufficient amount of time and readiness for discharge is documented in the medical record.	H		

No.		Description	Risk	Reference	Change
GM5.3		**Post-procedure instructions are communicated to patients and supporting individual(s).** *Guidance: Procedures are in place that ensures patients who have been sedated or placed under anesthetic are discharged in the care of a responsible adult after appropriate recovery.*			
GM5.3.1	**M**	Drugs dispensed to patients at the time of discharge are recorded in the patient record; verbal and written instructions for their use are given to the patient or their accompanying adult.	H		
GM5.3.2	**M**	Outpatients are advised of potential complications that may arise post-examination.	M		
GM5.3.3	**M**	Outpatients are given instructions to contact the family physician, imaging service or emergency department in the event that complications arise after the patient is discharged.	M		

Medical record

No.		Description	Risk	Reference	Change
					Revised
GM7.0		**THE MEDICAL RECORD IS CURRENT, ACCURATE AND CONTAINS QUALITY MEDICAL IMAGES AND RELEVANT EXAMINATION DETAILS.**			
GM7.1		**Images/examinations are labeled in a standardized way that allows for proper patient identification and annotation.**			
GM7.1.1	**M**	Images/examinations are labeled in a standardized way that allows for proper patient identification and annotation that includes the patient's first and last name.	H		
GM7.1.2	**M**	Images/examinations are labeled in a standardized way that allows for proper patient identification and annotation that includes a second patient identifier (e.g. identifying number and/or date of birth).	H		
GM7.1.3	**M**	Images/examinations are labeled in a standardized way that allows for proper patient identification and annotation that includes the facility name.	M		
GM7.1.4	**M**	Images and examinations are labeled with the date and time of the examination.	H		
GM7.1.5	**M**	Images/examinations are labeled in a standardized way that allows for proper patient identification and includes identifying annotations (e.g. appropriate image location and orientation).	H		
GM7.1.6	**B**	Images/examinations are labeled in a standardized way that allows for proper patient identification and includes other imaging parameters as per imaging service policy.			
GM7.1.7	**M**	Cross-sectional images are labeled with annotation that includes a cross-reference image and the corresponding location of slices displayed.	M		
GM7.2		**Comprehensive examination details are recorded in the medical record that includes:** *Guidance: Examination details may be recorded electronically or on written requisitions/worksheets. All details are made available to the interpreting imaging physician.*			
GM7.2.1	**M**	Comprehensive examination details are recorded in the medical record that include the paper or electronic patient requisition.	H		

No.		Description	Risk	Reference	Change
GM7.2.2	**M**	Comprehensive examination details are recorded in the medical record that include technologist performing examination.	M		
GM7.2.3	**M**	Comprehensive examination details are recorded in the medical record that include date and time of examination.	H		
GM7.2.4	**M**	Comprehensive examination details are recorded in the medical record that include any contrast or medication-induced adverse events and actions taken to resolve reaction.	H		
GM7.2.5	**M**	The number of exposures including rejected and repeated images is captured in the medical record.	H		
GM7.2.6	**M**	Comprehensive examination details are recorded in the medical record that include relevant medication information (e.g. name, route, identity of person administering, dose and time of administration). *Guidance: In this context, contrast agents are considered a medication.*	H		
GM7.2.7	**B**	Comprehensive examination details are recorded in the medical record that include lot number of medication administered.			
GM7.2.8	**B**	Comprehensive examination details are recorded in the medical record that include name of the imaging physician or designated physician responsible for medication authorization and/or supervision.			
GM7.2.9	**M**	Comprehensive examination details are recorded in the medical record that include deviations from the standard protocol are recorded particularly when there are reasons for examination limitations.	H		
GM7.2.10	**B**	Comprehensive examination details are recorded in the medical record that include relevant clinical information provided by the patient or observed complications pertinent for interpretation purposes.			
GM7.2.11	**M**	Comprehensive examination details recorded in the medical record include the patient pregnancy status, as required by the facility's policies.	H		
GM7.2.12	**B**	Comprehensive examination details are recorded in the medical record that include date of last menstrual period (LMP) for examinations involving any radiation to the abdomen or pelvis, or administration of radiopharmaceuticals, to patients of childbearing potential (11 to 55 years).			Revised

No.		Description	Risk	Reference	Change
GM7.2.13	**M**	Comprehensive examination details recorded in the medical record include whether the examination is reviewed with a physician prior to reporting, the name of the physician is documented in the medical record. *Guidance: If the reviewing physician is also the interpreting physician, their name does not need to be documented.*	H		
GM7.2.14	**M**	All images captured remain with the patient study unless they are rejected by the operator for predefined quality issues.	M		

Interpretation and reports

No.		Description	Risk	Reference	Change
GM8.0		**DIAGNOSTIC REPORTS ARE IN A STANDARDIZED FORMAT THAT PROVIDES COMPREHENSIVE AND NECESSARY INFORMATION FOR CLINICAL DECISION-MAKING.**			
GM8.1		**Reports are comprehensive and include appropriate patient and relevant clinical information.** *Guidance: Prior to interpretation, examinations are verified for number of images, markers, orientation, etc. in PACS.*			
GM8.1.1	**M**	Diagnostic reports include the patient's first and last name on each page.	H		
GM8.1.2	**M**	Diagnostic reports include a unique personal identification number such as a provincial health number (PHN) or a facility-issued identification number on each page.	H		
GM8.1.3	**M**	Diagnostic reports include date of birth.	H		
GM8.1.5	**M**	Diagnostic reports include the facility name.	M		
GM8.1.6	**M**	Diagnostic reports include examination performed.	H		
GM8.1.8	**M**	Diagnostic reports include name of authorized individual requesting the examination.	H		
GM8.1.9	**M**	Diagnostic reports include report recipient(s) for the examination.	H		
GM8.1.10	**M**	Diagnostic reports include date of the examination.	H		
GM8.1.11	**M**	Diagnostic reports include the time of examination when relevant such as when a patient undergoes more than one examination per day, or a series of timed examinations.	M		
GM8.1.12	**M**	Diagnostic reports include the date of interpretation and transcription if applicable.	M		
GM8.1.13	**M**	Diagnostic reports include the page number to total number of pages (e.g. page 1 of 5).	H		

No.		Description	Risk	Reference	Change
GM8.2		**Reports contain sufficient information to assist in diagnosis.** *Guidance: When required, previous images and reports are promptly available for review and comparison with the current examination. A request for imaging includes relevant clinical information, a working diagnosis, and/or pertinent clinical signs and symptoms and may include specific clinical questions to be answered in the final report. Such information helps tailor the most appropriate imaging examination to the clinical scenario, enhances the clinical relevance of the report, and thus promotes optimal patient care.*			
GM8.2.1	**B**	Standardized report templates are used.			
GM8.2.3	**M**	The diagnostic report includes a description of the studies or procedures performed and relevant patient preparation and positioning details. Pertinent post-recovery discharge details and any known significant patient reaction or complication is also recorded.	M		
GM8.2.4	**M**	Diagnostic reports include the findings.	H		
GM8.2.5	**M**	Diagnostic reports include the potential limitations.	H		
GM8.2.6	**M**	Diagnostic reports include the clinical history, indication or clinical question.	H		
GM8.2.7	**M**	Diagnostic reports include a comparison with previous examinations and reports when relevant.	H		
GM8.2.8	**M**	Diagnostic reports include the conclusion or diagnosis.**Error! Bookmark not defined.**	H		
GM8.2.9	**M**	Diagnostic reports include recommendations for repeat or follow-up examination when indicated.	M		
GM8.2.10	**B**	The medical record includes a description of any contrast media, medications, catheters, or devices used. The concentration, volume, and route of administration of the contrast media or medication given is also included when applicable.			
GM8.3		**A timely and accurate final report is issued for all examinations.** *Guidance: A final report is the definitive means of communicating to the authorized individual or other relevant health-care provider the results of an imaging examination or procedure. Additional methods for communication of results are encouraged in certain situations.*			
GM8.3.1	**M**	Final reports are issued for all examinations.	H		

No.		Description	Risk	Reference	Change
GM8.3.2	**M**	A copy of the final report is archived by the imaging service as part of the patient's medical record and is retrievable for future reference.	H		
GM8.3.3	**M**	The final report is verified by the reporting physician for accuracy in wording and intended meaning.	M		
GM8.3.4	**M**	Diagnostic reports are verified and signed off by an interpreting physician. If the report is not signed off by the original interpreting physician, this is clearly indicated.	H		
GM8.3.5	**B**	Medical staff responsible for the patient are notified of report delays in variance with established turnaround times.			
GM8.3.6	**B**	The use of abbreviations or acronyms is limited to avoid ambiguity.			
GM8.3.7	**M**	There is a process in place to verify the accuracy of reports which are transcribed and not verified by the interpreting physician.	M		
					Revised
GM9.0		**EFFECTIVE COMMUNICATION MINIMIZES THE RISKS OF BOTH REPORTING AND PATIENT MANAGEMENT ERRORS.** *Guidance: An effective method of communication is tailored to satisfy the need for timeliness, support the role of an imaging physician as a physician consultant by encouraging physician to physician communication and minimize the risk of communication errors. Communication of information is only as effective as the system that conveys the information. There is a reciprocal duty of information exchange. The authorized individual or relevant health-care provider shares in the responsibility for obtaining results of imaging examinations they have requested.*			

No.		Description	Risk	Reference	Change
GM9.1		**Preliminary reports provide limited information often necessary for clinical decision-making.** *Guidance: Preliminary reports may be communicated in writing, electronically, or verbally, and communication is documented. A preliminary report precedes the final report and contains limited information. Preliminary reports may be time sensitive, and are not expected to contain all the reportable findings. A preliminary report may not have the benefit of prior imaging studies and/or reports and may be based upon incomplete information due to evolving clinical circumstances. Nevertheless, clinical decision making may be based on this report due to the need for immediate patient management. The situations that may require preliminary reports may include, but are not limited to, interpretations provided to emergency and surgical departments and critical care units, or initial readings provided by trainees.*			
GM9.1.1	**M**	Preliminary reports are clearly identified.	H		
GM9.1.2	**M**	All preliminary reports are followed by a final report.	H		
GM9.1.3	**M**	Medical staff responsible for the patient is notified when there is a significant discrepancy between a preliminary and the final written report.	H		
GM9.1.4	**M**	Documentation of communication of any discrepancy between a preliminary and final report is incorporated into the final report.	H		
GM9.2		**Urgent and other non-routine examination findings are effectively communicated.** *Guidance: Routine reporting of imaging findings is communicated through the usual channels established by the hospital or the imaging service. However, in urgent or other non-routine clinical situations, the imaging physician expedites the delivery of a medical imaging report (preliminary or final) in a manner that reasonably ensures timely receipt of the findings. Documentation of this communication is extremely important because clinical care errors involving medical imaging may relate to flaws in the chain of communication.*			Revised
GM9.2.1	**M**	There is a written policy and procedure on the timely communication of urgent and critical findings.	M		
GM9.2.2	**M**	Appropriate medical staff is notified immediately by direct means for urgent and critical findings.	H		

No.		Description	Risk	Reference	Change
GM9.2.3	**M**	There are mechanisms to verify that urgent and critical findings which are only communicated verbally have been completely and accurately received, such as reading back the results.	M		
GM9.2.4	**M**	Contingency plans are available if the medical staff cannot be contacted for urgent and critical findings.	H		
GM9.2.5	**M**	Urgent and critical findings are documented in the patient's medical record.	H		
GM9.2.6	**M**	The person notified of the urgent and critical findings is documented in the patient's medical record.	H		
GM9.2.7	**M**	The date and time urgent and critical findings were communicated are documented in the patient's medical record.	H		
GM9.2.8	**M**	The method the urgent and critical findings were communicated are documented in the patient's medical record such as via telephone, or in person.	H		
GM9.3		**There are policies and procedures in place to deal with corrected and addendum reports.**			
GM9.3.1	**M**	There are policies and procedures that address when corrected and addendum reports are required and issued.	M		
GM9.3.2	**M**	Corrected and addendum reports are clearly identified and include the date and patient's identity.	H		
GM9.3.3	**M**	Both the original and the new results are reported.	H		
GM9.3.4	**M**	The date and time of the change or addition is recorded in the corrected or addendum report.	M		
GM9.3.5	**M**	The identity of the person making the change or addition to the corrected or addendum report is recorded.	H		
GM9.3.6	**M**	Notification of clinical staff is recorded when there is a significant discrepancy between the original and the corrected or addendum report.	H		

Interventional procedures

No.		Description	Risk	Reference	Change
GM10.0		**SAMPLE COLLECTION PROCESSES ENSURE HIGH-QUALITY SAMPLES AND MEET PATIENT NEEDS.** *Guidance: When only laboratory medicine staff are involved in the collection of samples these standards will be assessed during laboratory medicine accreditation.*			
GM10.1		**Samples are handled, transported, tracked and stored appropriately.** *Guidance: See also infection prevention and control accreditation standards and general safety accreditation standard DSA1.11.*			
GM10.1.1	**M**	Routine practices are used in the collection of blood, body fluids, and tissue samples.	H		
GM10.1.3	**M**	An antiseptic skin preparation agent is used when performing sterile or invasive procedures.	C		
GM10.1.4	**M**	Safety engineered sharps are used.	H		
GM10.1.5	**M**	There is a procedure for adding samples into fixatives or anticoagulants.	M		
GM10.1.7	**M**	Samples are placed in appropriate leak-proof sample containers.	H		
GM10.1.8	**M**	There is a point-to-point hand delivery system for time and/or case sensitive samples.	H		
GM10.1.9	**M**	Appropriate storage conditions are maintained for samples and sample containers such as light or temperature sensitivity.	H		
GM10.1.10	**M**	The identity of the sample collector and the date and time of sample collection is recorded.	H		
GM10.1.11	**M**	There is a process to ensure safe delivery of samples to the laboratory.	H		
GM10.1.12	**M**	There is a procedure for monitoring the transportation of samples to ensure they are transported in a manner that ensures the integrity of the sample and the safety of the carrier, the general public and the receiving laboratory, in compliance with regulatory requirements (including TDG legislation).	M		

No.		Description	Risk	Reference	Change
GM10.1.13	**M**	Personnel preparing samples for transport and transporting patient samples to another facility are certified, or are supervised by personnel certified in accordance with Transport of Dangerous Goods Regulations.	H		
GM10.1.14	**M**	Sample transport is in compliance with the Transport of Dangerous Goods Act and other relevant legislation.	H		
GM10.2		**Sample labeling provides information necessary to link samples to patients and distinguish samples.**			
GM10.2.1	**M**	Samples are labeled after the collection process, in the presence of the patient by the collector.	H		
GM10.2.2	**M**	Primary sample containers are labeled with a minimum of two patient identifiers.	H		
GM10.2.5	**M**	When printed labels are affixed to sample containers after the primary sample has been labeled, they do not obscure the original label.	H		
GM10.2.6	**M**	Multiple samples collected at one time from the same patient, and similar samples collected at different times from the same patient are uniquely identified.	H		
GM10.3		**Sample requisitions contain accurate, comprehensive and appropriate information.**			
GM10.3.1	**M**	The patient's first and last name is recorded on the laboratory service requisition for sample collections.	H		
GM10.3.2	**M**	A unique personal identifier number such as provincial health number (PHN) or facility-issued identifier number is recorded on the laboratory service requisition.	H		
GM10.3.3	**M**	The patient's date of birth is recorded on the laboratory service requisition.	H		
GM10.3.5	**M**	The name and contact information of the authorized individual requesting the testing is recorded on the laboratory service requisition.	H		
GM10.3.6	**M**	The designation of the authorized individual requesting the testing is clearly indicated on laboratory service requisition (physician, midwife, other health-care professional etc.).	H		
GM10.3.7	**M**	The destination(s) for the report is recorded on the laboratory service requisition.	H		
GM10.3.8	**M**	The analysis, product or service requested is recorded on the laboratory service requisition.	H		
GM10.3.9	**M**	The sample type and anatomic site of origin are recorded laboratory service requisition.	H		

No.		Description	Risk	Reference	Change
GM10.3.10	**M**	Clinically relevant information about the patient and the request, is recorded on the laboratory service requisition.	M		
GM10.3.11	**M**	The date and time of collection is recorded on the laboratory service requisition.	H		
GM10.3.12	**B**	The urgency of the request is recorded on the laboratory service requisition.			Revised
GM10.3.13	**M**	The presence of radioactive material or prion disease within the tissue samples submitted for laboratory testing is indicated on the requisition. Radioactive samples can include but are not limited to sentinel lymph nodes, breast biopsies, and prostate seeds.	H		

Specimen Radiography

No.		Description	Risk	Reference	Change
GM11.0		**SPECIMEN RADIOGRAPHY RESULTS IN IMAGES APPROPRIATE FOR THEIR INTENDED USE IN CLINICAL DECISION-MAKING.**			New
GM11.1		**Routine quality control procedures are established and used to monitor performance of specimen radiography cabinet systems.** *Guidance: Specimen radiography cabinet systems are mobile, or tabletop radiography devices used to image specimen samples for surgical and pathological evaluation. Specimen radiography cabinet systems are used in pathology departments, medical imaging departments, and surgical suites. Specimen radiography performed on mammography systems is quality control tested as per mammography quality control procedures, see MA13.*			New
GM11.1.1	**M**	Monthly quality control testing of specimen radiography cabinet systems includes evaluation of the gain calibration.	M	Mammo-AC-23	New
GM11.2		**Specimen radiography is performed following established protocols.**			New
GM11.2.1	**M**	Specimen radiography is performed on mammography systems or specimen radiography cabinet systems. *Guidance: Specimen radiography cabinet systems are mobile, or tabletop radiography devices used to image specimen samples for surgical and pathological evaluation. Specimen radiography cabinet systems are used in pathology departments, medical imaging departments, and surgical suites.*	M	Mammo-AC-23	New
GM11.2.2	**M**	Specimen radiography cabinet system equipment is used only as intended by the manufacturer.	M	Mammo-AC-23	New
GM11.2.3	**M**	Intraoperative surgical specimen radiography involves the direct communication between the surgeon and the radiologist to ensure adequacy of excision.	M	Mammo-AC-23	New
GM11.3		**Specimen radiography is operated by competent staff with the necessary education, skills and certification.**			New

No.		Description	Risk	Reference	Change
GM11.3.1	**M**	Specimen radiography performed on mammography systems are operated by mammography technologists. *Guidance: Technologists providing mammography services are certified with the Canadian Association of Medical Radiation Technologists (CAMRT) and have specialized training in mammography, either through a training curriculum or special courses.*	M	Mammo-AC-23	New
GM11.3.2	**M**	Specimen radiography performed on specimen radiography cabinet systems are operated by competent staff with the necessary education and skills. *Guidance: Operators may include but are not limited to medical radiation technologists, pathologists, laboratory personnel, physicians, and surgical personnel.*	M	Mammo-AC-23	New
GM11.3.3	**M**	An orientation and training program are provided to those who perform specimen radiography to ensure safe, consistent, and accurate operation. *Guidance: Completion of orientation is documented.*	M	Mammo-AC-23	New

Imaging guided stress testing procedures

No.		Description	Risk	Reference	Change
					New
GM12		**IMAGING GUIDED STRESS TESTING PROCEDURES**			
GM12.1		**Stress testing procedures are performed in an environment designed to ensure patient safety.**			New
GM12.1.1	**B**	There is adequate space to facilitate the stress testing equipment.		US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.2		**There is physician supervision of stress testing examinations.**			New
GM12.2.1	**M**	The most responsible physician supervises imaging guided stress testing procedures. *Guidance: Supervision means that the physician is immediately available to provide assistance and direction throughout the performance of the procedure and respond to adverse events. The method of supervision is identified (GM11.2.2) and can include remotely by phone, in room monitoring or by other means as approved by the medical director.*	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.2.3	**M**	The method of supervision of imaging guided stress testing procedures is identified and approved by the medical director. *Guidance: The medical director reviews the risks associated with the procedure and determines the most appropriate methods of supervision. The method can include remotely by phone, in room monitoring or by other means. See also DPS6.0 Medical emergency management.*	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.2.4	**M**	The most responsible physician is aware of specific relative contraindications and pertinent risk factors that might increase the likelihood of adverse events.	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.2.5	**M**	The most responsible physician is knowledgeable in the recognition and treatment of adverse events (e.g. idiosyncratic reactions, extravasations).	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.3		**Appropriately qualified supplementary staff are present to ensure patient safety is maintained throughout stress testing examinations.** *Guidance: The medical director or delegate determines who are appropriately qualified supplementary staff.*			New

No.		Description	Risk	Reference	Change
GM12.3.1	**M**	Appropriately qualified supplementary staff support patient safety tasks.	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.3.2	**M**	Appropriately qualified supplementary staff support treadmill or bicycle operation, for exercise induced stress testing.	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.3.3	**M**	Appropriately qualified supplementary staff support electrocardiogram (ECG) monitoring.	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.3.4	**M**	Appropriately qualified supplementary staff support medication infusion and patient monitoring.	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.4		**Emergency equipment and supplies are readily available during stress testing examinations.**			New
GM12.4.1	**M**	There is an emergency crash cart immediately accessible.	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.4.2	**M**	An emergency drug tray is available in the room.	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.4.3	**M**	The contents of the emergency drug tray include nitroglycerine, in tablet or aerosol spray.	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.4.4	**M**	The contents of the emergency drug tray include epinephrine.	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.4.5	**M**	The contents of the emergency drug tray include atropine.	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.4.6	**M**	The contents of the emergency drug tray include intravenous supplies.	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.4.7	**M**	The contents of the emergency drug tray include parenteral antihistamine.	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.4.8	**M**	The contents of the emergency drug tray include parenteral antiemetic.	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New

No.		Description	Risk	Reference	Change
GM12.4.9	**M**	The contents of the emergency drug tray include short-acting bronchodilator (e.g. salbutamol) either in a metered-dose inhaler with a spacer device or as a solution with a nebulizer administration unit, ventolin nebules or as a discus device.	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.4.10	**M**	The contents of the emergency drug tray include a beta-blocker (if performing pharmacological stress testing).	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.5		**Stress testing examination protocols include all the information necessary to perform the examination.**			New
GM12.5.1	**M**	Stress testing protocols are readily available.	H	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.5.2	**M**	Stress testing protocols include a description of medication administration and dosing, as applicable.	M	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.5.3	**M**	Stress testing protocols include a description of graded protocols (e.g. speed, incline and workload), for exercise induced stress testing.	M	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.5.4	**M**	Stress testing protocols include timing of assessing symptoms, heart rate, blood pressure and ECG tracings (using 12-lead). *Guidance: The protocols include instructions for the time of measurement of symptoms, heart rate, blood pressure and electrocardiographic findings.*	M	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.5.5	**M**	Stress testing protocols outline any specific events that are reasons for stopping or terminating early the stressing activity (e.g. radiopharmaceutical injection criteria and or exercise end points). *Guidance: This may include but are not limited to the duration of pharmaceutical administration or specific symptoms at peak exercise.*	M	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.5.6	**M**	Stress testing protocols include requirements for post-stress monitoring.	M	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.5.7	**M**	Stress testing protocols include identification and treatment of common adverse events (e.g. hypertension, dyspnea, chest pain).	M	US/EC-AC-24 NM-AC-21 PET-AC-23	New
GM12.6		**ECGs findings are recorded in the medical record.**			New
GM12.6.1	**M**	ECG tracings and summarized findings are recorded in the patient record and are readily available.	M	US/EC-AC-24 NM-AC-21 PET-AC-23	New

References

Abbreviation	Reference
US/EC-AC-24	2024-2028 DAP Ultrasound and Echocardiography Advisory Committee Recommendation
Mammo-AC-23	2023-2027 DAP Mammography Advisory Committee Recommendation
NM-AC-21	2021-2025 DAP Nuclear Medicine Single Photon Emission Advisory Committee Recommendation
PET-AC-23	2023-2027 DAP Nuclear Medicine Positron Emission Advisory Committee Recommendation

Bibliography

American College of Obstetricians and Gynecologists. ACOG Committee Opinion No. 723: Guidelines for Diagnostic Imaging During Pregnancy and Lactation [Internet]. American College of Obstetrics & Gynecology: 2017 Oct;130(1):210-216. Available from: https://www.acog.org/-/media/project/acog/acogorg/clinical/files/committee-opinion/articles/2017/10/guidelines-for-diagnostic-imaging-during-pregnancy-and-lactation.pdf

American College of Radiology Practice Guideline for Communication of Diagnostic Imaging Findings. Revised 2005 (Res. 11)*. Retrievable from: http://www.acr.org/SecondaryMainMenuCategories/quality_safety/guidelines/dx/comm_diag_rad.aspx

American College of Radiology. ACR–AAPM–SIIM Technical Standard For Electronic Practice Of Medical Imaging [Internet].[Virginia]: American College of Radiology; 2007[rev 2022]. Available from: https://www.acr.org/-/media/ACR/Files/Practice-Parameters/elec-practice-medimag.pdf

American Society of Anesthesiologists Clinical Information [Internet]. Schaumburg, IL: American Society of Anesthesiologists; 2017. ASA physical status classification system; [approved 2014 Oct 15]. Available from: https://www.asahq.org/standards-and-guidelines/asa-physical-status-classification-system

Canadian Association of Radiologists. Consensus Guidelines for the Prevention of Contrast-Induced Nephropathy. Retrievable from: http://www.car.ca/Files/Nephropathy.pdf

Diagnostic Accreditation Program; College of Physicians and Surgeons of Alberta. Diagnostic imaging Standards and Guidelines. Alberta: CPSAB; 2010 Mar.

Diagnostic Accreditation Program; College of Physicians and Surgeons of British Columbia. Accreditation standards 2014: Diagnostic imaging. Vancouver: Diagnostic Accreditation Program; 2014

Dobson G, Filteau L, Fuda G, McIntyre I, Milne AD, Milkovich R, Sparrow K, Wang Y, Young C. Guidelines to the Practice of Anesthesia - Revised Edition 2022. Can J Anaesth. 2022 Jan;69(1):24-61. English. Available from: https://link.springer.com/article/10.1007/s12630-021-02135-7

Guidelines for Monitoring and Management of Pediatric Patients During and After Sedation for Diagnostic and Therapeutic Procedures. An update. PEDIATRICS Vol 118 No.6 December 2006, p. 2589. Retrievable from: http://www.pediatrics.org/cgi/content/full/118/6/2587

Joint Commission Resources. 2012 Laboratory Accreditation Standards. Oakbrook Terrace, IL: Joint Commission Resources; 2011

Owen RJ, Hiremath S, Myers A, Fraser-Hill M, Barrett B, Canadian Association of Radiologists. Consensus Guidelines for the Prevention of Contrast Induced Nephropathy [Internet]. Ontario: Canadian Association of Radiologist; 2011 Jun. Available from: https://car.ca/wp-content/uploads/Prevention-of-Contrast-Induced-Nephropathy-2011.pdf

Schieda N, Maralani PJ, Hurrell C, Tsampalieros AK, Hiremath S. Updated Clinical Practice Guideline on Use of Gadolinium-Based Contrast Agents in Kidney Disease Issued by the Canadian Association of Radiologists. Can Assoc of Radiologist's Journal. 2019 Aug;70(3):226-232. Available from: https://journals.sagepub.com/doi/10.1016/j.carj.2019.04.001?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%20%200pubmed