COLLEGE OF PHYSICIANS AND SURGEONS OF BRITISH COLUMBIA

Diagnostic Accreditation Program

ACCREDITATION STANDARDS FOR INITIAL ASSESSMENT

Pulmonary Function

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

Table of contents

How to use this document

A new facility, new services provided by an accredited facility, or services that have implemented significant change must proceed through the initial assessment process and receive a provisional accreditation award prior to service delivery and testing of equipment on people.

The initial assessment process includes:

- the facility/service completing and submitting documentation that outlines the service profile, equipment, key individuals and their related qualifications, and other information as requested
- a DAP accreditation officer reviewing the submitted documentation and conducting an on-site visit of the facility/service

During the initial assessment process, the facility/service is assessed to a partial selection of the Diagnostic Accreditation Program (DAP) Accreditation Standards. This document, Accreditation Standards for Initial Assessment, identifies those standards that will be utilized by the DAP accreditation officer for conducting the initial assessment. A facility preparing for an initial assessment is strongly encouraged to review this document in their preparation, and to ensure all mandatory requirements have been fulfilled prior to contacting the DAP to schedule the on-site initial assessment. It is also suggested that the facility/service reviews the complete, comprehensive set of DAP Accreditation Standards as these documents provide additional guidance and explanations that the facility may find useful.

Evidence of compliance with mandatory requirements is required for the facility to be eligible to receive a provisional accreditation award. Mandatory requirements are identified by a bold type **M**.

Example

PSA1.0	**POTENTIAL HAZARDS AND RISKS TO STAFF, PATIENTS AND VISITORS ARE MINIMIZED.**	
PSA1.3	**Safety issues are discussed and monitored.**	
PSA1.3.1	**M**	The diagnostic service has a safety committee or health and safety representative. *Guidance: If there are 20 or more employees, a joint occupational health and safety committee (JOHSC) must be functioning. If the diagnostic service is part of a larger facility, a member of the committee must have the responsibility to represent the diagnostic service. If the facility has between 10 and 19 staff, the workers must select a person to be their Health and Safety Representative. This person, in effect, carries out the same functions as the committee in a larger facility. For organizations with less than 10 employees, the employer is required to hold regular meetings with the staff to discuss matters relating to maintaining a healthy and safe workplace. Records of these meetings must be kept. Sections 125 to 140 of the* Workers Compensation Act *provide all the details about committee requirements and function.*

Accreditation award

All mandatory requirements must be fully implemented for a facility to be eligible for a provisional accreditation award.

A new facility/service that is granted provisional accreditation status is permitted to commence service delivery to patients subject to satisfactory performance in fulfilling continuous accreditation requirements. If a facility/service is not awarded provisional accreditation, they are not permitted to commence service delivery.

Facilities are encouraged to contact an accreditation specialist at the DAP for more information on proceeding through the initial assessment process, and to arrange for an accreditation officer to conduct an initial assessment.

Quality category codes

Governance and Leadership	PGL
Medical Staff	PMS
Human Resources	PHR
Patient and Client Focus	PPC
General Safety	PSA
Patient Safety	PPS
Infection Prevention and Control	PIPC
Quality Improvement	PQI
Information Management	PIM
Equipment and Supplies	PES
Global Modality	GP
Pulmonary Function	PF

Governance and leadership

Introduction

Each organization has a corporate governance structure that is ultimately responsible for the quality and safety of services provided. For large organizations, such as health authorities and some privately owned facilities, this governance structure is the board of directors. For other privately owned facilities the governance structure may be a partnership group or an individual as the sole proprietor. The term "governing body/ownership" is used in these standards to refer to those individuals who provide corporate governance to the organization.

Each organization, regardless of its complexity, also has a leadership structure. Many leadership responsibilities directly affect the provision of diagnostic services as well as the day to day operations of the diagnostic department. In some cases, these responsibilities will be shared amongst leaders; in other cases, a particular leader may have primary responsibility. Regardless of the organization's structure, it is important that leaders carry out all of their responsibilities.

Leadership

No.	Description
PGL2.0	**THE ACCOUNTABILITY AND RESPONSIBILITY FOR KEY LEADERSHIP FUNCTIONS IS ASSIGNED.** *Guidance: Functions may be assigned to an individual, leadership group or committee. An individual may be assigned to more than one key function.*
PGL2.2	**Responsibility for the clinical oversight of diagnostic service quality and safety is assigned and supported by the organization.** *Guidance: Clinical oversight describes a system through which an organization continually improves the quality of their services and safeguards high standards of care through an environment that promotes clinical excellence*
PGL2.2.1	**M** A senior medical leader is appointed with responsibility for the quality and safety of the medical practice within the diagnostic service.
PGL2.2.2	**M** Medical leaders are actively involved in the monitoring of the clinical caseload.
PGL2.2.3	**M** Administrative and technical leaders are appointed with responsibility for the quality and safety of operational processes and technical operations within the diagnostic service. *Intent: It is the expectation that the job descriptions of diagnostic service leaders include quality and safety responsibilities.*
PGL2.3	**There is a documented and dated organizational chart.** *Guidance: The organizational chart includes medical, technical and administrative staff.*

PGL2.3.1	**M**	The management structure of the diagnostic service is clearly delineated.
PGL2.3.2	**M**	Lines of accountability, responsibility and authority, as well as the interrelationships of all staff are clear.
PGL2.3.3	**M**	Relationships to other organizations are identified (e.g. remotely located medical leadership).

Medical staff

Introduction

The medical staff of the organization is comprised of those medical practitioners who hold a valid licence to practise medicine in British Columbia, and who have been appointed to the medical staff by the governing body/ownership of the organization. The governing body/ownership has a responsibility to ensure that only qualified and competent medical practitioners are appointed to the medical staff. The medical staff is accountable to the governing body/ownership.

Medical staff leadership

For health authority/hospital-based diagnostic services, the medical leader may have the title of chief, department head, medical director, or an alternate title. The medical leader and medical staff of health authority/hospital based diagnostic services operate within the provisions set out in the medical staff bylaws, and are accountable to the governing body through the established medical staff structure of the health authority/hospital.

In private diagnostic service facilities, each physician is responsible for ensuring the activities of medical leadership take place, including assuring the competence of all physicians providing medical services within the organization through a peer review process.

If a physician is the owner in solo practice, they are responsible for ensuring the activities of medical leadership take place, inclusive of ensuring that they are qualified and competent themselves to undertake the scope of medical service provided within their organization.

No.		Description
PMS1.0		**A MEDICAL LEADER IS APPOINTED WITH ASSIGNED RESPONSIBILITIES AND ACCOUNTABILITIES FOR THE DIAGNOSTIC SERVICE.**
PMS1.1		**The medical leader has responsibility for medically related activities.**
		The medical leader:
PMS1.1.5	**M**	• establishes and monitors policies and procedures for the delegation of medical acts
PMS1.1.6	**M**	• authorizes the implementation of technical/medical operational policies and procedures related to the diagnostic service

Remotely supervised facilities

No.		Description
PMS1.2		**Medical leaders must visit the remotely supervised facility to assess the quality and safety of the service.**
PMS1.2.1	**M**	The medical leader visits the facility prior to assuming responsibility for medical leadership for a new service.
PMS1.3		**Logs to record the medical leader or delegate visits to remotely supervised facilities are maintained.**
PMS1.3.1	**M**	A log is kept to record the visit of the medical leader or delegate to the diagnostic service.
PMS1.3.2	**M**	Recommendations for improvement or required follow-up are recorded in the log.
PMS1.3.4	**M**	The log is signed by the person conducting the visit.
PMS1.4		**Roles of authority, responsibility and accountability are clearly defined and maintained at remotely supervised facilities.**
PMS1.4.1	**M**	The medical leader or designated interpreting physician maintains ongoing communication with the technical staff and test requestors.
PMS1.4.2	**M**	Processes are in place to ensure the prompt availability of an interpreting physician for consultation whenever required.
PMS1.4.3	**M**	The medical leader documents those tests that may be performed at remotely supervised facilities.

Medical staff credentialing and privileging

Credentialing is a process that involves the collection, verification and assessment of information regarding the education, training, experience and ability of an individual physician to perform a requested privilege. In British Columbia physicians must

have the requisite credentials as outlined in the Provincial Privileging Dictionaries. Refer to http://bcmqi.ca/privileging-dictionaries.

Credentialing for physicians who hold privileges at any health authority facility is performed by the health authority, and includes assessing eligibility for Medical Services Plan (MSP) billings for restricted services. Many medical offices are owner operated solo practices and the physician may not hold privileges with a health authority; therefore, the physician would not have proceeded through a credentialing process. In these instances the physician is licensed to their scope of practice through the College of Physicians and Surgeons of BC. For MSP billing purposes for a restricted diagnostic service, the College will review the associated credentials required to be eligible to bill for these services and will notify MSP of the eligibility. For further information please contact credentialing@cpsbc.ca.

For community-based multi-physician facilities the medical director and ownership are responsible to ensure the physicians that practise in their facilities are appropriately credentialed, either through the health authority or by reviewing the credentials of the physician and ensuring that the physician has been deemed eligible to bill MSP for the services. There must be a formal process used for credentialing and privileging, and it is the expectation of these accreditation standards that the medical director and ownership can demonstrate these processes.

No.		Description
PMS2.0		**THE DIAGNOSTIC SERVICE HAS QUALIFIED AND COMPETENT MEDICAL PRACTITIONERS.**
PMS2.1		**Information for each medical practitioner is collected, verified and assessed relative to the requested scope of practice/procedure.**
		This information includes:
PMS2.1.1	**M**	• current registration and licensure from the College of Physicians and Surgeons of British Columbia in the relevant specialty
PMS2.1.2	**M**	• MSP billing eligibility confirmation from the College of Physicians and Surgeons of British Columbia to bill for restricted services, if not affiliated with a health authority
PMS2.1.3	**M**	• relevant education and training
PMS2.1.4	**M**	• evidence of physical ability to perform the scope of practice/procedure
PMS2.1.5	**M**	• experience and competency to perform the scope of practice/procedure
PMS2.2		**Medical staff only practise within the scope of their privileges.**
PMS2.2.1	**M**	An accurate list of all medical practitioners practising within the diagnostic service is maintained.

PMS2.2.2	**M**	A record is maintained for each medical practitioner indicating the scope of service/procedures they are permitted to practise within the diagnostic service and this is communicated to the practitioner and the organization.
PMS2.3	**Pulmonary function (PF) services are provided by qualified and competent physicians.**	
PMS2.3.1	**M**	Physicians providing adult or pediatric diagnostic pulmonary function services have the requisite credentials for privileges as outlined in the Provincial Privileging Dictionaries. *Guidance: Pulmonary function services are considered core and non-core privileges, depending on the relevant specialty; therefore may require further training, experience and demonstrated skills. Refer to http://bcmqi.ca/privileging-dictionaries/ for the requirements to perform diagnostic pulmonary function.*

Delegated medical acts

No.	Description
PMS3.0	**THE DELEGATION OF MEDICAL ACTS DOES NOT COMPROMISE PATIENT SAFETY OR QUALITY.**
PMS3.1	**Delegated medical acts are clearly defined.**
PMS3.1.1	**M** Each delegated medical act is clearly defined and circumscribed.
PMS3.1.2	**M** The degree of medical supervision required is identified. *Guidance: Medical supervision may be direct, with the physician in attendance, or through technology (e.g. video link, telephone).*
PMS3.1.3	**M** Competency requirements to perform the delegated medical act are clearly identified.
PMS3.2	**The delegation of medical acts has been approved and accepted.**
PMS3.2.1	**M** Approval from the governing body/ownership of the organization has been obtained prior to the delegated medical act being carried out in the organization.
PMS3.2.2	**M** The delegation of the medical act has been accepted by the individual(s) who will perform the delegated medical act.
PMS3.2.3	**M** The diagnostic service maintains a list of approved medical acts and the individuals authorized to conduct each delegated medical act.
PMS3.3	**Delegated medical acts are performed by competent individuals.**
PMS3.3.1	**M** Additional training is provided to individuals performing the delegated medical act.

No.	Description	
PMS3.3.2	**M**	Competency assessment to perform a specific delegated medical act is conducted by a physician or technical delegate. *Guidance: Competency assessment of the technical delegate is conducted by a physician with relevant expertise in the medical act.*
		There is a competency assessment record for each individual performing delegated medical acts. The competency assessment record includes:
PMS3.3.3	**M**	the date of the assessment
PMS3.3.4	**M**	the specific act(s) being assessed
PMS3.3.5	**M**	the name of the physician or technical delegate conducting the assessment
PMS3.3.6	**M**	the signature of the individual attesting to the competence of the individual performing the specific act(s)
PMS3.3.7	**M**	The competency of the individual performing the specific delegated medical act is reassessed annually by a physician or technical delegate. *Guidance: The record of assessment for each individual is updated annually following the reassessment.*

Human resources

The management of human resources encompasses the policies, procedures and systems that influence the behavior and performance of staff. The diagnostic service must have methods in place to ensure that staff are managed as effectively as possible, since the quality of care and services provided within the diagnostic service will be greatly affected by the quality of the staff working in the department.

There is a strategy to ensure that qualified and competent staff are recruited and retained and that they are motivated and engaged in the work that they perform. This will help ensure that the needs and requirements of the diagnostic service and the population served are effectively met.

Staff selection and retention

No.		Description
PHR2.0		**THE DIAGNOSTIC SERVICE HAS PROCEDURES IN PLACE TO SELECT AND RETAIN QUALIFIED AND COMPETENT STAFF.**
PHR2.1		**The diagnostic facility has qualified and competent staff to deliver services.**
PHR2.1.1		The diagnostic facility selects and recruits staff based on qualifications and experience (e.g. certification, academic preparation, knowledge, skills and reference checks).
PHR2.1.2	**M**	Therapists are certified with the Canadian Society of Respiratory Therapists (CSRT); or, are graduates from a recognized training school of respiratory therapy and are eligible to undergo examination from the Canadian Board for Respiratory Care (CBRC).

Staff roles and records

No.		Description
PHR3.0		**THE STAFF AND LEADERSHIP OF THE DIAGNOSTIC SERVICE UNDERSTAND THEIR ROLES AND ACCOUNTABILITIES.**
PHR3.1		**Job descriptions exist for all staff.**
PHR3.1.1	**M**	There are job descriptions for all staff that reflect current practice and evolving responsibilities.

Staff orientation and training

No.		Description
PHR5.0		**ORIENTATION, TRAINING AND CONTINUING EDUCATION FOR THE SAFE PROVISION OF QUALITY DIAGNOSTIC SERVICES IS PROVIDED.**
PHR5.1		**New staff receive orientation and training appropriate for their job position.**
		New staff receive orientation and training that includes:
PHR5.1.1	**M**	• patient safety (e.g. definitions and reporting processes for adverse events and critical incidents)
PHR5.1.2	**M**	• patient identification
PHR5.1.3	**M**	• management of infectious materials including routine precautions, needle stick, injury protocol and personal protective equipment
PHR5.1.4	**M**	• sharps handling and disposal
PHR5.1.5	**M**	• WHMIS (e.g. appropriate disposal of solutions and supplies)
PHR5.1.6	**M**	• staff injury prevention and reporting
PHR5.1.7	**M**	• fire safety
PHR5.1.8	**M**	• management of aggressive behaviour
PHR5.1.9	**M**	• violence and harassment in the workplace
PHR5.1.10	**M**	• emergency responses/codes
PHR5.1.11	**M**	• disaster response
PHR5.1.12	**M**	• information management processes and systems
PHR5.1.13	**M**	• confidentiality of data and information
PHR5.1.14	**M**	• relevant policies and procedures related to performing the duties of the position
PHR5.1.15	**M**	• roles and responsibilities of the individual and key staff

Patient and client focus

Introduction

Engaging and involving patients and clients in their health care ensures their needs are met in a safe and effective manner. A patient and client focused culture enables the diagnostic service, to be more responsive and enhances the quality and safety of the care and services provided to patients and clients.

The patient and client focus standards examine patient and client-centered services including how the diagnostic service determines the requirements, expectations and preferences of patients and clients. Examples of clients may include referring physicians, WorkSafeBC, and insurance companies.

Management of patient and client relationships

No.	Description
PPC1.0	**THE DIAGNOSTIC SERVICE SEEKS TO UNDERSTAND AND BE RESPONSIVE TO THE REQUIREMENTS OF PATIENTS AND CLIENTS.**
PPC1.2.2	**M** There is a process for patient prioritization.

Patient rights and consent

No.	Description
PPC3.0	**THE DIAGNOSTIC SERVICE RESPECTS THE RIGHTS OF PATIENTS.** *Refer to the Government of Canada's Patient's Bill of Rights for additional information, accessible at* http://dsp-psd.pwgsc.gc.ca/Collection-R/LoPBdP/BP/prb0131-e.htm.
PPC3.3	**The diagnostic service ensures that patients are provided with the information necessary to give or withhold informed consent.** *Intent: Obtaining informed consent is a process of communication that establishes a mutual understanding between the patient and health-care provider(s) involved in the diagnostic procedure. It provides patients with the information they need to make informed decisions and ultimately results in the patient's authorization or agreement to undergo the procedure for which informed consent is being obtained. Informed consent is a process that encompasses patient needs and preferences, patient education and compliance with the Health Care (Consent) and Care Facility (Admission) Act – see associated link:* ***www.qp.gov.bc.ca/statreg/stat/H/96181_01.htm***.

No.	Description	
PPC3.3.1	**M**	The diagnostic service identifies the specific tests or procedures that require informed consent as well as the circumstances that would allow for exceptions to it.

General safety

Occupational health and safety

The accreditation standards relating to occupational health and safety includes those most critical to staff safety in the diagnostic service; however, they do not encompass all of the requirements under the *Workers Compensation Act* of British Columbia. Leaders are encouraged to review section 115 of this Act and the associated Occupational Health and Safety Regulations to ensure they are meeting all regulatory requirements in British Columbia. Questions specific to the Act and the associated Occupational Health and Safety Regulations should be directed to WorkSafeBC for interpretation, advice and direction.

Management responsibilities

No.	Description	
PSA1.0	**POTENTIAL HAZARDS AND RISKS TO STAFF, PATIENTS AND VISITORS ARE MINIMIZED.**	
PSA1.1	**There is a safety program in place that includes:**	
PSA1.1.2	**M**	• monthly safety audits/inspections of the work area, equipment, and practices to identify and resolve safety hazards *Guidance: Occupational health and safety regulations require safety audits/inspections to be conducted regularly. The inspection results must be reviewed by the occupational health and safety committee or health and safety representative.*
PSA1.2	**A safety manual is readily available to staff that includes:**	
PSA1.2.1	**M**	• how to access first aid services and/or medical assistance for staff related injuries *Guidance: If the diagnostic service is part of a larger facility (over 50 staff), there must be immediate access to an occupational first aid attendant (OFAA) with a minimum of a level 2 occupational first aid certificate. If the facility is self-contained, a level 1 OFAA is sufficient until the total staff surpasses 50. Detailed tables specifying the first aid requirements are found in the Occupational Health and Safety Regulation at the end of Part 3. It must be noted that medical facilities are **not** exempt from these requirements. Medical facilities may have staff take the appropriate OFA course, but some leeway is provided to allow for existing qualification to be considered equivalent.*
PSA1.2.2	**M**	• the policy and procedure for investigating and reporting staff safety incidents including near misses
PSA1.2.3	**M**	• exposure control plans, based on existing occupational hazards
PSA1.2.4	**M**	• requirements for the use of personal protective and other safety equipment

No.	Description	
PSA1.2.5	**M**	• Workplace Hazardous Materials Information System (WHMIS) program information
PSA1.2.6	**M**	• emergency evacuation plans
PSA1.2.7	**M**	• procedures to protect staff "working alone" or in "isolation" *Guidance: "Working alone or in isolation" is defined as working in circumstances where assistance would not be readily available to the worker in case of emergency or if the worker is injured or becomes unwell.*
PSA1.2.8	**M**	• procedures to manage violent and aggressive behaviour *Guidance: The procedure for dealing with the prevention of, and response to, incidents of violence must distinguish between incidents involving two workers ("improper conduct") and incidents of aggressive behaviour from a patient or member of the public ("violence"). All incidents of improper conduct and violence must be formally investigated, whether any injury occurred or not.*
PSA1.3	**Safety issues are discussed and monitored.**	
PSA1.3.1	**M**	The diagnostic service has a safety committee or health and safety representative. *Guidance: If there are 20 or more employees, a joint occupational health and safety committee (JOHSC) must be functioning. If the diagnostic service is part of a larger facility, a member of the committee must have the responsibility to represent the diagnostic service. If the facility has between 10 and 19 staff, the workers must select a person to be their Health and Safety Representative. This person, in effect, carries out the same functions as the committee in a larger facility. For organizations with less than 10 employees, the employer is required to hold regular meetings with the staff to discuss matters relating to maintaining a healthy and safe workplace. Records of these meetings must be kept. Sections 125 to 140 of the* Workers Compensation Act *provide all the details about committee requirements and function.*

Safety practices and equipment

No.	Description	
PSA1.4	**Chemicals are used, stored and disposed of safely.**	
PSA1.4.1	**M**	Hazardous liquids such as corrosives are stored below eye level.
PSA1.4.2	**M**	The amount of hazardous liquids in a work area must not exceed the quantity reasonably needed for routine tasks.[1]
PSA1.4.3	**M**	Containers for flammable liquids are kept closed when not in use.
PSA1.4.4	**M**	Flammable liquids are stored in approved cabinets. *Guidance: Refer to the product material safety data sheets (MSDS) for handling and storage.*
PSA1.4.5	**M**	MSDS is available and current for controlled substances subject to WHMIS regulations.

No.	Description
PSA1.4.6	**M** Controlled substances are labeled appropriately. *Guidance: This applies to both the original supplier issued container and any secondary containers that have a workplace label indicating: product name; safe handling procedures; and reference to MSDS.*
PSA1.4.7	**M** Chemicals are disposed of in accordance with WHMIS requirements.
PSA1.6	**Fire safety measures are implemented.**
PSA1.6.1	M Appropriate fire extinguishing equipment and procedures are in place.
PSA1.7	**Electrical safety measures are implemented.**
PSA1.7.1	M Equipment and supplies are clearly labelled and comply with electrical safety regulatory requirements (e.g. Canadian Standards Association [CSA] or equivalent).
PSA1.8	**Personal protective equipment is available for staff.** *See also Infection Prevention and Control Accreditation Standards.*
PSA1.8.1	**M** Adequate and appropriate personal protective equipment is available to protect staff from chemical or biological hazards. *Guidance: Personal protective equipment may include gloves, lab coats/gowns and masks.*
PSA1.8.2	**M** Latex-free gloves are available to staff with latex sensitivities.
PSA1.9	**There are mechanisms in place to prevent staff from assuming postures that could result in musculoskeletal injuries.**
PSA1.9.4	**M** Adequate assistance and transfer/lift devices are available when moving or lifting patients. *Guidance: Transfer/lift devices include "transavers," slider boards and ceiling or mobile patient lifts.*
PSA1.9.5	**M** The weight limit of lifting equipment is clearly marked.
PSA1.10	**Compressed gas is maintained and stored safely.** *Guidance: An example of a compressed gas would be oxygen.*
PSA1.10.1	**M** Gas cylinders are clearly labeled with the cylinder's contents.
PSA1.10.2	**M** A pressure-reducing regulator or device is used for all compressed gas cylinders.
PSA1.10.3	**M** Any gauge whose pointer (indicator or needle) does not go back to the zero point when pressure is removed is replaced.
PSA1.10.4	**M** Adapters between cylinders and pressure reducing regulators are not used.
PSA1.10.5	**M** Cylinders not in use are shut off and capped.
PSA1.10.6	**M** Cylinders are secured to prevent falling during storage, transportation and use (e.g. chaining a cylinder to a secure object).

No.		Description
PSA1.10.7		Cylinders are kept in an upright position. *Guidance: Larger sized cylinders (e.g. H/K) should be kept in an upright position.*
PSA1.10.8	**M**	Cylinder carts are used to move large cylinders and specifically designed cylinder holders are used to carry small cylinders.
PSA1.10.9	**M**	Cylinders that are empty are clearly identified.

Appropriate physical environment

No.		Description
PSA2.0		**THE DESIGN AND LAYOUT OF THE PHYSICAL SPACE ALLOWS SERVICE DELIVERY TO BE SAFE, EFFICIENT AND ACCESSIBLE FOR PATIENTS, VISITORS AND STAFF.**
PSA2.1		**The design and layout of the physical space meets laws, regulations and codes.**
PSA2.1.2	**M**	Emergency exit routes are marked and provide an unimpeded exit.
PSA2.3		**The physical environment ensures patient safety and privacy.**
PSA2.3.1	**M**	Patient areas are safe and clean.
PSA2.3.2	**M**	A secure and private location for changing clothing and for the temporary storage of personal items is available, if needed. *Guidance: This may be relevant for the type of testing performed (e.g. Exercise Testing).*
PSA2.3.5	**M**	Patient information cannot be viewed by other patients or visitors.
PSA2.3.6	**M**	Patient privacy is not compromised during the diagnostic procedure.
PSA2.4		**The design and layout of the space supports safe and appropriate service delivery.**

No.		Description
PSA2.4.3	**M**	Activity, workspace and equipment is designed or positioned to reduce the risks of ergonomic distress disorders and accidents (e.g. musculoskeletal injuries, repetitive stress injuries, etc.). *Guidance: If workers experience symptoms indicating a musculoskeletal injury, the employer must investigate and make appropriate changes to the work area. This might be ergonomically designed chairs, anti-fatigue mats for staff that must stand for most of the work day. The employer must have conducted a risk assessment for the potential for musculoskeletal injury that will include handling of patients who are heavy or have restricted ability to move or the use of awkwardly placed controls on equipment. Controls, including equipment and training, must have been put in place to address all the identified moderate or high-risk situations. WorkSafeBC has two worksheets ("A" and "B") in the publications section of the website, which provide a template for conducting the risk identification and assessment. These worksheets can be found at http://www2.worksafebc.com/pdfs/ergonomics/MSI_worksheet_A_fillable.pdf?_ga=1.245774660.1138311406.1379014432 and http://www2.worksafebc.com/pdfs/ergonomics/MSI_worksheet_B_fillable.pdf?_ga=1.149796342.1138311406.1379014432.*
PSA2.5		**The physical environment meets the needs of staff.**
PSA2.5.4	**M**	Storage and consumption of food and beverages is permitted in designated areas only.
PSA2.6		**Sinks and eyewashes are available to staff.**
PSA2.6.1	**M**	There are clearly labeled hand washing sinks. *Intent: Sinks used for soiled equipment should be deemed "dirty" and not used for hand washing.*
PSA2.6.2	**M**	Hand washing sinks have unimpeded drainage (e.g. not stoppers).
PSA2.6.4	**M**	Eyewash stations are conveniently located and regularly flushed, when appropriate. *Guidance: Consult with WorkSafeBC to determine the type of eyewash station required based upon the chemicals used in the diagnostic service.*
PSA2.7		**Lighting, temperature and ventilation is appropriate.**
PSA2.7.1	**M**	Lighting provides sufficient illumination for safe working.
PSA2.7.2	**M**	Emergency lighting is available in the event of power failure. *Guidance: Emergency lighting units must be tested regularly.*

Patient safety

Introduction

Patient safety is fundamental to the delivery of quality diagnostic services and optimal patient outcomes. A priority for all diagnostic services is to ensure that procedures are safe and a continuous effort is made to improve patient safety. Appropriate and sufficient resources should be allocated to support the diagnostic service's implementation of the patient safety priorities or goals.

Creating a culture of patient safety

No.	Description
PPS1.0	**THE DIAGNOSTIC SERVICE CREATES A CULTURE OF PATIENT SAFETY AND MAKES PATIENT SAFETY A PRIORITY.**
PPS1.1	**The activities of the diagnostic service ensure patient safety.**
PPS1.1.4	**M** Mechanisms are in place to address patient sensitivities and allergies. *Guidance: At a minimum, latex-free products are made available for both patients and staff (e.g. gloves, mouthpieces).*

Patient identification

No.	Description
PPS2.0	**POSITIVE PATIENT IDENTIFICATION PRECEDES COMMENCEMENT OF THE TEST OR PROCEDURE.**
PPS2.1	**Patient identification is confirmed prior to a patient's test or procedure by the individual(s) performing the test or procedure.**
PPS2.1.3	**M** At least two unique patient identifiers are used when verifying patient identification.
PPS2.1.8	**M** Pediatric and other patients who cannot provide identification information are identified by a responsible adult.
PPS2.1.9	**M** Patient identity information discrepancies are resolved prior to performing the test.

Medication management and administration

No.	Description
PPS3.0	**THE DIAGNOSTIC SERVICE HAS METHODS IN PLACE TO ENSURE THAT MEDICATION IS MANAGED AND ADMINISTERED TO PATIENTS SAFELY AND EFFECTIVELY.**
PPS3.1	**Medications are stored and disposed of safely.**
PPS3.1.1	**M** Storage of medications complies with manufacturer's recommendations.
PPS3.1.2	**M** All stored medications are labeled with the contents, expiration date, and any warnings as applicable.
PPS3.1.4	**M** All medications are disposed of using appropriate facility accepted disposal methods.

Risk and disclosure

No.	Description
PPS4.0	**ADVERSE EVENTS AND CRITICAL INCIDENTS, INCLUDING NEAR MISSES ARE MANAGED APPROPRIATELY.**
PPS4.1	**There are policies, procedures and practices for managing adverse events and critical incidents.**
PPS4.1.3	**M** All adverse events and critical incidents are documented.
PPS4.1.4	**M** Policies and procedures for reporting, investigating and making recommendations following a near miss are documented and available to staff.

Medical emergency management

No.	Description
PPS5.0	**THE DIAGNOSTIC SERVICE HAS PROCEDURES IN PLACE TO HANDLE MEDICAL EMERGENCIES.**
PPS5.1	**There are procedures to handle medical emergencies in a timely and effective manner.**
PPS5.1.1	**M** There is a medical emergency response procedure in place.
PPS5.1.2	**M** Staff are familiar with the procedure(s) for responding to medical emergencies.

No.		Description
PPS5.1.3	**M**	Emergency call systems are available in patient care areas. *Guidance: Facilities should conduct a risk assessment to determine what emergency call systems are required (e.g. patient washrooms, changing rooms, etc.).*
		Staff know how to access:
PPS5.1.4	**M**	• emergency medical services
PPS5.1.5	**M**	• emergency equipment and supplies
PPS5.1.6	**M**	The facility identifies staff who respond to medical emergencies and provides training in the use of emergency equipment.

Infection prevention and control

Introduction

Facilities establish infection prevention and control activities and precautions to help reduce the possibility of acquiring and transmitting an infection. The type and scope of the activities and precautions are influenced by the size of the facility, the resources available, the services provided, and the patients served.

Planning

No.	Description
PIPC1.0	**PLANNING FOR INFECTION PREVENTION AND CONTROL IS EFFECTIVE, INTEGRATED AND COORDINATED.**
PIPC1.1	**An infection prevention and control plan is developed and implemented.**
PIPC1.1.1	**M** There are documented policies and procedures for infection prevention and control (e.g. an infection control manual).

Routine practices

No.	Description
PIPC2.0	**ROUTINE PRACTICES FOR PREVENTING THE TRANSMISSION OF INFECTION ARE IMPLEMENTED.** *Guidance: The term "routine practices" (or "standard precautions") is used to describe a system to prevent transmission of infections in health-care settings. These practices are to be used at all times, with all patients regardless of diagnosis or infectious status.*
PIPC2.1	**Hand hygiene is used to prevent and control the spread of infection.** *Intent: Hand hygiene is the single most important activity for preventing the transmission of infections.*
PIPC2.1.1	**M** There are readily-accessible designated hand hygiene sinks or other forms of hand hygiene products.
PIPC3.0	**PERSONAL PROTECTIVE EQUIPMENT (PPE) IS WORN BY STAFF AS A BARRIER AGAINST BLOOD AND BODY FLUID EXPOSURE.** *Guidance: See also General Safety Accreditation Standards.*

No.	Description
PIPC3.3	**The diagnostic service has a process for the assessment and use of a N95 respirator/mask.** *See also Information Management (PIM7.3) accreditation standards.*
PIPC3.3.1	**M** A risk assessment is conducted to determine if and when the use of N95 respirators/masks for staff is necessary. *Intent: An N95 respirator/mask helps protect staff from respiratory pathogens that are transmitted via the airborne route. Staff must use N95 respirators/masks if they may be exposed to an airborne infection that is listed in the WorkSafeBC Regulations and a risk assessment has indicated that this infection poses a potential hazard. It is recommended that the diagnostic service consults with Occupational Health and Safety (OH&S) and infection control resources regarding conducting the risk assessment.*

Additional precautions

No.	Description
PIPC4.0	**PATIENTS, STAFF AND VISITORS ARE PROTECTED FROM POTENTIAL OR KNOWN COMMUNICABLE DISEASES.**
PIPC4.1	**Additional precautions are used for patients with known or suspected communicable diseases.** *Intent: Additional infection prevention and control precautions are necessary for specific pathogens or clinical presentations. Professional knowledge, skills and judgment are used to assess the potential routes of transmission and the appropriate additional precautions to be taken (e.g. contact, droplet or airborne precautions).*
PIPC4.1.1	**M** Patients with known or potential communicable diseases are identified. *Guidance: Known or suspected communicable diseases may be identified in many ways e.g. asking the patient, notation on the requisition, or noted in the information system. It is not necessary to wait for a specific diagnosis or microbiologic confirmation before initiating appropriate precautions when patient assessment clearly indicates a clinical syndrome or risk factors related to a potentially communicable disease. For the patient who has, or is suspected of, having a disease requiring additional precautions it is important to institute these precautions immediately. They may be instituted by any health-care provider as soon as the communicable disease, clinical presentation, or risk factors are suspected or identified.*
PIPC4.1.2	**M** For patients with a known or potential communicable disease, appropriate staff are notified of additional precautions required.

No.		Description
PIPC4.1.5	**M**	N95 respirators/masks are available for all staff who enter the procedure room if there is a known, or suspected airborne infection. *Guidance: Airborne transmission refers to transmission of infection by inhaling aerosols e.g. tuberculosis, measles, or chicken pox (varicella). This can occur when a patient coughs, sneezes, or talks. These infectious agents can be acquired by susceptible individuals who may be at some distance away from the source patient.*

PIPC5.0 BLOOD AND BODY FLUID EXPOSURE PRECAUTIONS ARE USED TO SAFEGUARD STAFF.

PIPC5.1		**There is a defined follow-up process that addresses possible or actual blood and body fluid exposure.**
PIPC5.1.1	**M**	There are documented policies and procedures for follow-up to blood and body fluid exposure.
PIPC5.2		**Safe and effective practices are followed for the use and disposal of sharps.**
PIPC5.2.1	**M**	Safety engineered sharps or devices that have built in safety mechanisms are used.
PIPC5.2.3	**M**	Used sharps are disposed of immediately in designated puncture resistant containers located in the immediate area where the sharp was used. *Guidance: In areas where sharps containers have not been mounted, portable sharps containers are used.*

Cleaning of surfaces and ancillary medical equipment

No.		Description

PIPC6.0 THE PHYSICAL ENVIRONMENT OF THE DIAGNOSTIC SERVICE IS CLEAN.

PIPC6.1		**Safe and effective cleaning of the physical environment is maintained.**
PIPC6.1.1	**M**	Policies and procedures are in place indicating the frequency and method of environmental cleaning and disinfection.
PIPC6.2		**The diagnostic service reduces the risk of infections associated with ancillary medical equipment.**
PIPC6.2.1		Routinely used patient testing equipment are cleaned or discarded between patients (e.g. blood pressure cuffs, stethoscope, tourniquets).
PIPC6.2.2	**M**	Single use medical devices are not reprocessed. *Intent: The reuse of single-use devices can affect their safety, performance, and effectiveness and expose patients and staff to unnecessary risk.*

Disinfection of ancillary medical equipment

A risk classification is given to medical devices that present a high risk of infection if contaminated by any microorganism. For purposes of these standards the risk classification of reusable medical equipment will be addressed and for the diagnostic service this specifically covers mouthpieces, cardiopulmonary exercise equipment and spacers for bronchodilator administration.

No.		Description
PIPC7.0		**THERE IS A SAFE AND EFFECTIVE PROCESS FOR DISINFECTION OF MEDICAL DEVICES.**
PIPC7.1		**Standardized disinfection practices for the decontamination of reusable medical devices are implemented.**
PIPC7.1.1	**M**	There is a designated storage area for soiled equipment that is distinct from patient testing area.
PIPC7.1.2	**M**	Cleaning of the medical equipment is performed in a distinctly separate area from where disinfected/sterile medical equipment are handled or stored.[2]
PIPC7.1.3	**M**	Transport of soiled medical equipment is performed in a closed container or bag.
PIPC7.1.4	**M**	Disinfection of medical equipment is performed following manufacturer's recommendation (e.g. reusable mouthpieces are disinfected via pasteurization process).

Information management

Information management processes may be basic or complex, depending on the information system used Information systems can be paper-based; fully electronic or a combination of the two. Operational and clinical information must be accurately generated by the laboratory to ensure staff and clients have access to necessary and appropriate information.

Planning

No.		Description
PIM3.0		**THERE ARE PROCESSES TO ENSURE THE AVAILABILITY OF INFORMATION.**
PIM3.1		**The diagnostic service is prepared for events that could impact the availability of information.**
PIM3.1.1	**M**	There is a documented disaster recovery plan and associated risk assessment for recovery and access to data.
PIM3.1.3	**M**	For computerized information systems, database and diagnostic test data backup is performed daily and the backup is securely located in a separate physical location.
PIM3.1.4	**M**	Data stored on-site and off-site is accessible, but protected from unauthorized access and safeguarded against harm (e.g. water, fire, etc.).
PIM3.2		**Downtime procedures are available and communicated to staff.** *Intent: Downtime procedures are required for both scheduled and unscheduled system downtime.*
PIM3.2.2	**M**	Users know how to contact support staff in the event of system and/or equipment malfunction.

Confidentiality

No.		Description
PIM4.0		**PATIENT CONFIDENTIALITY AND INFORMATION IS PROTECTED THROUGH POLICIES AND PROCEDURES.**
PIM4.1		**Data access is restricted, controlled and monitored.**
PIM4.1.1	**M**	Policies are in place that specify the level of access that is permitted for each category of staff, including information recorded in patient files from other service areas in the organization. *Intent: Personal information is accessed only by those who are engaged in the primary purpose for which the information was captured.*

No.		Description
PIM4.1.2	**M**	Authorized staff maintain user access and restriction controls.
PIM4.1.4	**M**	There is a policy that addresses how to handle unauthorized access.
PIM4.1.5	**M**	For computer-based systems there is a policy for password confidentiality and use.
PIM4.1.6	**M**	Generic login accounts are not used.
PIM4.1.7	**M**	There is a procedure to remove patient identifiers from test data and reports prior to secondary use (e.g. records used for research or teaching purposes). *Guidance: This procedure includes the removal of embedded or "burned-in" patient demographics.*
PIM4.2		**The service has policies for the release or destruction of data.**
PIM4.2.1	**M**	There is a policy for the use and disclosure of personal information. *Intent: The policy must include the release of information to patients, family, other service areas, other organizations, for research or education purposes or legal reasons.*
PIM4.2.2	**M**	There is a policy that identifies how personal information is distributed (e.g. email, facsimile, web-based technology).
PIM4.2.3		Personal information that is subject to restricted access is identified.
PIM4.2.4	**M**	Confidential data is destroyed appropriately.
PIM4.2.5	**M**	Education is provided to users of information systems to ensure the confidentiality of data. *Guidance: The education includes information on the release of patient information, legal responsibilities regarding confidentiality, the possible consequences of breeching confidentiality, and reporting, documenting and investigating security incidents.*

Medical records

No.		Description
PIM5.0		**THE DIAGNOSTIC SERVICE MAINTAINS COMPLETE AND ACCURATE MEDICAL RECORDS.** *See also Global Accreditation Standard (GP4.0) and the Pulmonary Function modality-specific accreditation standards.*
PIM5.1		**The medical record includes accurate patient identification information.**
PIM5.1.1	**M**	The facility uniquely identifies the patient and tests performed. *Guidance: There is a system for uniquely identifying patients and records used from the time the patient presents through all stages of the test. The facility ensures that correct patient identification is maintained on all records, including reports. Every patient has a unique facility-issued patient identifying number and each test is uniquely associated to that patient.*

No.	Description
PIM5.1.2	**M** The patient name, patient identifying number and facility name are clearly identified on the file/patient medical record.

Retention of documents and records

No.	Description
PIM7.0	**THE DIAGNOSTIC SERVICE RETAINS DOCUMENTS AND RECORDS.**
PIM7.1	**Retention times for diagnostic reports complies with the service's policy or provincial requirements (e.g. BC *Limitation Act*), whichever is longer.**
PIM7.1.1	**M** Medical records are stored according to British Columbia's revised *Limitation Act* (2013). *Guidance: The medical record comprises all the clinical data and information related to the patient's diagnostic procedure. The medical record contains all relevant documents for testing including, but not limited to: the request, hard copy or electronic worksheets and reports. Facilities and medical leaders establishing retention times outside of the requirements of the Limitation Act should seek and act according to expert legal advice on this matter.*

Equipment and supplies

Introduction

Manufacturers of equipment will provide installation, verification and maintenance requirements that must be followed to ensure adequate equipment functionality.

Equipment operation

No.	Description	
PES1.0	**EQUIPMENT IS SAFELY OPERATED, MAINTAINED AND MONITORED IN A MANNER THAT ENSURES PERFORMANCE SPECIFICATIONS ARE MET.**	
PES1.1	**There is a current inventory for all equipment used in the diagnostic chain that includes:**	
PES1.1.1	**M**	• name of item
PES1.1.4	**M**	• date of installation
PES1.1.6	**M**	• acceptance testing
PES1.1.7	**M**	• quality control records
PES1.2	**Diagnostic equipment is appropriately operated.**	
PES1.2.1	**M**	An orientation and training program is provided for all equipment to ensure safe, consistent, and accurate operation.
PES1.2.4	**M**	Equipment operators have access to the manufacturer's operator manual for the specific equipment used in the facility.[3]
PES1.2.5	**M**	All equipment is located and stored in a safe and secure location.
PES1.3	**The diagnostic service investigates and resolves problems involving all equipment.**	
PES1.3.2	**M**	There is a list of service staff and their contact information.

Equipment testing and quality assurance

No.	Description
PES2.0	**EQUIPMENT TESTING IS PERFORMED PRIOR TO CLINICAL USE.**

No.		Description
PES2.1		**Acceptance testing is performed after purchase and prior to clinical use of equipment.**
PES2.1.1	**M**	New, replaced, or relocated equipment has acceptance testing performed prior to clinical use.
PES2.1.2	**M**	The tester is independent of the manufacturer.[4]
PES2.1.4	**M**	Acceptance testing records are available for review.
		Acceptance testing of diagnostic equipment includes:
PES2.1.5	**M**	• an initial inspection of the system and any ancillary equipment
PES2.1.6	**M**	• an inspection of documentation
PES2.1.7	**M**	• biological controls have 10 tests performed to ensure accuracy and repeatability
PES2.1.9	**M**	• a defined procedure to notify interpreting staff if a systematic bias has been identified
PES2.1.10	**M**	• a review of the test data by the medical leader prior to clinical use

Calibrations/verification

No.		Description
PES4.0		**CALIBRATIONS/VERIFICATIONS ARE USED TO ENSURE THAT QUALITY CONTROL (QC) TESTING OF PULMONARY FUNCTION EQUIPMENT IS ACHIEVED.**
PES4.1		**Calibration/verifications is performed on pulmonary function equipment to ensure equipment is ready for patient testing.**
PES4.1.3	**M**	Calibrations/verifications are performed daily or prior to patient testing.
PES4.1.5	**M**	A certified 3 L syringe is used for calibration/verification. *Intent: 3 L syringes are replaced as per manufacturer's recommendation.*
PES4.1.6	**M**	A leak test is periodically performed on 3 L syringe(s).
PES4.1.7	**M**	Calibration/verification is performed with a filter in line, if filters are used during patient testing.
PES4.1.8	**M**	Lung volume testing equipment is calibrated if the temperature change is greater than 2 Celsius.
PES4.1.9	**M**	Documentation for calibrations/verifications is available for review.
PES4.1.10	**M**	The flowrate for delivering an aerosol via a nebulizer size has been determined.[5]

Biological controls

No.	Description
PES5.0	**BIOLOGICAL CONTROLS ARE USED ENSURE QUALITY CONTROL (QC) TESTING OF PULMONARY FUNCTION EQUIPMENT IS ACHIEVED.**
PES5.1	**Biological controls are used to ensure pulmonary function equipment to ensure equipment is ready for patient testing.**
PES5.1.1	**M** QC policies and procedures for biologic controls are documented and maintained.
PES5.1.2	**M** Biologic controls are used to asses and maintain equipment function.
PES5.1.3	**M** Biological controls have normal and repeatable lung function test results (e.g. no asthma or other respiratory problems).
PES5.1.5	**M** QC testing uses the same procedures as applied to the patient population.
PES5.1.6	**M** Biological control measurements meet all criteria for acceptability and repeatability.
PES5.1.8	**M** Documentation for calibrations is available for review.
PES5.2	**Biological control data is managed to ensure quality control for pulmonary function equipment.**
PES5.2.3	**M** Roles and responsibilities for QC are well defined and include the medical leader.
PES5.2.4	**M** When QC problems are identified, corrective actions are taken to determine cause(s) (e.g. QC results that fall outside acceptable criteria).
PES5.2.5	**M** Procedures are in place for the appropriate handling of patients while QC problems are investigated.
PES5.2.6	**M** Biological control measurements meet all criteria for acceptability and repeatability.

Biological references

No.	Description
PES6.0	**BIOLOGICAL REFERENCES ARE ESTABLISHED FOR THE POPULATION THE DIAGNOSTIC SERVICE SERVES.**
PES6.1	**Biological references are established to ensure accurate test results for interpretation.**
PES6.1.1	**M** A list of biological references used is defined and documented.

No.	Description
PES6.1.2	**M** The biological references reflect the patient population it serves.
PES6.1.3	**M** The limitations for the biological references are communicated to all staff. *Guidance: Biological references may include a specific age range, gender and ethnic population.*
PES6.1.4	**M** The list of biological references used is reviewed by the medical leader. *Guidance: Refer to Global Pulmonary Function Accreditation Standards GP 3.1.1.*

Solutions and supplies

No.	Description
PES7.0	**SOLUTIONS AND SUPPLIES ARE MONITORED IN A WAY THAT REDUCES OR ELIMINATES SHORTAGES AND WASTE.**
PES7.1	**The storage and monitoring of solutions and supplies ensures an effective inventory control system.**
PES7.1.1	**M** Storage complies with manufacturer's recommendations.

Global pulmonary function

The global accreditation standards are to be used in conjunction with the category specific accreditation standards.

Test requests

No.	Description	
GP1.0	**TEST REQUESTS ARE STANDARDIZED AND ENSURE THAT ACCURATE, COMPREHENSIVE AND APPROPRIATE INFORMATION IS RELAYED.** *Guidance: Requests are to be completed for all diagnostic tests. Requests may be verbal, written (requisitions) or electronic.*	
GP1.3	**Requests contain accurate and appropriate information that includes:**	
GP1.3.1	**M**	• the patient's first and last name
GP1.3.2	**M**	• a unique personal identifier number such as provincial health number (PHN) or facility-issued identifier number
GP1.3.3	**M**	• date of birth
GP1.3.4	**M**	• gender
GP1.3.5	**M**	• name and contact information of authorized individual *Intent: If an urgent/stat report is required the authorized individual's contact information is provided.*
GP1.3.6	**M**	• clear indication of the authorized individual
GP1.3.7	**M**	• name(s) of any other individual who is to receive a copy of the report
GP1.3.8	**M**	• test type(s) and any specific instructions
GP1.3.9	**M**	• pertinent clinical information including indications, history, and provisional diagnosis *Intent: The clinical information is sufficient to ensure the appropriate test is performed. Provisional diagnosis is provided when applicable to assist in determining the most appropriate diagnostic test.*
GP1.3.10	**M**	• the date the request is received
GP1.3.11	**M**	• indication of urgency *Intent: There is an effective system in place to ensure patient prioritization. For emergent patient prioritization cases the urgency is indicated on the request either by the authorized individual and/or by the diagnostic physician or designate.*

Patient preparation

No.		Description
GP2.0		**PATIENTS ARE APPROPRIATELY PREPARED FOR THE TEST BEING PERFORMED.**
GP2.2		**Pre-test information is collected and assessed prior to commencing the test.**
GP2.2.1	**M**	There are processes in place to ensure that patients have followed the preparation instructions and to address situations where patients are inappropriately prepared.
GP2.2.4	**M**	Patients are assessed for contraindications to the procedure or other exclusion criteria. *Guidance: When required, the technologist should consult with the physician, nursing staff and/or care giver concerning the patient's condition and any limitations.*

Medical record

No.		Description
GP4.0		**THE MEDICAL RECORD IS CURRENT, ACCURATE AND CONTAINS RELEVANT TEST DETAILS.**
GP4.1		**Tests are labeled in a standardized way that allows for proper patient identification that include:**
GP4.1.1	**M**	• patient's first and last name
GP4.1.2	**M**	• second patient identifier (e.g. identifying number or date of birth)
GP4.1.3	**M**	• facility name
GP4.1.4	**M**	• date and time of test
GP4.2		**Comprehensive test details are recorded in the medical record that includes:** *Intent: Test details may be recorded electronically or on written requisitions/worksheets. All details are made available to the interpreting physician.*
GP4.2.1	**M**	• the paper or electronic patient requisition

Interpretation and reports

No.		Description
GP5.0		**DIAGNOSTIC REPORTS ARE IN A STANDARDIZED FORMAT THAT PROVIDES COMPREHENSIVE AND NECESSARY INFORMATION FOR CLINICAL DECISION-MAKING.**
GP5.1		**Reports are comprehensive and include appropriate patient and relevant clinical information.**
		Reports include the following information:
GP5.1.1	**M**	• the patient's first and last name
GP5.1.2	**M**	• a unique personal identifier number such as MRN, PHN or facility-issued identifier number
GP5.1.3	**M**	• date of birth
GP5.1.4	**M**	• height
GP5.1.5	**M**	• weight (or BMI)
GP5.1.6	**M**	• race
GP5.1.7	**M**	• reference values
GP5.1.8	**M**	• gender
GP5.1.9	**M**	• facility name
GP5.1.10	**M**	• test(s) performed
GP5.1.11	**M**	• clinical indication for the test
GP5.1.12	**M**	• name of authorized individual requesting test
GP5.1.13	**M**	• the individual performing the test (e.g. name or unique identifier)
GP5.1.14	**M**	• report recipient(s)
GP5.1.15	**M**	• date of the test
GP5.1.17	**M**	• date of interpretation (e.g. dictation and/or transcription) *Intent: Having both dates may be useful to some facilities when determining report turnaround times.*
GP5.1.18	**M**	• report status (e.g. preliminary or final)
GP5.1.19	**M**	• multiple page reports include patient identifiers on each sequentially numbered page

Reporting processes

No.	Description
GP6.0	**EFFECTIVE COMMUNICATION MINIMIZES THE RISKS OF BOTH REPORTING AND PATIENT MANAGEMENT ERRORS.** *Intent: Effective communication is tailored to satisfy the need for timeliness, support the role of a diagnostic physician and minimize the risk of communication errors. The authorized individual or relevant health-care provider shares in the responsibility for obtaining results of diagnostic tests he or she has requested.*
GP6.2	**Urgent and other non-routine test findings are effectively communicated.** *Intent: Routine reporting of test findings is communicated through the usual channels established by the hospital or the diagnostic service. However, in urgent or other non-routine clinical situations, the interpreting physician expedites the delivery of a diagnostic report (preliminary or final) in a manner that ensures timely receipt of the findings. Documentation of this communication is extremely important because clinical care errors may relate to flaws in the chain of communication.*
GP6.2.1	**M** There is a written procedure on communication of urgent and other non-routine tests findings (e.g. critical findings/results). *Intent: A diagnostic service's policy on communication can be an effective tool to promote patient care. The policy can provide guidance on the types of communications that are most critical, the individuals responsible for receiving communications and the methods of communication that are most appropriate.*

Pulmonary function

Introduction

In addition to the global accreditation standards, these specific accreditation standards for pulmonary function provide additional mandatory requirements and best practices for accreditation.

Patient preparation

No.		Description
PF1.0		**PATIENTS ARE PREPARED FOR THE TEST BEING PERFORMED.** *See also Global Accreditation Standards GP 2.0.*
PF1.1		**Pre-testing information is collected and assessed prior to commencing the test.**
PF1.1.4	**M**	Procedures are in place for patients that are on supplemental oxygen. *Guidance: Patients on supplemental oxygen have access to an alternative source of supplemental oxygen in order to conserve their tank.*

Spirometry

No.		Description
PF2.0		**SPIROMETRY TESTS ARE STANDARDIZED AND RECORDED IN A MANNER TO ENSURE ACCURATE RESULTS FOR INTERPRETATION.**
PF2.1		**Procedures for spirometry testing follow current standards and best practices.**
PF2.1.4	**M**	Exclusion criteria for spirometry testing is established and includes but is not limited to patients with cardiac instability. *Guidance: For more information on exclusion criteria refer to Global Pulmonary Function Accreditation Standards GP 2.2.4 and GP 3.4.7.*
PF2.2		**Equipment requirements for spirometry follow current standards and best practices.**
		Spirometry equipment is capable of:
PF2.2.1	M	• graphical displays for flow versus volume data
PF2.2.2	M	• graphical displays for volume versus time data

No.	Description	
PF2.6	**Procedures for bronchodilator administration follow current standards and best practices.** *See also Patient Safety Accreditation Standards PPS3.0: Medication Management and Administration.*	
	There is a defined procedure to administer bronchodilators that includes:	
PF2.6.1	**M**	• dosage
PF2.6.2	**M**	• means of delivery (MDI or nebulizer – including flowrate)
PF2.6.3	**M**	• repeat administration
PF2.6.4	**M**	• time period for post bronchodilator testing *Intent: Spirometry testing is not performed until 15 minutes after bronchodilator administration.*
PF2.6.5	**M**	A spacer is used in conjunction with a MDI (meter dose inhaler).

Pulse oximetry

No.	Description	
PF9.0	**PULSE OXIMETRY TESTING IS CONDUCTED IN A WAY THAT ENSURES THE COLLECTION OF ACCURATE DATA FOR INTERPRETATION.**	
PF9.2	**Overnight oximetry tests are conducted and recorded in a manner that ensures accurate results.**	
PF9.2.5	**M**	There is a process to ensure the battery will last for the duration of the test. *Intent: This is done to ensure that oximetry testing is not compromised by dead batteries.*

Six-minute walk test (6MWT)

No.	Description
PF10.0	**SIX MINUTE WALK TESTS (6MWT) ARE CONDUCTED IN A WAY THAT ENSURES THE COLLECTION OF ACCURATE DATA FOR INTERPRETATION.** *A 6MW test is different than a walking oximetry test (refer to Pulmonary Function Accreditation Standards PF11.0). The function of a 6MW test may be to assess exercise tolerance and therapy in chronic conditions (e.g. pulmonary hypertension). The goal of this test is to measure the total distance that an individual is able to walk in a six minute period of time.*
PF10.1	**6MWT are conducted in a manner that ensures accurate results.**
PF10.1.1	**M** Testing follows standardized protocols.

Glossary

Preamble

This glossary has been adapted from one provided by the International Society for Quality in Health Care (ISQua). Some of ISQua's definitions have been altered to better reflect the needs of diagnostic facilities in British Columbia. Some definitions have been imported from the Institute of Medicine and the Clinical Laboratory Standards Institute.

adverse events Can be defined in three ways:

- an unexpected and undesired incident directly associated with the care or services provided to the patient
- an incident that occurs during the process of providing health care and results in patient injury or death
- an adverse outcome for a patient, including injury or complication

critical incident An incident resulting in serious harm to the patient, or the significant risk thereof. Incidents are considered critical when there is an evident need for immediate investigation and response. The investigation is designed to identify contributing factors and the response includes action to reduce the likelihood of recurrence.

Medical Device Regulations Medical Device Regulations encompass all other safety considerations and the question of efficacy for **all medical equipment** sold in Canada. It is the responsibility of the manufacturer or distributor to ensure that the equipment conforms to the requirements of these regulations. Evidence of compliance includes an active Health Canada medical device licensing number.[vi]

near miss An incident that did not result in injury, illness or damage but had the potential to do so.

safety testing A process to verify compliance with the performance specifications of the equipment as written in the purchase contract. It also verifies that the equipment performance meets the manufacturer's specifications and complies with federal and provincial or territorial regulations.

Safety testing is to be performed prior to any clinical use of the equipment and performed by an individual with in-depth knowledge of the particular type of equipment and the relevant regulations. This individual is to be independent of the manufacturer.

References

[1] WorkSafe BC, OH&S Regulations, Part 5, Chemical Agents and Biological Agents, 5.20 Containers and Storage. Retrievable from: http://www2.worksafebc.com/Publications/OHSRegulation/Part5.asp#SectionNumber:5.20

[2] Patient Safety Branch – Ministry of Health. Best Practice Guidelines for Cleaning, Disinfection and Sterilization in Health Authorities. March 2007. p.47.

[3] Health Canada Safety Code 35. Radiation Protection in Radiology—Large Facilities. Safety Procedures for the Installation, Use and Control of X-ray Equipment in Large Medical Radiological Facilities, Section A, 1.3.4, p.8

[4] Health Canada Safety Code 35. Radiation Protection in Radiology—Large Facilities. Safety Procedures for the Installation, Use and Control of X-ray Equipment in Large Medical Radiological Facilities, Section B, 2.2.4, p.23

[5] American Journal of Respiratory and Critical Care Medicine. Guidelines for Methacholine and Exercise Challenge Testing. 2000. Vol161, p.315.

[vi] Health Canada. Medical Devices Active License Listing (MDALL). Retrievable from: http://www.hc-sc.gc.ca/dhp-mps/md-im/licen/mdlic-eng.php