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Revised Alberta Pulmonary Function Accreditation Standards

CACPT PFT Symposium 2018

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Overview

- Basis for accreditation decisions
- Compiled by CPSA and stakeholder experts
- Align with Quality System Essentials
- Consistent with language, terms, organization, and requirements of current version of ISO quality management document

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Overview

- Patient / staff risk assessment measure for every standard
- Compliance stratification model
- Evidence based - individually referenced

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Overview

- A review of accreditation standards occurs on an ongoing basis, considering and incorporating stakeholder feedback.
- Comprehensive formal review occurs on an annual basis.

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Format & Structure

#	Standard	Reference	Assessment of Compliance
PF.7.3	**Examination – Spirometry**		
PF.7.3.2 **PS**	Spirometry examinations are appropriately conducted and reflect current best practice.	ATS[1] – Chapter 6 ATS[2] ATS[4] CPSO[1] – Chapter 19, 20 Ruppel[1] – Chapter 2	Are spirometry examination protocols in compliance with accepted best practice? Are there exclusion criteria for spirometry testing that includes, but not limited to, patients with cardiac instability? Does the interpretation for spirometry results include : • reference equations for individuals ≥ 19 years of age, with the lower limit of normal (i.e. lower 5% interval) reported? • prediction equations for individuals < 19 years of age, with the lower limit of normal (i.e. lower 5% interval) reported? • ethnicity correction at the discretion of the medical director and notification on the PFT report if applied as a reference set for an individual's spirometry? Do the parameters to evaluate spirometry values include at a minimum: • forced vital capacity (FVC)? • forced expiratory volume in the first second (FEV_1)? • forced expiratory volume in the first second to forced vital capacity ratio (FEV_1 /FVC)? • peak expiratory flow (PEF)? Is there a procedure for patients on supplemental oxygen?
			C ☐ P ☐ E ☐ N ☐ N/A ☐
			Observation:

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Compliance Categorization

- College Accreditation Compliance Categories "CPEN":
  - C - meets intent and requirements of standard
  - P - in progress (working towards meeting intent and requirements of standard; assessor notes evidence of progress towards full compliance)
  - E - exceeds requirements of standard
  - N - does not meet intent and / or requirements of standard

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Quality Management

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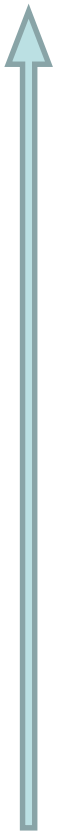
Stages of Quality



Stage	Activities Performed
Total Quality Management	Management approach centered on sustained high quality, focus on long-term success through customer satisfaction
Quality Cost Management	Measurement system for the economic aspects of the ‘cost of quality’
Quality Management System	**Systemic process-oriented approach to meeting quality objectives**
Quality Assurance	Planned and systematic activities to provide confidence that an organization fulfills requirements for quality
Quality Control	Operational process control techniques to fulfill quality requirements for regulatory compliance and accreditation

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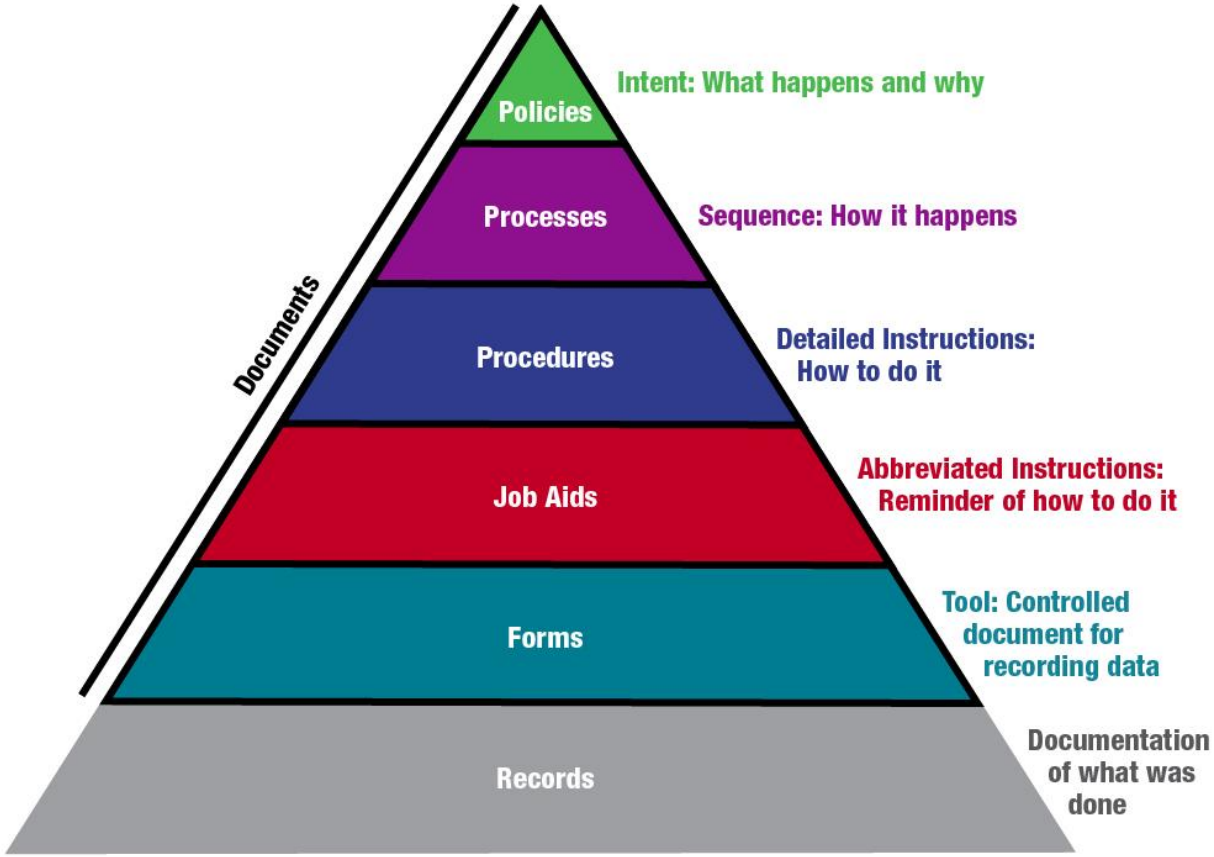
QMS Documents and Records



*Adapted from the World Health Organization's *Supplement to the Laboratory Quality Management System Training Toolkit*, Module 16 - Documents and Records. Quality Manual, version 2013; pg. 31. http://www.who.int/ihr/training/laboratory_quality/Quality_Manual_template.doc.

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Organization of the Standards

- Standards sections:
  - PF.1.0 Organization, Management & Personnel
  - PF.2.0 Quality Management System (QMS)
  - PF.3.0 Physical Facilities
  - PF.4.0 Equipment, Consumables and Supplies (ECS)
  - PF.5.0 Information Systems (IS)

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Organization of the Standards

- Standards sections:
  - PF.6.0 Pre-Examination Policies, Processes & Procedures
  - PF.7.0 Examination Policies, Processes & Procedures
  - PF.8.0 Quality Assurance of Examinations
  - PF.9.0 Post-Examination Policies, Processes & Documented Procedures

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Organization of the Standards

- Standards sections:
  - PF.10.0 Safety
  - PF.11.0 Infection Prevention & Control (IPC)

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Organization of the Standards

- Standards sections:
  - Terms and Definitions:
  - References:
  - Appendix A: Requirements for Alberta Pulmonary Function Laboratories

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Provincial Requirements

- Lab Classification
  - Level I
  - Level II
  - Level III
  - Level IV

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Transitional Provisions

- Individuals approved as a Medical Director of a level III laboratory as of December 1, 2017 may continue to do so;
  - The approval is restricted to labs they currently direct.
  - If the lab adds examinations, services or locations the Medical Director must meet the requirements of the current standards.

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Provincial Requirements

- The personnel qualifications for technical staff have not changed for the previous version of the standard
  - All technical staff shall have up-to-date Health Care Provider level certified CPR.
  - Procedures shall be in place to ensure that staff are adequately trained.
  - All personnel in the facility shall have a job description.

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Provincial Requirements

- The personnel qualifications for technical staff have not changed for the previous version of the standard
  - Regular feedback shall be given to staff and this shall be documented at least annually.
  - All technical staff should participate in continuing education.
  - Technical personnel who have not been actively working in a pulmonary function laboratory for 3 years shall upgrade their training as seems appropriate to the Medical Director.

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Provincial Requirements

- A.2.3.3 Specific Level III and IV Competencies
  - Refer to standard PF.1.2.11
  - If the laboratory performs arterial blood gases, non-specific inhalation challenge or exercise testing, documented evidence that the technical staff have been certified by the Medical Director or their designate on an annual basis are required.

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Standard Reference Equations

Spirometry

Individuals ≥ 19 years of age	Individuals < 19 years of age
NHANES III (Hankinson, Odencrantz, and Fedan 1999) may be used, with the lower limit of normal (i.e. lower 5% interval) reported	Polgar reference equations (Polgar and Promadhat 1971) may be used, with the lower limit of normal (i.e. lower 5% interval) reported.
OR The Global Lung Initiative (GLI) reference equations (Quanjer et al. 2012) may be used for individuals 3-95 years of age, with the lower limit of normal (i.e. lower 5% interval) reported.	

Lung Volumes

Individuals ≥ 19 years of age	Individuals < 19 years of age
Gutierrez (Gutierrez et al. 2004) may be used for lung volumes, with the upper and lower limit of the 95% confidence interval reported	Polgar reference equations (Polgar and Promadhat 1971) may be used, with the upper and lower limit of the 95% confidence interval reported
The Global Lung Initiative Task Force is currently working on standardized references equations for lung volumes. Once these are published they will be acceptable as an alternative and, like the GLI spirometry reference equations, will, over time, become the required reference.	

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Standard Reference Equations

$D_{L,CO}$

Individuals ≥ 19 years of age	Individuals < 19 years of age
Gutierrez (Gutierrez et al. 2004) may be used for lung volumes, with the upper and lower limit of the 95% confidence interval reported	Polgar reference values (Polgar and Promadhat 1971) may be used, with the upper and lower limit of the 95% confidence interval reported
The Global Lung Initiative TL,CO Task Force is currently working on standardized references equations for TL,CO ($D_{L,CO}$); publication of these is anticipated by the end of 2017. Once these are published they will be acceptable as an alternative and, like the GLI spirometry reference equations, will, over time, become the required reference.	

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Questions