Quality Improvement Plan

Audience
All personnel in the Pulmonary Laboratories: Pulmonary Function Clinic and Bronchoscopy Service.

Purpose
To summarize the Pulmonary Laboratories Quality Improvement Plan (QI), specifying goals and objectives of the program.

Scope
The Pulmonary Laboratories QI program is structured to systemically monitor and evaluate the quality and appropriateness of the laboratories contribution to improving patient care. Quality Management activities also include evaluation and/or monitoring of compliance with patient safety goals identified by accrediting agencies. Compliance with federal, state, and local laws and regulations is ensured with adherence to the UT System and institutional internal control process including periodic compliance risk assessments by the Office of Institutional Compliance. Policies and procedures are reviewed annually to ensure continued compliance with applicable laws and regulations. All departmental personnel are responsible for the application and outcomes of the quality improvement plans.

Scope of Care
All aspects of Pulmonary Function Lab’s care are integrated into the QI program and address all aspects of patient care and laboratory operations. The Pulmonary Diagnostic Laboratories provide trained personnel and support services for patients requiring diagnostic pulmonary function studies, bronchoscopies, pulmonary rehabilitation and other related diagnostic procedures for the diagnosis of various lung diseases.

Abbreviations & Definitions
- **CQI** – Continuous Quality Improvement.
- **Lab** – The combination of the Pulmonary Function Clinic and Bronchoscopy Service.
- **Practice Manager** – Refers to the practice manager of the Pulmonary Laboratories.
- **Medical Director** – Medical Director for the Pulmonary Laboratories.
- **QSE** – Quality System Essentials, which are universally accepted elements required to implement quality management.

Responsibility
The Medical Director of the Pulmonary Diagnostic Laboratories is responsible for the overall development and implementation of a CQI plan for the areas and is the ultimate authority for directing services.

Goals
The goals of the Pulmonary Diagnostic Laboratories QI program are as follows:
• To ensure high standards of laboratory and diagnostic medicine are practiced and achieved from all staff.
• Provide laboratory services of the highest quality to all patients in a timely and cost effective manner.
• Identify the important aspects of care and continually identify opportunities for improvement.
• Assure accurate laboratory testing.

Quality System Essentials

Organization – Management’s active participation in QI planning, leadership and conformance with regulatory requirements.
Personnel – Clearly defined job qualifications and job descriptions, documented processes for employee orientation, training, competency assessment, continuing education and performance appraisal.
Equipment – Documented processes for selection, use, installation, calibration, maintenance, troubleshooting, service and repair of equipment.
Purchasing and Inventory – Identification of critical supplies and services, desire quality, vendor evaluation, purchasing processes and inventory management.
Process Control – Identification and defining of critical operations and processes (process validation, quality control, proficiency testing, safety, availability of written procedure and policies).
Documents and Records – Defined formats and guidelines for document development, revision, distribution and management.
Occurrence Management – Defined process for reporting, detection, analysis, documentation and correction of problems.
Internal Assessment – Periodic evaluation of the QI plan and QSE, identification and monitoring of QI indicators, corrective actions implemented and report to hospital quality management.
Process Improvement – Use of FADE methodology for problem resolution.
Service and Satisfaction – Assess internal and external customer satisfaction with service and provide feedback.

QI Indicators The Pulmonary Laboratories will alternate reporting quarterly.

Selection of Indicators – Selected indicators must be measurable and should have one or more of the following characteristics:
• High Volume – the aspect of care occurs frequently or involves a large number of patients.
• Problem Prone – the aspect of care has produced problems in the past for patients and staff.
• Key indicators for 2014-2015 are: reporting critical values, reasons for not missing abgs, reasons for not performing lung volumes and DLCO, 2 patient identifiers, episodes of syncope or near syncope, reason for stopping 6 MWT and any injury in the lab. Each indicator will be
reviewed quarterly for evaluation of effectiveness and opportunities for improvement.

**Evaluation Criteria** – Criteria should reflect the best of current knowledge and current standards of service and practice. Each indicator has clinically valid criteria applied to it. Benchmarks for establishing criteria may be obtained from the laboratories databases and daily logbooks.

**Methodology and Analysis** – Methodology for data collection and analysis must be established prior to implementing a QI indicator.

- Data Sources – inpatient and outpatient.
- Sample Size – random sampling versus total data pool.
- Frequency – data collection and reporting. The frequency should be based upon the number of patients by the aspect of care being monitored, the risk involved to the patient, the volumes of data generated over a set interval and the intent to which the aspect of care consistently meets the criteria for acceptance.

**Follow-up** If the evaluation process identifies opportunities for improvement, corrective action will be implemented. The corrective action plan should include:

- Who or what is expected to change.
- Responsible party for implementation.
- Target dates for initiation and completion of action.

Outcome analysis is necessary to monitor effectiveness of corrective actions and overall performance. Effectiveness is determined by comparing performance outcomes. If outcomes demonstrates improvement and is sustainable, the indicator may be discontinued. If performance does not improve, corrective actions need to be re-evaluated and monitoring continued.

The Medical Director will review quarterly key indicators for appropriateness and effectiveness. He/she will also review the Quality Improvement Plan annually for effectiveness, necessary corrective actions, and whether indicators need to continue being evaluated or new indicators chosen.

**References**

*UTMB Performance Improvement Plan.*
*Department of Pathology’s Quality of Improvement Plan.*
*NCCLS GP26A, A Quality System Model for Health Care.*

This form documents the approval and history of the policies and procedures for the Pulmonary Function Laboratory. The Medical Director signs all policies verifying initial approval. Annually thereafter, the Director and/or designee may approve reviews and revisions.
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