Quality Management Plan

Audience All personnel in the Pulmonary Laboratories: Pulmonary Function Clinics.

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. A root cause analysis (RCA) or investigation will be instituted when a non-conforming event (NCE) occurs. See the RCA section below.

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.
Director – Refers to the Director 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.
Non-conforming event- events including problems such as errors and incidents that may interfere with patient care/client services.

Quality Assessment

Pulmonary Laboratory maintains Quality Assessment that includes the following:

1. QI/ QM Control Log (quarterly)
2. Quality Assessment Indicators (annual)
3. ABG Audit (quarterly)
4. HIPPA Audit (annual)
5. Safety Audit (annual)
6. Customer Survey (annual)
7. Ergonomic Evaluation (annual)

8. Fire Drills (annual)
9. Turn-Around-Time (quarterly)
10. PFT Meeting Minutes (quarterly)

Quality Assessment Indicators

The Pulmonary Laboratories will report quarterly in PFT Meetings. Medical Director and Technical Consultant will participate in review of QMS, provide education, update of ATS guidelines, and department planning. Evidence of Director involvement will be provided in the meeting minutes.

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 beginning in FY 2021 include:

Indicators	Target
1. Critical ABG values reported	100%, SD-2%
2. Missed MD contact by RT	0%
3. Missed two patient identifiers	0%
4. Adverse events or patient injuries	<3%
5. Missed ABGs	</= 10%, SD+2%
6. Complaints-Patient/Employee	0%
7. Turn Around Time (TAT)	</= 3 business days

QA will be collected quarterly and reported on monthly basis. Data will be stored for up to **two years** following discontinuation.

- QA indicators will begin to be monitored quarterly beginning in 2016. Data will be stored for up to **two years** following discontinuation.

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.

Evaluation The evaluation process identifies indicators meeting target, missed target, and possible implementation of corrective action. Review of targets is necessary to monitor effectiveness and overall performance. QA indicators and targets will be reviewed at quarterly meetings. If results reveal targets met or within Standard Deviation (SD), then no corrective action is necessary and will continue monitoring. If target is within SD, then Director can determine if corrective action is necessary. If target results are not met, then a corrective action can 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.

If there is no improvement, corrective actions need to be re-evaluated and monitoring continued.

For Quality Management (QM), the Medical Director will review quarterly key indicators for appropriateness and effectiveness. He/she will also review the Quality Improvement (QI) Plan annually for effectiveness, necessary corrective actions, and whether indicators need to continue being evaluated or new indicators chosen. A Clinical Corrective Action Form will be completed and reviewed quarterly for any QA targets not met and Medical Director deems necessary for review.

Corrective Action

The Laboratory will use a Clinical Corrective Action Form for QA data that does not meet specific indicator targets. The form is available in Shared drive for PFT Lab and can be completed by any PFT staff. All corrective action forms will be reviewed and signed by Medical Director and/or signed by Technical Consultant. Forms will be saved electronically in PFT Shared drive and not in hard copy.

Non-Conforming Event (NCE)

If a NCE occurs, the laboratory will review with Manager and/or Technical Consultant and/ or Medical Director, if necessary. The internal reporting system, RL Datix, will be used to enter reports including but not limited to patient injuries, complaints, professionalism, and other related issues. For external issues, the Press Ganey report will be reviewed by Manager and/ or Technical Consultant and/ or Medical Director, if necessary. Reports will be reviewed quarterly in PFT meetings.

Root Cause Analysis (RCA)

A root cause analysis or investigation can be performed should a NCE occur. A preliminary verbal questioning by Manager and/or Technical Consultant and or/

Medical Director will determine if further written formal RCA process will begin.

1. The Technical Consultant will review QM plan to determine the scope of RCA.
2. If determined that RCA is necessary, then the Technical Consultant will determine extent of RCA and steps will be taken:

a. Technical Consultant will interview patients and/or staff to determine facts of event.
b. Technical Consultant or Manager completes RL Datix (patient event reporting system), if necessary.
c. Technical Consultant will meet with staff to determine cause and course of corrective action.
d. Technical Consultant / Manager will notify Medical Director of results.
e. Results will be discussed as education for staff at quarterly meetings for effectiveness.

The RCA will follow institutional IHOP policies for Occurrence Reporting (Policy 01-08).

References

UTMB Performance Improvement Plan.
Department of Pathology's Quality of Improvement Plan.
NCCLS GP26A, A Quality System Model for Health Care.
NCCLS Document, GP22A, A Continuous Quality Improvement: Essential Management Approaches.
IHOP 9.13.13 Unusual Event Reporting
IHOP 9.13.16 Sentinel Events
Clinical Corrective Action FORM, PFT Lab/ QA/CCAction

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.

Date	Approved by:	Signature
11/07	**V. Cardenas, MD** **Medical Director Pulmonary Laboratory**	
6/09	**V. Cardenas, MD** **No changes to the policy**	
7/10	**V. Cardenas, MD**	
2/12	**A. Duarte, MD** **Medical Director Pulmonary Function Laboratory** **No changes to the policy**	
5/14	**A. Duarte, MD** **Medical Director Pulmonary Function Laboratory** **No changes to the policy**	

1/15	**A. Duarte, MD** **Medical Director Pulmonary Function Laboratory** **Changes to the policy**
8/16	**A. Duarte, MD** **Medical Director Pulmonary Function Laboratory** **Changes to the policy**
11/17	**A. Duarte, MD** **Medical Director Pulmonary Function Laboratory** **Changes to the policy**
9/19	**A. Duarte, MD** **Medical Director Pulmonary Function Laboratory** **Changes to the policy**
2/22	**A. Duarte, MD** **Medical Director Pulmonary Function Laboratory** **Changes to the policy**
9/23	**A. Duarte, MD** **Medical Director Pulmonary Function Laboratory** **Changes to the policy**