

**Implementation of Lab
Accreditation
Requirements in India
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About NABL Introduction

- NABL accreditation is a formal recognition of the technical competence of a medical testing laboratory
- Third party assessment
- NABL has Mutual Recognition Arrangement with APLAC and ILAC

Contd...

- **NABL accredited labs are all member of global family of accredited labs**
- **NABL provides efficient and transparent mechanism to the labs**
- **Labs prove technical competence by participation in proficiency test**
- **NABL is an autonomous body under DST**

Key steps towards accreditation

- Management defines project owner
- Project owner studies details of standard ISO15189:2007
- Understands carefully all 15 clauses under the management requirement



Contd..

- ① Understands carefully all 8 clauses under the technical requirement
- ② Defines scope of accreditation
- ③ Performs a gap analysis
- ④ Estimates the cost of accreditation and presents to management

Contd...

- ① **Management decides to proceed with accreditation**
- ② **Project owner leads implementation steps**
- ③ **Conduct atleast one internal audit followed by Management Review Meeting**

Requirements Overview

- Sampling as per the plan
- All samples to be uniquely identified
- Monitor quality of test results
- % CV, LJ Charts



Contd...

- **Maintain proper records**
- **Validate all procedures**
- **Calibration of equipment**
- **Document all non conformance**



Contd...

- **Monitor environmental conditions**
- **Prepare documentation as per standard**
- **Follow up all complaints from the clients**
- **A formal program to manage suppliers**

Management Requirements

4.1 Organization and Management

4.1.1 Legal Identification

4.1.2 Needs of patients and clinical personnel

4.1.3 Requirements of the standard



Contd...

- 4.1.4 Personnel responsible for primary sample examination**
- 4.1.5 Design, implementation maintenance and improvements of quality management system**
- 4.1.6 Communication in the lab**

Contd...

4.2 Quality Management System

4.2.1 Policies and Procedure

4.2.2 ILC, IQC

4.2.3 Quality Policy

4.2.4 Quality Manual

4.2.5 Calibration of instruments

Contd...

4.3 Document Control

4.3.1 Documented procedures

**4.3.2 Review, Approval and
Control**

4.3.3 Unique identification

Contd...

4.4 Review of Contacts

4.4.1 Procedure for review of contacts

4.4.2 Records of review

4.4.3 Referrals

**4.4.4 Information on deviations to
customers**

Contd...

4.4.5 Amendments

4.5 Examination by Referral Laboratories

4.5.1 Documented procedure for evaluation and selection

4.5.2 Review the arrangements

4.5.3 Maintain a register of all referral labs

Contd...

4.5.4 Examination results to the request

4.6 External services and supplies

4.6.1 Documented procedure for selection and evaluation

4.6.2 Verification of purchased material

4.6.3 Inventory control

4.6.4 Critical reagents suppliers

Contd...



4.7 Advisory Services

4.8 Resolution of Complaints

4.9 Identification and Control of Non Conformities

4.9.1 Documented procedure for non conformities

Contd...

4.9.2 Route analysis of non conforming examinations

4.9.3 Release of results in case of non conformities

4.10 Corrective Action

4.10.1 Causes of problem

Contd...

4.10.2 Changes in the operational procedures

4.10.3 Monitor the results of CA

4.10.4 Investigations causing doubts

Contd...



4.11 Preventive Action

4.11.1 Develop action plan for PA

4.11.2 Procedure for preventive action

Contd...

4.12 Continual Improvement

4.12.1 Review of procedures at regular intervals

4.12.2 Review of effectiveness of the CA

4.12.3 Implementation of actions

4.12.4 Monitoring of quality indicators

Contd...

4.12 Continual Improvement

4.12.5 Training opportunities to laboratory personnel

Contd...

4.13 Quality and Technical Records

4.13.1 Index, storage, maintenance and safe disposal of quality records

4.13.2 Easy retrieval of records

4.13.3 Retention period of records

Contd...

4.14 Internal Audit

4.14.1 Internal quality audit at refined intervals

4.14.2 Planning, implementation and documentation of the audits

4.14.3 Results of audits to the management

Contd...

4.15 Management Review

4.15.1 MRM once in a year

4.15.2 Input for MRM

4.15.3 Laboratory's contribution to patient care, monitoring and evaluation

4.15.4 Record of findings and actions of MRM

Technical Requirements

5.1 Personnel

**5.2 Accommodation and Environmental
Conditions**

5.3 Examination Procedures

5.4 Laboratory Equipments



Contd...

5.5 Examination Procedures

**5.6 Assuring the Quality of
Examination Procedures**

5.7 Pre-Examination Procedures

5.8 Reporting of Results



Stages of NABL Accreditation



- ① Quality System Manual adequacy study by NABL lead Assessor
- ② Pre-assessment visit by the Lead Assessor
- ③ Final Assessment by the NABL team
- ④ Report to NABL by Lead Assessor

Contd...

- ⦿ **Report review by NABL Technical Committee**
- ⦿ **Communication to laboratory about accreditation status**
- ⦿ **Periodic surveillance with annual fees**

Policies and Procedures

- ◉ Quality Policy Statement
- ◉ Quality Manual
- ◉ Lab Safety Manual
- ◉ Waste Management Manual
- ◉ Control of Documents



Contd...

- ◉ Selection and Evaluation of Supplier
- ◉ Client Complaints
- ◉ Control of Non-Conformities
- ◉ Corrective and Preventive
action
- ◉ Control of Records



Contd...

- ◉ **Internal Quality Audit**
- ◉ **Management Review**
- ◉ **External Quality Assessment Scheme (EQUAS)**
- ◉ **Standard Operating Procedures of each lab**
- ◉ **Calibration Procedures**

Benefits of Implementation of NABL Standard

- ◉ Having access to more contracts for testing
- ◉ Potential increase in business
- ◉ Improved national and global reputation and image of the laboratory
- ◉ Time and money saving due to reduction in re-testing

Contd...

- ⦿ **Continually improving quality data and laboratory effectiveness**
- ⦿ **Having a basis for most other quality systems related to laboratories, such as Good Manufacturing Practices and Good Laboratory Practices**

Contd...

- ◎ Standard has been developed by health care experts and tested
- ◎ Ensure a safe and efficient work environment that contributes to staff satisfaction

Contd...

- ⦿ Establish collaborative leadership that strives for excellence in quality
- ⦿ Understand how to continuously improve diagnostic processes and outcomes

Difficulties and Bottlenecks in the process of implementation

- **Poor Quality Management**
- **Poor Sample Control**
- **Poor Results Verification**
- **Quality Control and assessment**



Contd...

- ◉ **Non Validated Tests**
- ◉ **Time pressures**
- ◉ **Poor workload Management**
- ◉ **Understaffed**
- ◉ **Inadequate Attention to Detail**
- ◉ **ILC and EQAS**



THANK YOU