Labs for Life

Introduction

Labs for Life is a pilot partnership initiative of National AIDS Control Organization (NACO), Ministry of Health and Family Welfare (MoHFW) and U.S. Centers for Disease Control and Prevention (CDC) for improving the quality of laboratory services, building sustainable laboratory systems within the public health sector and strengthening country owned institutions. For phase 1, 20 laboratories have been selected across six states, and objectives were defined to improve the overall quality. After the implementation of this initiative, the overall quality score had increased significantly from baseline at the mid-term assessment of the laboratories.

Key Stakeholders

Implementation of the practice

The project was implemented in association with Christian Medical Association of India (CMAI). Initially, project governance committees were formed at National, State, District, and Institution level. At the National level, the core committee under the chairmanship of Additional Secretary, MoHFW, comprises of representatives from all the partners. The committee meets once in a quarter to monitor and develop strategies at the National level

A baseline assessment was conducted at all selected facilities to identify the gaps, challenges, and document best practices. The findings were circulated to all the states.

A comprehensive capacity building plan with central, district and facility wise training program was developed to improve the vital systematic areas including Facility Management and Safety, Sample Collection, Documentation, Equipment Management, Calibration and Controls, Testing Methodologies, Inventory Control, Staff Training Practices, Setting and Monitoring Quality Indicators and Usage of Information Technology.

The several activities like Training of Trainers (ToT), district level onsite training, handholding by Regional Quality Consultants, Periodic mentoring visits by the L4L central team, and online webinars on technical topics have been conducted. E-learning videos on numerous lab tests and laboratory quality management systems are created and available in labforlife.in.

Image: LabsforLife

A district and state-level resource mapping were done to comprehend the currently available resources for diagnostics under various government institutions. This helps in tapping the available resources through referrals and improved linkage across various institution.

Apart from the interventions at systematic areas, facility-specific interventions were also undertaken in terms of technical advice for lab renovations in several institutions, Bio-Medical Waste Management issues, etc. Laboratories' quality management service was also made in compliance with ISO standards.

The phaseII of the project is being implemented to improve public health laboratories in institutions housing ART Centers. 22 ART center-Hospitals across six districts in Maharashtra and Andhra Pradesh are selected.

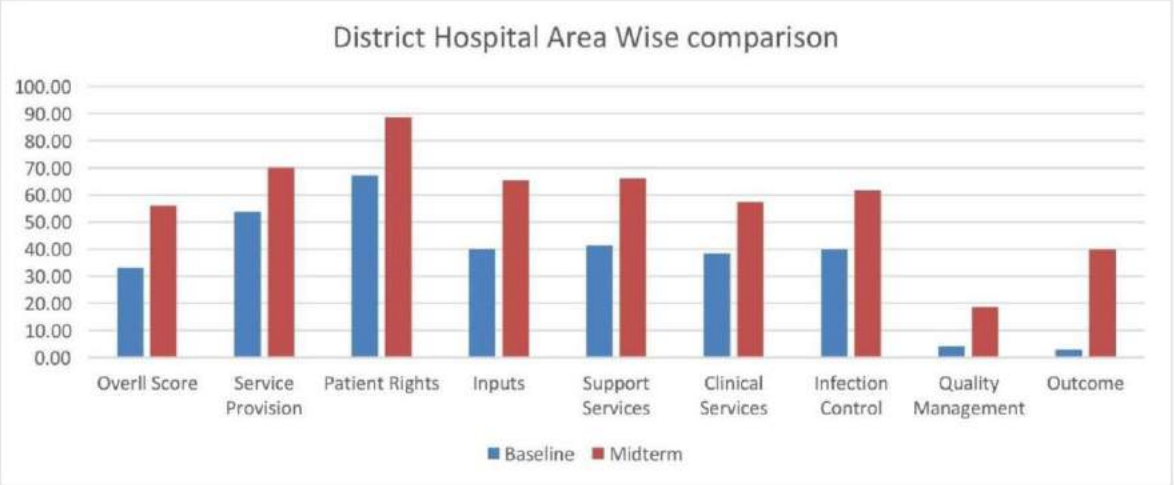
Further, during the evaluation, it was identified that unlike the secondary healthcare system, tertiary healthcare lacks well defined standards for service provisioning in Medical Colleges. MCI defines the academic requirements only, and the standards like IPHS and NQUAS deals with tertiary care only. Thus, the responsibility of setting a benchmark of service provisioning lies with the institution only. Therefore, under this program, recommendations have been placed for empowering the Medical Colleges for service provisioning standards for their various laboratories.

Results of the practice

Mid-term assessment conducted at all facilities found noteworthy development in diagnostic capacities, improved quality of services, strengthened specimen referral mechanisms, and

linkages between different levels. The overall Quality score increased expressively from 27.2% at baseline to 59.7%.

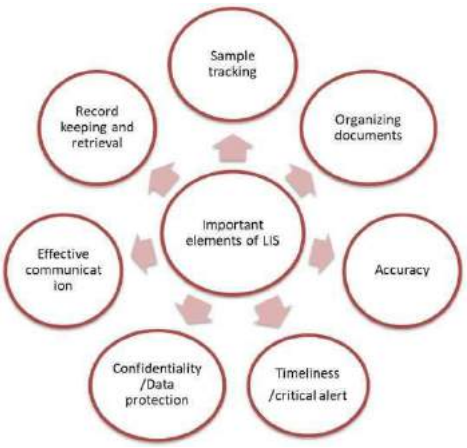
In District hospitals, a cross-sectoral improvement was observed. Improvement was maximum for Outcomes, Quality management, Inputs, Support services, Infection control, Clinical services, Patient rights and Service provision.



All medical colleges recorded an improvement compared to baseline scores. Improvement was more for certain elements viz. Specimen collection and handling, Biosafety, Staff management and availability, training and supervision, use of IT, and Communication. It was marginal to moderate for others i.e. Premises quality, Public health functions, Equipment availability and management, Budget and finances, Diagnostic capacities etc.

In view of promising outcomes from the early project activities, the objectives were changed from achieving improvement in lab services – in terms of capacity, quality and sustainability; to achieving accreditation for conformance to the ISO15189 standard for selected laboratories from among the L4L project participants. Nine labs have been selected for starting the accreditation process. Continuous Training and close mentoring support are being provided to these labs. This includes Internal Auditor training for identified laboratory Quality Managers, additional support through handholding to complete the QMS Quality Managers, additional support through handholding to complete the QMS documentation, arranging mock internal audits through L4L. NQAS certification is also being encouraged for those facilities that are partially ready.

Lessons Learnt



According to the midterm review report, though there is a significant improvement in many technical areas as compared to baseline information, it is apparent that many areas require more developmental actions such as:

- Responsiveness of institutions to training
- Lack of importance to leadership and staff motivation
- Requirements for guidelines and standards for tertiary care hospitals regarding the t ests
- Resource needs and dedicated lab funds

The project has created a quality-assured diagnostics model at the district level, by integrating all levels of public health via a sample referral system that helps to utilize the available resources efficiently. The project also identifies the gaps from state level to facility level and bridges them with robust logistic and IT systems for training and laboratory management – Laboratory Information Management System.

Conclusion

Taking forward the learning from Labs for Life, NHM has launched the LIFE initiative on 6th July 2017 for the holistic transformation of Laboratory services in public hospitals through a systematic approach of continual quality improvement. This would entail closing of structural gaps, capacity building for staff, optimizing the laboratory process and implementing a credible Quality Management System to meet prevalent National and International standards. As the tangible outcome of the efforts, targeted laboratories would achieve quality certification/accreditation against NQAS/NABL standards. The States should advocate the importance of establishing, implementing and maintaining QMS in public health laboratories and disseminating the knowledge and facilitating the process of generating awareness.

Further reading

i. *http://naco.gov.in/sites/default/files/3Gap%20Analysis%20Midterm%20Review%20National%20report%20Final.pdf*
ii. *http://naco.gov.in/labs-life-l4l-project*
iii. *http://labsforlife.in/Default.aspx*