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IMPACT ASSESSMENT REPORT

Assessing the impact of providing timely diagnosis for liver infections with free FibroScan screenings and liver function tests.

IMPLEMENTED BY

Abbott

EVALUATED BY

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Executive Summary

The liver, a crucial organ for detoxification and nutrient metabolism, plays a fundamental role in sustaining human health. Liver diseases often begin inconspicuously, with early stages showing few or no symptoms, allowing the condition to progress undetected. As the disease advances, symptoms such as fatigue, jaundice, and abdominal pain become more apparent, significantly affecting the individual's well-being. The impact of liver diseases extends beyond the patient, influencing families and communities through both health complications and economic strain. The financial burden includes substantial medical costs and diminished productivity due to prolonged illness and the demands of chronic care. This dual impact of liver diseases—on both health and economic fronts—highlights the urgent need for accurate diagnosis and timely treatment. Effective interventions can help mitigate personal suffering and reduce the societal costs associated with liver diseases (Wazir, H., Abid, et al., 2023).

Abbott India has demonstrated its commitment to advancing global health by initiating a nationwide program for the distribution of FibroScan devices and the provision of free Liver Function Tests (LFT) across India. Before the introduction of FibroScan, the diagnosis of liver diseases was significantly hindered by the reliance on invasive and less accessible diagnostic methods.

Project Operational Model

The operational model for the deployment of portable FibroScan machines involves allocating a single machine to serve 48 to 50 clinics per month. Hospitals designate specific liver clinic days for technician visits based on their annual operation plans. A diagnostic service partner is responsible for conducting lab tests, deploying trained technicians, and generating diagnostic reports. A structured schedule allows the machine to cover up to 2-3 clinics per day in certain cities. Technicians manage the transport, operation, and maintenance of the equipment, following a systematic visit plan. The model includes regular maintenance protocols to ensure consistent performance of the machines. After screenings, patients receive their diagnostic reports directly from the clinics. Key expenses, including the cost of the FibroScan machine, technician salaries, travel reimbursements, annual maintenance, and operational costs, are covered by Abbott.

Reach and Scale

Intervention	Tier 1 cities	Tier 2 cities	Tier 3 cities	Total
Fibroscan Clinics	14,072	6,408	7,202	**27,682**
LFT clinics	448	130	222	**800**

Advantage of FibroScan and LFT over other diagnostic methods

FibroScan screening is a non-invasive, accurate, and easily administered diagnostic tool that provides immediate results, making it highly relevant for detecting liver conditions, especially in high-risk populations such as individuals with diabetes, obesity, or a history of alcohol use. Meanwhile, LFT enables early detection of liver function irregularities, prompting timely intervention and further testing like FibroScan for a more detailed analysis. Together, these methods offer a comprehensive and accessible approach to liver health monitoring, improving early diagnosis and patient outcomes.

Methodology

Give Grants conducted an Impact Assessment in October 2024 to evaluate the design, delivery, and impact of Abbott Health Clinics providing Fibroscan screening and liver-testing facilities at multiple locations and identify the associated challenges.

- A qualitative methodology was used. For quantitative data, actual figures were referred.
- The team visited 6 cities-Tier 1 (Hyderabad and Kolkata), Tier 2 (Gorakhpur, Indore and Ujjain) and Tier 3 (Allahabad) cities for the assessment.
- **Physical verification:** Assessed 10 clinics across 4 states (West Bengal, Uttar Pradesh, Madhya Pradesh and Telangana)
- **Key Informant Interviews (KIIs)**: Interviewed 21 key stakeholders, including doctors, technicians, hospital administrative staff, the implementation team, and the Abbott Team.
- **Beneficiary Interviews**: Conducted interviews with 20 patients (from multiple locations across the country).

Findings

Program Relevance

- **Early Diagnosis & Timely Interventions:** The program enables early detection of liver conditions, allowing for timely therapeutic interventions and facilitating inter-hospital referrals.
- **Advanced Liver Diagnostics for Remote Areas:** By providing free access to advanced liver diagnostics, the program serves as a reliable resource for comprehensive liver health assessments, particularly benefiting underserved regions.
- **Specialist Distribution in LFT and FibroScan screening:** The free LFT intervention relies primarily on Consulting Physicians (65.4%) and General Practitioners (21.9%), with limited specialist involvement. In contrast, the FibroScan screening is predominantly led by Gastroenterologists (64.2%), highlighting its liver-focused approach. Consulting Physicians (26.9%) and other specialists play smaller roles, emphasizing a balance between liver health expertise and general medical support
- **Predominance of Non-Governmental Partnerships:** The Abbott Health Clinic intervention relies heavily on non-governmental healthcare partnerships,

accounting for 92.6% of FibroScan screenings and 100% of LFTs. Government facilities contribute only 5.8% to FibroScan, while PPPs make up a minimal 1.6%, underscoring the program's dependence on private and non-governmental providers.

Program Effectiveness

- **Stakeholder Satisfaction and Operational Efficiency:** Stakeholders (all doctors and hospital administration staff) have expressed satisfaction with the interventions, acknowledging its positive impact on improving access to essential liver health diagnostics. The assessment finds that technicians are satisfied with the operation of the machines and do not encounter any significant challenges in their usage.
- **Physical Verification Findings:** The physical verification of the program highlighted key aspects of operational readiness, data integrity and infection control. All FibroScan and LFT machines across hospitals and clinics were found to be fully operational, regularly maintained, and compliant with infection control protocols. Additionally, all patients were informed about the screening purpose and procedure, reinforcing ethical and patient-centered approach.

Impact and Sustainability

- **Screening rate:** The advent of FibroScan machines and routine LFT has enhanced the early diagnosis and management of liver diseases as reported by the doctors. A total of 3,42,597 patients have been diagnosed through Fibroscan screening and 8,158 patients have been diagnosed through LFTs. During the IA interviews, this claim has been validated by 95% of the respondent patients.
- **Affordable healthcare:** The assessment finds that by eliminating financial barriers to essential diagnostics, the program ensures equitable access to critical liver health assessments. Feedback from doctors and hospital administrative staff corroborates these observations.

Gaps/challenges

- **Optimizing Technician Efficiency and Accessibility:** While the health screening support program for FibroScan demonstrates a commendable commitment to accessibility, the current model, where a single technician visits 48-50 clinics monthly, presents an opportunity for optimisation. Presently, the long distances that some technicians need to travel for screenings pose a significant challenge to their efficiency and the program's reach.
- **Enhancing Service Continuity with Improved Tracking:** The program could benefit from implementing a robust tracking system for clinic cancellations. It was observed that cancellations by technicians, healthcare providers, or diagnostic centers disrupt service continuity. Introducing a system that would help ensure more consistent and reliable service delivery, especially for patients traveling long distances to reach the clinic on a given date, would lead to improved patient satisfaction.
- ***Balancing Expansion with Comprehensive Patient Support*:** The project's key objective is to offer free diagnostic services at scale and thereby ensure early treatment initiation for the patient. However, the project is limited in scope in terms

- of post-diagnostic treatment assistance, which can affect overall patient outcomes. This can be addressed by providing patients with guidance on affordable or free healthcare services and treatment assistance to enhance patient care.
- **Enhancing Service Continuity with Improved Tracking:** Though the project activities are monitored on a continual basis, there is an opportunity to improve patient monitoring with specifications on demographic data and post-diagnostic interventions, while complying with the data integration protocols for Pharmaceutical companies. Currently, the lack of a structured system for collecting and organizing data against key indicators and insufficient tracking of patient screenings and diagnoses presents a challenge in defining long term project outcomes. Hence, there is a scope to introduce robust data management practices and standardized reporting templates, which can be implemented with the support from healthcare service providers.
- ***Ensuring Equitable Access with Clear Selection Criteria:*** The health screening support program for FibroScan has a strong foundation, but there is an opportunity to enhance equitable access. Currently, the lack of defined beneficiary selection criteria, including clear inclusion and exclusion parameters for patient enrollment, poses a challenge. Addressing these gaps would ensure more equitable access and allow the program's benefits to reach the most vulnerable sections of the population.

Recommendations

- Although post-diagnostic monitoring is not currently within the project's objectives, there is significant potential to enhance the program's overall impact and sustainability by incorporating it. In the future, Abbott can leverage this data to strengthen patient care by facilitating connections to affordable or free healthcare services and providing treatment assistance, thereby expanding the program's scope and effectiveness.
- Engaging a dedicated nodal agency can significantly enhance service consistency, operational efficiency and provide support for overall program management. The agency can oversee critical functions such as managing clinic schedules, handling cancellations by technicians or health professionals, conducting post-diagnostic follow-ups, and ensuring clear inclusion and exclusion criteria for beneficiaries, along with rigorous monitoring. Additionally, the nodal agency can lead community sensitization initiatives to promote care-seeking behavior for liver ailments. Given the program's large scale and wide geographic reach, a nodal agency would serve as an essential partner in supporting Abbott's day-to-day on-ground operations.

"It is because of FibroScan that I discovered my condition. Otherwise, I would have likely progressed to a much more severe stage."
- reported by a 65-year old male patient from Hyderabad