

# Impact Assessment of the Support for Cath Lab Programme

Project Code: G0039

Trinias

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# Chapter 1: Overview of HDFC Bank Ltd's CSR Policy & Project Alignment



#### 1.1 HDFC Bank's CSR Policy

HDFC Bank is actively contributing to the improvement of the lives of millions of Indians through its social initiatives. These endeavours, collectively known as 'Parivartan,' are designed with the objective of fostering sustainable empowerment within communities, thereby making significant contributions to the economic and social development of the nation.

HDFC Bank has a long-standing commitment to corporate social responsibility (CSR), and healthcare is one of its key focus areas. The bank has implemented a number of CSR projects in the healthcare sector, with the goal of improving access to quality healthcare for underserved communities.

The themes of HDFC's CSR project include:

- Rural Development: The HDFC Bank team believes in including villages in economic progress for overall development. The Bank's Holistic Rural Development Programme (HRDP) addresses the specific needs of each village through carefully planned interventions developed in consultation with the community and stakeholders.
- 2. **Skill development and livelihood enhancement:** In the realm of Skill training and livelihood enhancement, Parivartan provides backing for numerous projects. This initiative encompasses capacity building, the promotion of financial literacy, credit, and entrepreneurial endeavours, along with enhancing skills for agricultural and related practices.
- 3. **Promotion of Education:** The bank's educational initiatives are designed to foster learning by establishing a conducive and efficient learning atmosphere in schools. Within the second pillar of education in Parivartan, the interventions concentrate on teacher training, incorporating alternative methods, promoting innovation, and enhancing school infrastructure through refurbishment. HDFC Bank Parivartan has introduced smart classes in various states, aiming to integrate technology with education.
- 4. Healthcare and Hygiene: In the area of Healthcare and Hygiene, primary efforts revolve around supporting the Indian Government's Swachh Bharat Abhiyan through initiatives that raise awareness, induce behavioural change, and construct toilets. Additionally, to foster healthcare and hygiene, the Bank regularly conducts health camps, raises awareness about nutrition, ensures access to clean drinking water, and organises blood donation drives. Moreover, the Bank has installed oxygen plants at 18 locations nationwide to aid hospitals in meeting the heightened demand for oxygen during the COVID-19 pandemic.
- 5. **Financial Literacy and Inclusion:** They hold the belief that the initial stride toward financial inclusion involves fostering financial literacy. Through HDFC Bank's extensive network of over 5,400 branches, millions have gained insights into fundamental concepts like savings, investment, and accessing organised financial resources via financial literacy camps conducted nationwide. Moreover, their branches emphasise delivering basic financial services and implementing capacity-building programmes.

#### **1.2 Project Context**

HDFC Bank, as part of its Parivartan initiative, is committed to supporting the enhancement of healthcare infrastructure in various regions. One such endeavour involves the establishment of a Catheterisation Laboratory (Cath Lab) at Patna Medical College, Bihar. This hospital, renowned as one of the oldest medical colleges in Asia, is currently undergoing renovations with the goal of becoming the largest medical facility in the region by 2025. Recognising the importance of cardiac care services, HDFC Bank has been approached to provide support for setting up the Cath Lab at this institution.

Through its Parivartan initiative, HDFC Bank aims to contribute to the improvement of medical facilities, particularly in regions like Patna, where access to advanced healthcare services is essential.

The Cath Lab intervention is deemed crucial for conducting a wide range of diagnostic and therapeutic procedures, including ablation, angiogram, angioplasty, and more. Given the significance of cardiac care in addressing critical heart ailments, the establishment of this facility is paramount for meeting the healthcare needs of the community, especially those from lower socio-economic backgrounds. Patients from surrounding villages and the outskirts of Patna often rely on this hospital during emergencies, highlighting the importance of enhancing its medical infrastructure to ensure timely and improved medical services for all.

The primary objective of this intervention is to improve the medical infrastructure in Patna, particularly in the realm of cardiac care. By setting up the Cath Lab, HDFC Bank aims to facilitate access to advanced diagnostic and treatment services for patients, thereby addressing critical healthcare needs in the region. Additionally, the project aims to specifically benefit patients from lower socio-economic backgrounds by providing them with timely and improved medical services.

#### **1.3 Project Activities**

#### **Procurement and Installation of Equipment:**

 Procure necessary medical equipment, including cardiac catheters, angiography machines, monitoring devices, and other essential tools required for the Cath Lab.
 Oversee the installation process to ensure proper setup and functioning of all equipment.

#### **Staff Training and Capacity Building:**

1.Conduct training sessions for medical staff to familiarise them with the operation and maintenance of the Cath Lab equipment.

2. Provide ongoing capacity-building initiatives to enhance the skills and knowledge of healthcare professionals in cardiac care procedures.

#### Infrastructure Development:

1.Renovate and upgrade the physical infrastructure of the Cath Lab facility to meet regulatory standards and ensure a conducive environment for patient care.

2.Ensure the availability of essential amenities and utilities required for the smooth functioning of the Cath Lab operations.

#### **Quality Assurance and Compliance:**

1.Implement quality assurance protocols and standards to maintain high levels of safety and accuracy in cardiac procedures conducted at the Cath Lab.

2.Ensure compliance with regulatory guidelines and accreditation requirements to uphold the quality of cardiac care services provided.

#### **1.3 Alignment with SDGs**

| SDG Goals                              | SDG Targets  | Alignment  |
|--|--|------------|
| <b>3</b> GOOD HEALTH<br>AND WELL-BEING | Goal 3: Good Health and Well-<br>being<br>3.3 By 2030, end the epidemics of<br>AIDS, tuberculosis, malaria and<br>neglected tropical diseases and<br>combat hepatitis, water-borne<br>diseases and other communicable<br>diseases. | Completely |

| 9 INDUSTRY, INNOVATION<br>AND INFRASTRUCTURE    | Goal 9: Industry, Innovation and<br>Infrastructure<br>9.1 Develop quality, reliable,<br>sustainable and resilient<br>infrastructure, including regional and<br>transborder infrastructure, to support<br>economic development and human<br>well-being, with a focus on affordable<br>and equitable access for all. | Completely |
|---|--|------------|
| 12 RESPONSIBLE<br>CONSUMPTION<br>AND PRODUCTION | Goal12:Responsibleconsumption and production12.2By2030, achieve thesustainablemanagement andefficient use of natural resources.  | Completely |
| <b>17</b> PARTNERSHIPS FOR THE GOALS            | Goal 17: Partnership for the goals<br>17.17 Encourage and promote<br>effective public, public-private and<br>civil society partnerships, building on<br>the experience and resourcing<br>strategies of partnerships  | Completely |

## 1.4 Alignment with National Policies

| National<br>Policy/Scheme/Mission | Objectives & Strategies   | Alignment  |
|-----------------------------------|---|--|
| National Health Policy<br>2017    | Ensure availability and access to affordable and quality healthcare services. | The establishment of<br>the Cath Lab by HDFC<br>Bank aligns with the<br>objectives of the<br>National Health Policy<br>2017 by enhancing<br>access to quality<br>healthcare services,<br>particularly in the realm<br>of cardiac care. By<br>providing advanced<br>diagnostic and<br>treatment facilities, the<br>project contributes to |

| improving healthcare      |
|---------------------------|
| infrastructure and        |
| ensuring timely access    |
| to essential services for |
| patients in Patna and     |
| surrounding areas.        |

#### **1.5 Alignment with CSR Policy**

The Schedule VII (Section 135) of the companies act, 2013 specifies the list of the activities that can be included by the company in its CSR policy. The below mentioned table shows the alignments of the intervention with the approved activities by the Ministry of Corporate Affairs.

| Sub-<br>Section | Activities as per Schedule VII   | Alignment |
|-----------------|--|-----------|
| (i)             | Eradicating hunger, poverty and malnutrition<br>(Promoting health care including preventive<br>Health) and sanitation (Including contribution to<br>the Swacch Bharat Kosh set-up by the Central<br>Government for the promotion of sanitation) and<br>making available safe drinking water;   | Partially |
| (viii)          | Contribution to the Prime Minister's National<br>Relief Fund or [Prime Minister's Citizen<br>Assistance and Relief in Emergency Situations<br>Fund (PM CARES Fund) or] any other fund set<br>up by the Central Government for socio-<br>economic development and relief and welfare of<br>the Scheduled Castes, the Scheduled Tribes,<br>other backward classes, minorities and women; | Partially |

#### **1.6 Alignment with ESG Principle**

The programme's intervention also aligns with the ESG Sustainability Report of the corporate. Particularly, concerning the Business Responsibility & Sustainability Reporting Format (BRSR) shared by the Securities & Exchange Board of India (SEBI), the programme aligns with the principle mentioned below:

#### **Principle 7**

Businesses should support a precautionary approach to environmental challenges

Chapter 2: Impact Assessment Design & Approach

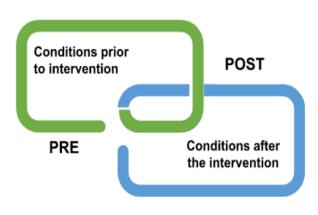
#### 2.1 Objective of The Study

HDFC Bank Ltd. has partnered with CSRBOX to conduct a comprehensive Impact Assessment of the Support for Cath Lab Intervention Project FY 2021-22. The study aims to achieve the following objectives:

- To assess the effectiveness of the installation of the Cath Lab and associated medical equipment in enhancing cardiac care services at Patna Medical College.
- To evaluate the extent to which the establishment of the Cath Lab has benefited patients, particularly those from lower socio-economic backgrounds, in terms of access to timely and improved cardiac care services.
- To assess the maintenance mechanisms adopted to sustain the functioning of the Cath Lab and associated medical equipment, ensuring continuous delivery of high-quality cardiac care services.

These objectives will provide valuable insights into the impact and effectiveness of the intervention programme in improving healthcare infrastructure and access to cardiac care services in Patna.

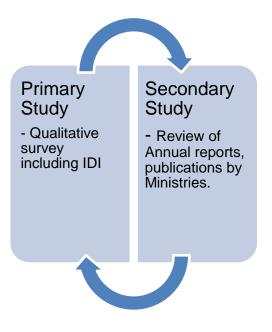
#### 2.2 Approach and Evaluation Framework



In line with the study's objectives and key areas of investigation, the evaluation's design prioritised learning as its primary goal. This section outlines CSRBOX's strategy for developing and implementing a robust, dynamic, and outcome-focused evaluation framework/design. To gauge the impact, the study adopted a pre-post programme evaluation approach, relying on the recall capacity of the respondents. Under this method, beneficiaries are surveyed about their conditions before

and after programme intervention. Analysing the difference helps to discern the programme's contribution to enhancing the intended condition of the beneficiary. While this approach can effectively comment on the programme's role in improving living standards, it may not entirely attribute all changes to the programme.

For the assessment of the programme, we employed a two-pronged approach to data collection and review that included secondary data sources and literature, as well as primary data obtained through qualitative methods of data collection. The figure below illustrates the study approach used in data collection and review. The secondary study involved a review of the functioning of Cath Labs and other studies and research by renowned organisations available in the public domain for drawing insights into the situation of the area.



The primary study comprised a qualitative approach to data collection and analysis. The qualitative aspects involved in-depth interviews (IDIs) with the Medical Superintendent, Medical Officer, Nurse and Machine Operator.

In addition to primary data collection, the consultants studied various project documents like Project Proposal, Project log-frame (Logical Framework Analysis), and other relevant reports/literature related to the projects.

#### **OECD-DAC Framework**

To assess the Relevance, Coherence, Effectiveness, Efficiency, Impact, and Sustainability of the project, the evaluation utilised the OECD-DAC framework. By employing the logic model and the criteria outlined in the OECD-DAC framework, the evaluation assessed the HDFC



team's contribution to the results while considering various factors that might have affected the overall outcome. The social impact assessment focused on the following pillars:

#### 2.3 Stakeholder Interaction

Detailed discussions were undertaken with the staff at the Cath Lab, focusing on key personnel responsible for managing the operations of the medical equipment provided as part of the Parivartan Project. These conversations were aimed at obtaining in-depth insights into the daily operations of the equipment and its broader implications on the functioning and services offered by the Cath Lab. The objective was to acquire a nuanced understanding of how the implemented initiatives, such as the establishment of the Cath Lab and the provision of necessary medical equipment, have positively impacted and enhanced the hospital's capacity to deliver high-quality cardiac care to its patients.

Following stakeholders were considered for interaction to collect data:

| Secondary Stakeholder  | Mode of Data<br>Collection | No. of Interactions |
|------------------------|----------------------------|---------------------|
| Medical Superintendent | In-Depth Interview         | 1                   |
| Medical Officer        | In-Depth Interview         | 1                   |
| Nurse                  | In-Depth Interview         | 1                   |
| Machine Operator       | In-Depth Interview         | 1                   |
| Total Interactions     |                            | 4                   |

# Chapter 3: Impact Findings



#### 3.1 Theory of Change

|   | Activities   | Output   | Outcome   | Impact   |
|---|--|--|---|--|
| • | Installation of<br>medical<br>equipment in the<br>Cath Lab                   | Types of medical<br>equipment items<br>installed: 6  | <ul> <li>Enhanced<br/>efficiency in<br/>hospital<br/>operations.</li> <li>Improved<br/>accuracy and<br/>speed of<br/>diagnoses.</li> <li>Increased<br/>knowledge and<br/>skills of<br/>healthcare staff.</li> <li>Enhanced quality<br/>of services<br/>provided by the<br/>hospital.</li> </ul> | <ul> <li>Improved overall healthcare services.</li> <li>Positive impact on the community's health.</li> <li>Increased accessibility to advanced cardiac care services.</li> <li>Improved cardiac health outcomes for the community.</li> </ul> |
| • | Training sessions<br>conducted for<br>hospital staff by<br>the supplier      | <ul> <li>Improved<br/>knowledge and<br/>skills of<br/>healthcare staff.</li> </ul>   | <ul> <li>Strengthened<br/>hospital capacity<br/>and capabilities.</li> <li>Better utilisation<br/>of cardiac care<br/>services.</li> </ul>  | <ul> <li>Increased patient<br/>satisfaction and<br/>trust in the<br/>hospital's cardiac<br/>care facilities.</li> </ul>  |
| • | Conducting<br>diagnostic and<br>therapeutic<br>procedures in the<br>Cath Lab | <ul> <li>Increased<br/>availability of<br/>advanced cardiac<br/>care services.</li> </ul>  | <ul> <li>Reduction in<br/>waiting times for<br/>diagnostic and<br/>therapeutic<br/>procedures.</li> </ul>   |  |
| • | Enhancement of<br>infrastructure and<br>facilities in the<br>Cath Lab        | <ul> <li>Renovation and<br/>upgrade of Cath<br/>Lab facilities.</li> <li>Improved patient<br/>experience and<br/>comfort during<br/>procedures.</li> </ul> | <ul> <li>Streamlined<br/>workflow and<br/>resource<br/>utilisation in the<br/>Cath Lab.</li> <li>Reduction in<br/>waiting times for<br/>diagnostic and<br/>therapeutic<br/>procedures.</li> </ul>   |  |

The Theory of Change for the establishment of the Cath Lab outlines a strategic pathway from project activities to impact. Through the installation of 6 medical equipment items and the provision of comprehensive training sessions for staff, the project has directly benefited numerous patients. The outcomes are evidenced in the enhanced efficiency of hospital operations, improved accuracy and speed of diagnoses, and a significant reduction in Turnaround Time for test reports. The increased knowledge and skills of healthcare staff have

bolstered the Cath Lab's capacity and capabilities, leading to improved healthcare service utilisation. These combined efforts contribute to the positive impact on the community's cardiac health, highlighting the project's significance in advancing cardiac care delivery, patient outcomes, and overall well-being.

#### 3.2 Observations Made Under OECD-DAC Framework

The following section presents key observations and insights derived from qualitative interactions conducted with various stakeholders involved in the Cath Lab project at Patna Medical College, utilising the OECD-DAC framework parameters for evaluation.

#### 3.2.1 Relevance

The establishment of the Cath Lab at Patna Medical College signifies a strategic and forward-thinking approach to meeting the critical healthcare needs of the local community, particularly in addressing the prevalent issue of cardiac ailments. As recounted by the hospital staff, 60%, of the patient population comprises males, predominantly hailing from agrarian backgrounds, with ages typically spanning from 40 to 70 years.

The majority of these patients are farmers whose livelihoods are intricately tied to the land they cultivate. The demanding nature of their occupation, coupled with agerelated health concerns, underscores the critical importance of accessible and efficient healthcare services, especially in addressing cardiac issues.

"Patients faced considerable challenges before the Cath Lab's availability, often traveling long distances for cardiac treatment, causing them undue distress and financial strain" added Dr. Upendra Narayan Singh, HOD at Patna Medical College.

Further contextualising the necessity for establishing the Cath Lab, patients often had to travel to distant CHCs and Block hospitals to avail he require treatment before the availability of this facility, wherein they were compelled to seek cardiac treatment outside the region. This inflicted undue distress and suffering upon patients and imposed a significant financial burden on them and their families. This underscores the pressing need for localising essential healthcare services. The establishment of the Cath Lab stands as a beacon of hope, offering respite to countless individuals grappling with cardiac ailments. It represents a pivotal milestone in the hospital's commitment to mitigating the adverse impact of cardiovascular diseases within the community, fostering a healthier and more resilient populace.

Moreover, the Cath Lab's inception serves as a testament to the hospital's unwavering dedication to meeting the evolving healthcare needs of the populace. By bringing stateof-the-art cardiac care facilities within reach, the hospital not only alleviates the physical and financial burdens borne by patients but also instils a sense of trust and confidence in the local healthcare ecosystem. In essence, the establishment of the Cath Lab heralds a new era of healthcare accessibility and inclusivity, wherein every individual, irrespective of their socio-economic background, can avail timely and comprehensive cardiac care services.

#### 3.2.2 Effectiveness

The operationalisation of the Cath Lab has undeniably ushered in a new era of enhanced accessibility to critical cardiac procedures, marking a significant milestone in the hospital's journey towards comprehensive healthcare provision. Ragini Kumari, whose frontline perspective offers invaluable insights, highlighted a notable surge in patient admission following the establishment of the Cath Lab.

"In 2023, there 170 hospital admissions for cardiac related procedures. There have been 4 more admissions for the same in 2024. This underscores the growing reliance and trust placed on the facility for essential cardiac interventions since the Cath Lab was set up" added Ragini Kumar, Grade-A Nurse at Patna Medical College.

"The Cath Lab has revolutionised our approach to cardiac care, resulting in tangible improvements in patient outcomes and satisfaction" added Dr. Upendra Narayan Singh.

Furthermore, the notable increase in patient admissions serves as a testament to the Cath Lab's efficacy in addressing the burgeoning demand for cardiac interventions within the community. By streamlining and centralising cardiac care services, the facility has effectively bridged the gap between patient needs and available resources, ensuring timely and effective interventions for individuals grappling with cardiac ailments.

The surge in patient admissions signifies a paradigm shift in healthcare-seeking behaviour, with individuals increasingly opting for local and specialised cardiac care solutions. This speaks volumes about the Cath Lab's credibility and efficacy, underscoring its pivotal role in reshaping the healthcare landscape of the region. As patient admissions continue to soar and positive feedback pours in, it is evident that the Cath Lab has emerged as a cornerstone of the hospital's commitment to excellence in cardiac care delivery, enriching the lives of countless individuals and families within the community.

#### 3.2.3 Impact

The ramifications of the Cath Lab extend far beyond the hospital's walls, leaving an indelible mark on the broader healthcare ecosystem through a tangible reduction in cardiac-related mortality rates and a notable uptick in patient satisfaction levels

"Patients now experience expedited and efficient treatment processes, leading to heightened satisfaction levels and instilling greater confidence in our healthcare services." added Ragini Kumar.

"The establishment of the Cath Lab has played a pivotal role in mitigating cardiacrelated mortality rates and elevating patient satisfaction levels, thereby reshaping the healthcare landscape" added Dr. Upendra Narayan Singh.

This alignment in perspectives underscores the Cath Lab's profound influence in not only saving lives but also fostering a sense of trust and assurance among patients and their families. By offering timely interventions and streamlining treatment pathways, the Cath Lab has become synonymous with excellence in cardiac care delivery, reaffirming the hospital's commitment to patient-centric healthcare provision.

Moreover, the observed reduction in cardiac-related mortality rates serves as a testament to the Cath Lab's efficacy in addressing critical healthcare needs and ensuring optimal patient outcomes. Through advanced interventions and state-of-the-art technology, the facility has emerged as a beacon of hope for individuals grappling with cardiac ailments, offering a lifeline of hope and healing.

Furthermore, the heightened levels of patient satisfaction underscore the tangible impact of the Cath Lab on overall healthcare experiences. Patients now find solace in the knowledge that prompt and effective treatment is readily available, thereby alleviating anxieties and instilling a sense of confidence in the healthcare services provided.

In essence, the establishment of the Cath Lab represents a paradigm shift in cardiac care delivery, ushering in an era of heightened efficiency, improved outcomes, and enhanced patient experiences. As its positive impact continues to reverberate throughout the community, it stands as a testament to the hospital's unwavering commitment to excellence in healthcare provision and its dedication to improving the lives of individuals and families alike.

#### 3.2.4 Coherence

The integration of the Cath Lab into the hospital's framework not only meets but also exceeds the strategic objectives of the institution in providing equitable and highquality healthcare services. "The Cath Lab serves as an epitome of our institution's unwavering commitment to advancing cardiac care, seamlessly aligning with our broader vision of ensuring that every individual has access to healthcare of the highest standard." added Dr. Upendra Narayan Singh.

"The Cath Lab project is a tangible manifestation of our collective vision and concerted efforts towards excellence in healthcare provision" added Ragini Kumar.

The project exemplifies a cohesive integration of vision and action within the institution, underscoring the relentless pursuit of excellence in healthcare delivery. The Cath Lab plays a pivotal role in enhancing the institution's ability to fulfil its mission of providing accessible and high-quality healthcare services to all segments of society.

#### 3.2.5 Efficiency

Operational efficiency lies at the heart of the Cath Lab project, ensuring seamless delivery of critical cardiac care services while optimising resource utilisation. As maintained by the hospital staff, the project's execution minimised disruptions and maximised resource utilisation, ultimately enhancing the hospital's capacity to deliver timely and effective cardiac care services.

The strategic allocation of resources and the streamlined workflows within the Cath Lab has resulted in optimised service delivery and enhanced patient outcomes. By prioritising operational efficiency, the Cath Lab project not only enhances the hospital's capacity to meet the growing demand for cardiac care but also reinforces its commitment to delivering healthcare services of the highest standard to the community.

#### 3.2.6 Sustainability

The Cath Lab project stands as a testament to a sustainable healthcare delivery model, heralding a new era of enduring improvements in patient outcomes and accessibility.

"The establishment of the Cath Lab represents a significant leap towards sustainable healthcare delivery, symbolising our commitment to building a resilient healthcare infrastructure capable of meeting the evolving needs of our community. By laying a robust foundation for long-term enhancements in patient outcomes and healthcare accessibility, the Cath Lab project paves the way for a healthier and more resilient future" added Dr. Upendra Narayan Singh. The sustainability of the Cath Lab project lies not only in its physical infrastructure but also in its capacity to adapt and innovate in response to evolving healthcare needs. By fostering a culture of continuous improvement and innovation, the Cath Lab project is well-positioned to drive lasting advancements in cardiac care delivery, thereby maximising its long-term impact on patient health and well-being. Through strategic investments in training, technology, and community engagement, the Cath Lab project can serve as a cornerstone of sustainable healthcare delivery, enriching the lives of patients and communities for years to come.

## **3.3 Observational Analysis of Medical Equipment Condition Assessment**

| Equipment                            | Condition         | Total<br>Patients<br>Treated | Total<br>Occupied<br>Beds | Utilisation<br>Time | Down<br>Time | Previous<br>Service<br>Date | Next<br>Scheduled<br>Service<br>Date | Calibration<br>Frequency | Responsibl<br>e Person |   |   |  |  |                            |                            |   |
|--------------------------------------|-------------------|------------------------------|---------------------------|---------------------|--------------|-----------------------------|--------------------------------------|--------------------------|------------------------|---|---|--|--|----------------------------|----------------------------|---|
| Cardiac Catheters                    | Not<br>available  | 0                            | 0                         | 0                   | Not yet      | N/A                         | N/A                                  | N/A                      | Mr. Ashok              |   |   |  |  |                            |                            |   |
| Angiography<br>Machine               | Good<br>condition | 170                          | 1                         | 4 hours/day         |              |                             |                                      | -                        |                        | - | - |  |  | As and<br>when<br>required | As and<br>when<br>required | - |
| Monitoring<br>Devices                | Good<br>condition | 0                            | 0                         | N/A                 |              |                             | N/A                                  | N/A                      |                        |   |   |  |  |                            |                            |   |
| Interventional<br>Tools              | Not<br>available  | 0                            | 0                         | N/A                 |              |                             |                                      |                          |                        |   |   |  |  |                            |                            |   |
| lmaging<br>Equipment                 | Good<br>condition | 0                            | 0                         | N/A                 |              |                             |                                      |                          |                        |   |   |  |  |                            |                            |   |
| Safety and<br>Emergency<br>Equipment | Good<br>condition | 0                            | 0                         | N/A                 |              |                             |                                      |                          |                        |   |   |  |  |                            |                            |   |
| Infrastructure and<br>Environment    | Good<br>condition | N/A                          | N/A                       | N/A                 |              |                             |                                      |                          |                        |   |   |  |  |                            |                            |   |
| Compliance and Documentation         | Good              | N/A                          | N/A                       | N/A                 |              |                             |                                      |                          |                        |   |   |  |  |                            |                            |   |
| Overall Facility<br>Maintenance      | Good              | N/A                          | N/A                       | N/A                 |              |                             |                                      |                          |                        |   |   |  |  |                            |                            |   |

Upon analysing the checklist for the equipment provided under the project, it becomes evident that several noteworthy observations warrant further exploration and consideration.

Firstly, the availability of essential equipment, particularly Cardiac Catheters and Interventional Tools, emerges as a critical concern. The absence of these items could significantly impede the hospital's ability to perform certain cardiac procedures effectively. Therefore, urgent attention is required to address this gap and ensure that all necessary equipment is readily accessible to healthcare providers.

On a more positive note, the majority of available equipment, including the Angiography Machine, Monitoring Devices, and Imaging Equipment, are reported to be in good condition. This is reassuring as it indicates that the hospital possesses the necessary tools to conduct cardiac procedures reliably and efficiently. However, it's essential to maintain vigilance in monitoring the condition of these assets to prevent any deterioration over time.

The utilisation of the Angiography Machine appears to be relatively high, with 170 patients treated, suggesting effective utilisation of this critical equipment. This underscores the importance of optimising the use of existing resources to maximise the impact of the cardiac care facility.

While the overall maintenance and service of the equipment seem satisfactory, there are instances where scheduled services are pending. Timely maintenance is crucial to ensure the continuous functionality of the equipment and prevent any disruptions in patient care. Therefore, it is imperative to prioritise and expedite any pending service requirements to uphold the reliability of the cardiac care facility.

Additionally, compliance and documentation practices appear in order, reflecting a commitment to regulatory standards and proper record-keeping protocols. This adherence to compliance requirements is essential for maintaining the quality and integrity of patient care services.

However, the checklist also identifies specific improvement areas, such as the need for additional equipment like an echo machine/printer for hard copies. Addressing these deficiencies is vital to enhancing the effectiveness and efficiency of the cardiac care services provided.

In summary, while the checklist highlights both strengths and areas for improvement, it serves as a valuable tool for assessing the overall readiness and functionality of the cardiac care facility. By addressing the identified gaps and leveraging existing strengths, the hospital can enhance its capacity to deliver high-quality cardiac care services to the community even more effectively.

# Chapter 4: **Recommendations**

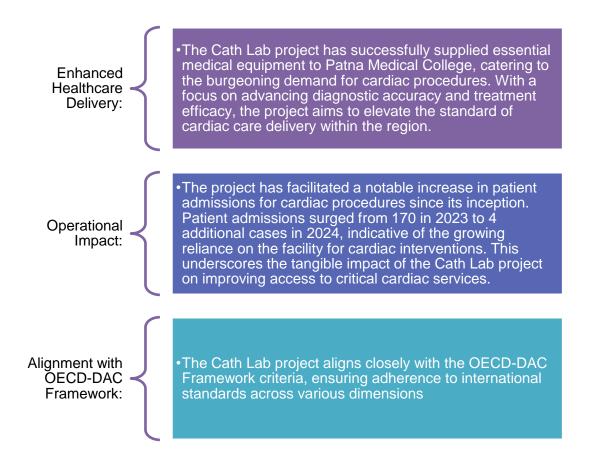


| Longitudinal<br>Data Collection:      | Implement a comprehensive longitudinal data collection mechanism<br>to track patient outcomes and healthcare utilisation patterns over<br>time. This will provide valuable insights into the long-term impact of<br>the Cath Lab facility on patient health and well-being.   |
|---------------------------------------|---|
| Qualitative<br>Feedback<br>Mechanism: | Establish a structured qualitative feedback mechanism to gather<br>insights from patients, caregivers, and healthcare providers<br>regarding their experiences with the Cath Lab facility. This will help<br>identify areas for improvement and inform future decision-making<br>processes.   |
| Comparative<br>Analysis:              | Conduct a comparative analysis of patient outcomes and healthcare<br>utilisation metrics between the pre-Cath Lab period and the post-<br>implementation phase. This will enable a thorough assessment of<br>the facility's impact on key performance indicators such as mortality<br>rates, hospital admissions, and treatment outcomes.   |
| Cost-Benefit<br>Analysis:             | Undertake a comprehensive cost-benefit analysis to evaluate the<br>economic impact of the Cath Lab facility on both patients and the<br>healthcare system. Assess the direct and indirect costs associated<br>with cardiac procedures, including travel expenses, treatment costs,<br>and productivity losses, against the benefits derived from improved<br>health outcomes and reduced morbidity. |
| Stakeholder<br>Engagement:            | Foster ongoing engagement with stakeholders, including patients,<br>healthcare providers, hospital administrators, and policymakers, to<br>solicit feedback, share findings, and garner support for continued<br>investment in cardiac care services. This collaborative approach will<br>ensure the sustainability and effectiveness of the Cath Lab<br>programme.                                 |
| Capacity<br>Building:                 | Invest in continuous training and capacity-building initiatives for<br>healthcare professionals involved in operating and managing the<br>Cath Lab facility. This will ensure the maintenance of high clinical<br>standards, promote adherence to best practices, and enhance the<br>quality of care delivered to patients.   |
| Community<br>Outreach:                | Strengthen community outreach efforts to raise awareness about<br>the availability and benefits of cardiac care services offered at the<br>Cath Lab facility. Empower community members to make informed<br>decisions about their health and encourage early intervention for<br>cardiac conditions through targeted education and outreach<br>campaigns.   |
| Research and Innovation:              | Encourage research and innovation initiatives aimed at advancing<br>cardiac care practices and technologies. Foster collaboration with<br>academic institutions and industry partners to explore novel<br>approaches to diagnosis, treatment, and prevention of<br>cardiovascular diseases, thereby enhancing the overall<br>effectiveness of the Cath Lab programme.                               |

#### **Executive Summary**

The Cath Lab Project at Patna Medical College, funded under HDFC Bank's Parivartan program, represents a significant advancement in cardiac care infrastructure, aimed at enhancing diagnostic capabilities and treatment outcomes for patients with cardiovascular ailments. Through strategic equipment provision and integration, the project seeks to bolster the hospital's capacity to address the pressing healthcare needs of the community while adhering to international standards of excellence.

#### Key Highlights of the Cath Lab Project:



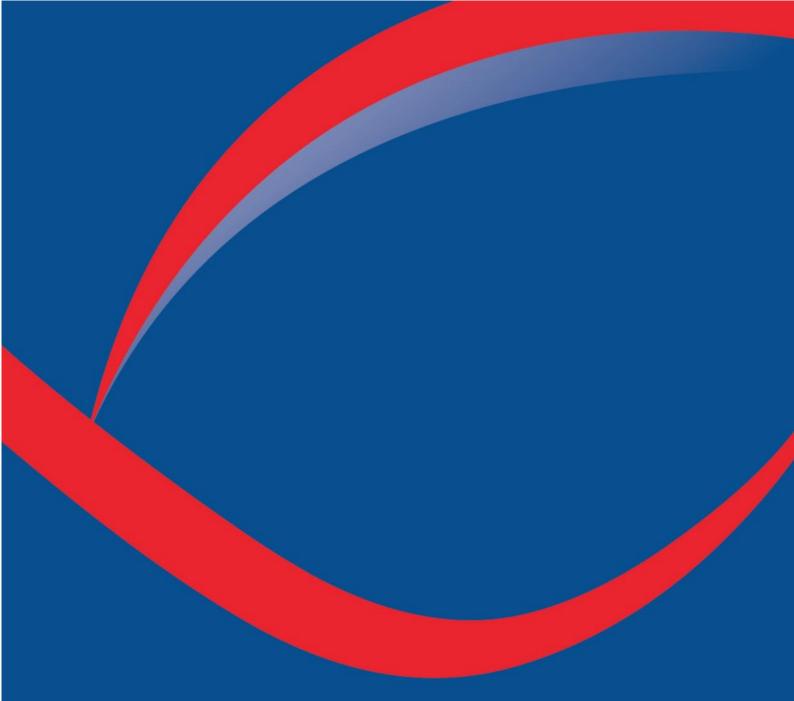
| Relevance:      | Tailored medical equipment addresses specific healthcare needs, particularly in the realm of cardiac interventions, catering to the unique requirements of the patient population. |
|-----------------|--|
|                 |  |
| Effectiveness:  | Optimized diagnostic procedures and timely interventions have resulted in tangible improvements in patient outcomes, validated by healthcare professionals.                        |
|                 |  |
| Impact:         | The Cath Lab project has significantly enhanced patient treatment<br>and satisfaction levels, thereby reshaping the healthcare landscape<br>within the community.                  |
|                 |  |
| Coherence:      | The strategic integration of medical equipment seamlessly aligns with the hospital's overarching goals, facilitating precision in cardiac care delivery.                           |
|                 |  |
| Efficiency:     | Meticulous planning and execution during equipment installation<br>ensure operational efficiency, minimizing disruptions and<br>maximizing service delivery.                       |
|                 |  |
| Sustainability: | Proactive maintenance and routine checks ensure the long-term sustainability and effectiveness of cardiac care services provided by the Cath Lab.                                  |
|                 |  |

**Operational Efficiency and Safety Measures:** 

The evaluation of equipment within the Cath Lab highlights key insights into operational efficiency, safety measures, and evolving healthcare needs. Notable findings include:



In conclusion, the Cath Lab Project at Patna Medical College signifies a transformative milestone in cardiac care delivery, driven by a commitment to excellence, innovation, and patient-centric healthcare provision. Through strategic investment in advanced medical equipment and infrastructure, the project is poised to catalyse enduring improvements in patient outcomes and community well-being, thereby fulfilling its mandate to elevate the standard of cardiac care within the region.



## CSRBOX & NGOBOX

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