

## Impact Assessment Report

# CT-Scan and MRI Machines to Boost the Capabilities of the Kolkata Municipal Corporation Healthcare Facility

Project Code: G0166



## Disclaimer For the Impact Assessment Report

- % This report has been prepared solely for the purpose set out in the Memorandum of Understanding (MoU) signed between Renalysis Consultants Pvt. Ltd. (CSRBOX) and HDFC Bank Ltd. to undertake the Impact Assessment of their Corporate Social Responsibility (CSR) project implemented.
- % This impact assessment is pursuant to the Companies (Corporate Social Responsibility Policy) Amendment Rules, 2021, notification dated 22nd January 2021.
- % This report shall be disclosed to those authorised in its entirety only without removing the disclaimer. CSRBOX has not performed an audit and does not express an opinion or any other form of assurance. Further, comments in our report are not intended, nor should they be interpreted to be legal advice or opinion.
- % This report contains an analysis by CSRBOX considering the publications available from secondary sources and inputs gathered through interactions with the leadership team of HDFC Bank Ltd., project beneficiaries, and various knowledge partners. While the information obtained from the public domain has not been verified for authenticity, CSRBOX has taken due care to receive information from sources generally considered to be reliable.
- % In preparing this report, CSRBOX has used and relied on data, material gathered through the internet, research reports, and discussions with personnel within CSRBOX as well as personnel in related industries.

## With Specific to Impact Assessment, CSRBOX:

- Has neither conducted an audit or due diligence nor validated the financial statements and projections provided by HDFC Bank Ltd.
- Wherever information was not available in the public domain, suitable assumptions were made to extrapolate values for the same;
- CSRBOX must emphasise that the realisation of the benefits/improvisations accruing out of the recommendations set out within this report (based on secondary sources) is dependent on the continuing validity of the assumptions on which it is based. The assumptions will need to be reviewed and revised to reflect such changes in business trends, regulatory requirements, or the direction of the business as further clarity emerges. CSRBOX accepts no responsibility for the realisation of the projected benefits;
- The premise of an impact assessment is 'the objectives of the project along with output and outcome indicators pre-set by the programme design and implementation team. CSRBOX's impact assessment framework was designed and executed in alignment with those objectives and indicators.

## Executive Summary

In 2023, under the Parivartan programme, the HDFC Bank initiated project G0166 which focused on providing advanced medical diagnostic equipment to the Kolkata Municipal Corporation (KMC) healthcare facility. The project involved the donation of an MRI machine and a CT scan machine to boost the diagnostic capabilities of the KMC hospital. By integrating these state-of-the-art machines into the existing healthcare system, the project aimed to offer more accurate and timely diagnostic services, ultimately improving patient care and outcomes.

A brief of the programme's cardinals is detailed below:

### Relevance of the Programme:

- The project was initiated following discussions between HDFC Bank and the Mayor of Kolkata. The hospital was chosen for its location in a densely populated area with limited access to advanced diagnostics for the urban poor in Khidirpur.
- Before the installation, KMC Hospital lacked advanced diagnostic facilities, forcing patients to seek expensive services at private centres.
- The project aimed to provide high-end diagnostic services at affordable rates, breaking down financial barriers for patients.
- MRI and CT scan machines were selected based on recommendations from KMC experts, with validation from HDFC Bank through consultations with vendors, ensuring they met the hospital's specific needs.

### Effectiveness of the Programme:

- The project successfully provided high-quality, affordable diagnostic services to the community members, significantly improving access to essential medical diagnostics.
- Feedback from doctors and medical staff confirms satisfaction with the accuracy and reliability of diagnostic reports generated by the new machines, leading to better patient outcomes.
- Extensive advocacy and awareness efforts were undertaken by Reliable Diagnostic and KMC hospital, including hoardings, leaflets, and banners, along with patient mobilisation across Kolkata.
- Instructions were issued to 144 UPHCs to refer patients to the new MRI and CT scan centre, further enhancing the project's effectiveness.

### Impact of the Programme:

- The project significantly reduced diagnostic costs, alleviating financial burdens on the community, particularly low-income individuals.
- The introduction of advanced diagnostic machines improved care quality by providing accurate and timely results, leading to better treatment planning and patient outcomes.
- Reduced wait times and affordable pricing improved patient satisfaction, reflecting the project's success in meeting community needs.
- Doctors and technicians expressed satisfaction with the equipment, which supported more efficient and accurate diagnostics.
- On average, patients rated their experience at the KMC scan centre 3.8 out of 5, indicating a positive response.

## Coherence of the Programme:

- % The programme is in alignment with National Health Policy (2017).
- % The programme aligns with SDGs 3,9,10 and 17.
- % The programme aligns with the following ESG Principles:

### PRINCIPLE 2.

Businesses should provide goods and services in a manner that is sustainable and safe

### PRINCIPLE 4.

Businesses should respect the interests of and be responsive to all its stakeholders

### PRINCIPLE 8.

Businesses should promote inclusive growth and equitable development

## Efficiency of the Programme:

- The machines have been in use since January 2024, with extensive utilisation. The MRI machine performed approximately 3,837 scans, and the CT scan machine performed approximately 2,527 scans by August 2024.
- Diagnostic services are offered at rates that are almost 62.4% lower than those at government hospitals, making them more accessible to economically disadvantaged communities.
- The machines operate continuously with minimal downtime, maximising their value and ensuring high demand is met.
- Initial maintenance is covered under warranty, with ongoing maintenance managed by Reliable Diagnostic through an Annual Maintenance Contract (AMC), ensuring long-term efficiency.

## Sustainability of the Programme:

- The affordability of diagnostic services contributes to the project's financial sustainability, ensuring continued access for the community.
- A comprehensive maintenance plan is in place to ensure the long-term functionality of the diagnostic machines.
- The project's sustained impact on community health, through improved access to diagnostic services and enhanced healthcare quality, supports its long-term sustainability.

# Contents

Executive Summary .....	3
1.1 CSR Initiatives of HDFC Bank .....	7
1.2 About Project .....	7
1.3 Project Objectives .....	8
1.4 Alignment with SDG Goals .....	8
1.5 Alignment with National Priorities .....	9
1.6 Alignment with CSR Policy .....	10
1.7 Alignment with ESG Principles .....	10
1.8 Theory of Change .....	17
2.1 Objective of the Study .....	13
2.2 Approach and Evaluation Framework .....	13
2.3 Geography of the Study .....	15
2.4 Stakeholder Mapping .....	16
2.5 Other Evaluation Framework .....	16
2.6 Ethical Practices for Consideration .....	17
3.1 Overview of Diagnostic Equipment and its Management .....	19
3.2 Observations Made under OECD-DAC Framework .....	20
3.2.1 Relevance of the Project .....	20
3.2.2 Effectiveness of the Project .....	21
3.2.3 Efficiency of the Project .....	22
3.2.4 Impact of the Project .....	24
3.2.5 Coherence of the Project .....	25
3.2.6 Sustainability of the Project .....	28
3.3 Observational Analysis of Medical Equipment Condition Assessment .....	29
3.3.1 CT- Scan Machine .....	29
3.3.2 MRI Scan Machine .....	34
3.4 Rating the Implementing Partner on PPP Matrix .....	37
Recommendations & Way Forward .....	40

## Chapter 1

# Overview of HDFC CSR Policy and Project



This section provides an overview of the funding organisation, the programme objectives and the interventions.

## 1.1 CSR Initiatives of HDFC Bank

The HDFC Bank has contributed to the transformation of millions of lives among the Indian population through its social initiatives. These endeavours fall under the umbrella of 'Parivartan', intending to foster the economic and social progress of the nation by sustainably empowering its communities. Parivartan has played a pivotal role in effecting positive change in people's lives through its interventions in various areas, including rural development, education, skill enhancement, livelihood improvement, healthcare, hygiene, and financial education. With significant strides already made, the bank remains committed to driving further change in alignment with its principles of sustainability and innovation. The CSR interventions of HDFC encompass the following areas :



## 1.2 About the Project

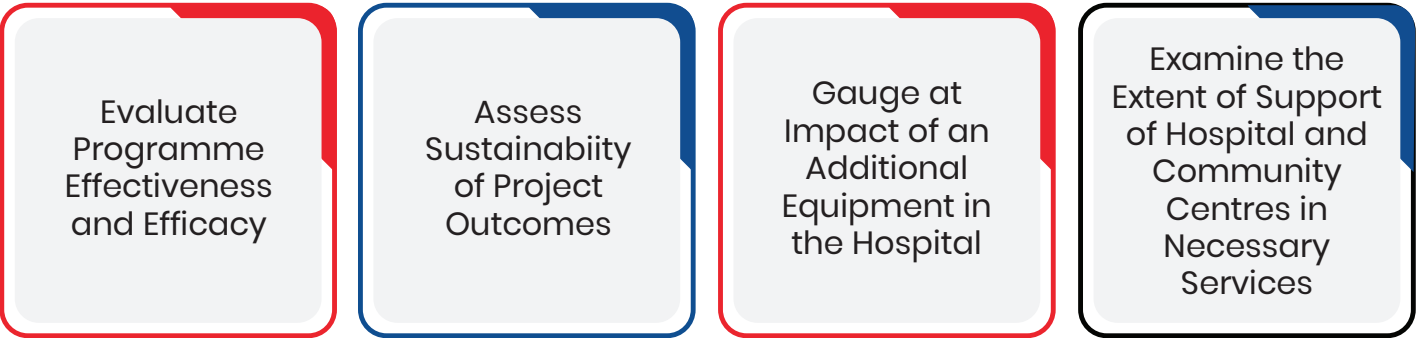
In 2023, the Parivartan programme of HDFC Bank has undertaken a significant Corporate Social Responsibility (CSR) initiative aimed at upgrading medical facilities in government hospitals and community health centres. This initiative is designed to support the socially weaker sections of society. As part of this comprehensive programme, various projects have been implemented to enhance the healthcare infrastructure and improve the quality of medical services available to underserved communities.

One of the key projects under the Parivartan programme is Project G0166, which focuses on providing advanced medical diagnostic equipment to the Kolkata Municipal Corporation (KMC) healthcare facility. This project involves the donation of an MRI machine and a CT scan machine to boost the diagnostic capabilities of the KMC hospital. By integrating these state-of-the-art machines into the existing healthcare system, the project aims to offer more accurate and timely diagnostic services, ultimately improving patient care and outcomes.




The introduction of MRI and CT scan machines is expected to significantly enhance the KMC healthcare facility’s ability to diagnose and treat a wide range of medical conditions. This will not only reduce the burden on healthcare professionals but also decrease the dependency on external diagnostic centres, thereby making advanced diagnostic services more accessible to the local population. This project is a strategic effort to address the gaps in diagnostic services within the KMC healthcare system and to support the broader goals of the Parivartan programme in upgrading medical facilities for the socially weaker sections of society.

1.2 About the Project






1.4 Alignment with SDG Goals

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. The intervention’s alignment with the SDGs is denoted below.


SDG Goal	SDG Target	Alignment
	<b>Target 3.8:</b> Ensure access to quality essential healthcare services	The project directly contributes to SDG 3 by providing advanced diagnostic equipment (MRI and CT scan machines) to a public healthcare facility. This enhances the quality and accessibility of healthcare services for underserved communities, ensuring they receive timely and accurate medical diagnostics.
	<b>Target 3.4:</b> Reduce by one- third premature mortality from non- communicable diseases	Early and accurate diagnosis through MRI and CT scans helps in the early detection and treatment of non- communicable diseases, contributing to the reduction of premature mortality.



	<b>Target 9.1:</b> Develop quality, reliable, sustainable, and resilient infrastructure	By upgrading the healthcare infrastructure with advanced diagnostic machines, the project contributes to building a resilient and sustainable healthcare system. This aligns with the intention to develop reliable infrastructure that meets the needs of the population.
	<b>Target 9.4:</b> Target 9.4: Upgrade infrastructure and retrofit industries to make them sustainable	The introduction of advanced medical equipment represents an upgrade to the existing healthcare infrastructure, making it more sustainable and capable of providing long-term benefits to the community.
	<b>Target 10.2:</b> Empower and promote the social, economic, and political inclusion of all	By improving healthcare services in a government facility, the project reduces inequalities in access to high-quality medical care. It specifically targets economically disadvantaged populations, providing them with the same level of care that would otherwise be inaccessible, thereby promoting social inclusion.
	<b>Target 10.3:</b> Ensure equal opportunity and reduce inequalities of outcome	The project contributes to reducing health disparities by ensuring that advanced diagnostic services are available to all, regardless of economic status, thereby supporting equal opportunity in healthcare outcomes.
	<b>Target 17.17:</b> Encourage and promote effective public, public-private, and civil society partnerships	This project is a clear example of a successful public-private partnership, where HDFC Bank collaborates with the Kolkata Municipal Corporation to improve public healthcare infrastructure. Such partnerships are crucial for achieving the broader SDGs by pooling resources, expertise, and efforts towards common goals.

## 1.5 Alignment with National Priorities

The programme is well aligned with the country's national priorities and goals. The same is represented below:

National Priority	Objective	Alignment
<p>National Health Policy (2017)</p> 	<p>Improve health status through concerted policy action in all sectors and expand preventive, promotive, curative, palliative and rehabilitative services provided through the public health sector with a focus on quality.</p>	<p>By providing MRI and CT scan machines to a government healthcare facility, the project directly supports the policy's objective of improving infrastructure to enhance healthcare delivery, particularly for underserved communities.</p>

## 1.6 Alignment with CSR Policy

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 table shows the alignments of the intervention with the approved activities by the Ministry of Corporate Affairs.

Activity	Description	Alignment with the Project
(iv)	Promoting health care including preventive health	<p>The project enhanced healthcare infrastructure through the provision of advanced MRI and CT scan machines to the KMC healthcare facility. This improved diagnostic capabilities, enabling early and accurate disease detection, which supports preventive healthcare.</p> <p>By targeting underserved communities, the project makes high-quality medical services more accessible and affordable, directly contributing to the well-being of socially and economically weaker sections of society.</p>

ESG Principle	Alignment with the Project
<b>PRINCIPLE 2.</b> Businesses should provide goods and services in a manner that is sustainable and safe	<b>Sustainable Healthcare Delivery:</b> By providing advanced MRI and CT scan machines, the project enhances the sustainability of healthcare services. These machines are designed for long-term use, providing reliable diagnostic services over time, thereby ensuring that the healthcare infrastructure is both durable and capable of meeting ongoing community needs.
<b>PRINCIPLE 4.</b> Businesses should respect the interests of and be responsive to all its stakeholders	<b>Addressing Community Health Needs:</b> The project demonstrates responsiveness to the healthcare needs of underserved communities by improving access to critical diagnostic services. By focusing on a government facility, it directly addresses the interests of local populations who rely on public healthcare for essential services.  <b>Stakeholder Inclusivity:</b> The project involves and benefits multiple stakeholders, including patients, healthcare providers, and the broader community. By upgrading medical facilities, the project aligns with the interests of these groups, ensuring that the healthcare system serves them effectively.
<b>PRINCIPLE 8.</b> Businesses should promote inclusive growth and equitable development	<b>Affordable Healthcare Access:</b> The project directly promotes inclusive growth and equitable development by providing advanced diagnostic services (MRI and CT scans) at significantly reduced rates to the urban poor in Khidirpur, ensuring that vulnerable populations can access essential healthcare without financial barriers.  <b>Strengthening Local Infrastructure:</b> By enhancing the healthcare infrastructure of a public hospital, the project ensures that high-quality medical services are available to all, particularly underserved communities, thereby contributing to long-term community health and equitable development.

## Chapter 2

# Impact Assessment Design and Approach



This section outlines the framework and methodologies employed while conducting the baseline study. It assesses the current waste management scenario and baseline indicators in the targeted rural villages. It details the data collection methods and sampling techniques utilised to gather comprehensive insights into waste generation, segregation practices, infrastructure, and community perceptions.

1.2 About the Project

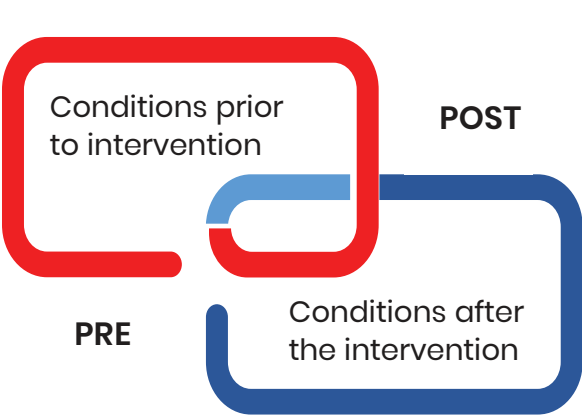
To assess the effectiveness of integration of MRI and CT-Scan machines in KMC healthcare services.

To measure the impact on diagnostic capabilities and patient outcomes.

To analyse the maintenance mechanism for sustained functioning of the MRI and CT-Scan machines.

To measure the impact on diagnostic capabilities and patient outcomes.

2.2 Approach and Evaluation Framework



Given the study's objectives and key areas of inquiry, the design of the evaluation focussed on learning as the prime objective. In this section, we present our approach to developing and executing a robust, dynamic, and result-oriented evaluation framework/design.

To measure the impact, a pre-post programme evaluation approach is proposed for the study. This approach is dependent on the recall capacity of the respondents. Under this approach, the beneficiaries are enquired about conditions prior to the programme intervention

and after the programme intervention. The difference helps in understanding the contribution of the programme in improving the intended condition of the beneficiary. This approach at best can comment on the contribution of the programme in improving the living standards though may not be able to attribute the entire changes to the programme. Other external factors may also play a role in bringing positive changes along with the programme. Hence, the contribution will be assessed but attribution may not be entirely assigned to the programme.

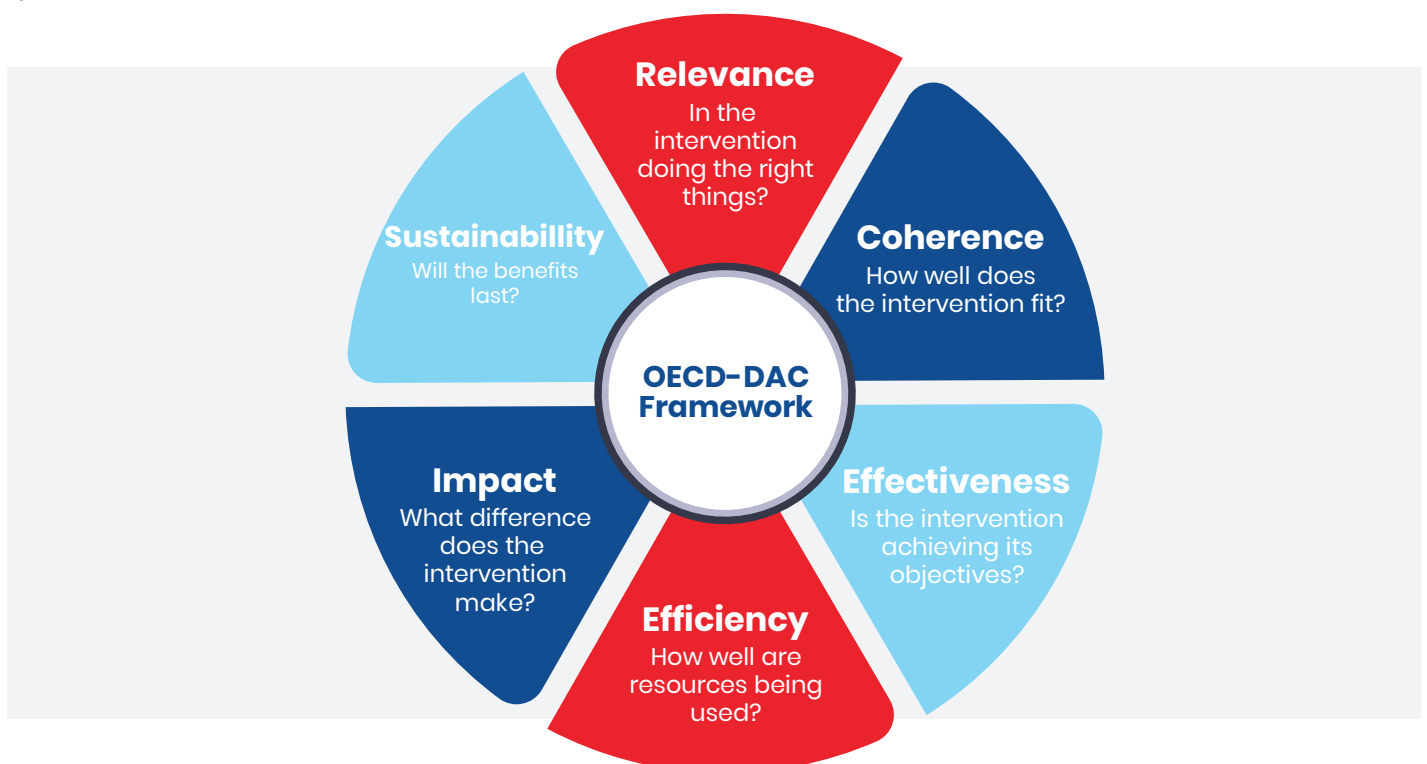
For the assessment of the programme, we will be employing a two-pronged approach to data collection and review, including secondary data sources, literature, and primary data obtained from qualitative methods of data collection. The figure below illustrates the study approach that will be used in data collection and review. The secondary study involves a review of annual reports, monitoring reports, programme documentation, and research by renowned organisations available in the public domain to draw insights into the situation of the area.



The primary study comprises qualitative approaches to data collection and analysis. It involves in-depth interviews (IDIs) and Key-informant interviews with the stakeholders, like the Key machine operator, Hospital staff and Nurse/Ward boys. In addition to primary data collection, the consultants are also studying various project documents, like Project Proposals, Project Log-frame (Logical Framework Analysis), Project Cost, and other variables (if any), Project Implementation Timelines, Communication and Documentation Products, and other relevant reports/literature related to the projects. The consultants are also studying project implementation-related documents, specifying details of activities carried out, processes undertaken, and number of beneficiaries reached.

## OECD-DAC Framework

To determine the relevance, efficiency, coherence, effectiveness, impact and sustainability of the project, the evaluation will use the OECD-DAC Framework. Using the OECD-DAC framework, the evaluation will be able to assess the HDFC CSR Team’s contribution to the results, while keeping in mind the multiplicity of factors that may be affecting the overall outcome. The social impact assessment hinges on the following pillars:





## 2.3 Geography of the Study

The study was conducted at the Kolkata Municipal Corporation (KMC) Hospital, Khidirpur –17/1 Manasatala Lane Kolkata 700023.

The Kolkata Municipal Corporation (KMC) oversees an area of 202 square kilometres, encompassing 144 wards, and delivers a wide range of quality urban services to a population of approximately 9 million, including a significant floating population.



Figure 1: KMC Diagnostic Centre for MRI and CT-Scans

## 2.4 Stakeholder Mapping

Detailed conversations were conducted with various stakeholders including KMC hospital staff, implementing partners and patients. These discussions aimed to gather comprehensive insights into the day-to-day functioning of the equipment and its overarching impact on the operations and services provided by the KMC hospital. The goal was to gain a nuanced understanding of how the equipment support (CT-scan and MRI machines, has influenced and improved the hospital's ability to deliver quality care to its patients.

The following stakeholders were considered for interaction to collect data:

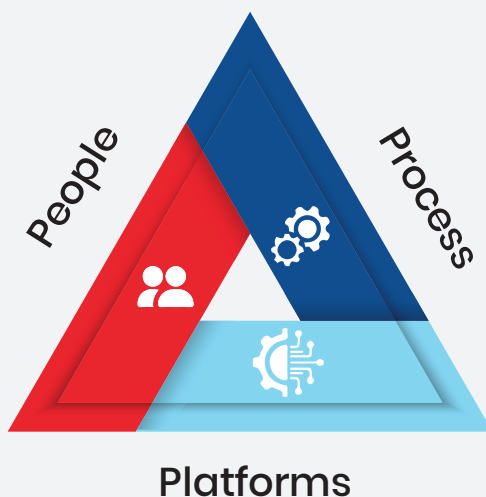


SDG Goal	SDG Goal	SDG Goal
Chief Municipal Health Officer (CMHO)	In-depth Interview (IDI)	1
Doctors	In-depth Interview (IDI)	6
Machine Operators	In-depth Interview (IDI)	2
Nurses	In-depth Interview (IDI)	2
Patients	Key Informant Interview (KII)	2
Representative of United Imaging	In-depth Interview (IDI)	1
Implementing Partner	In-depth Interview (IDI)	2
HDFC Project Team Member	In-depth Interview (IDI)	2
Total Interactions		20

## 2.4 Stakeholder Mapping

As a part of the evaluation process, the team has also ranked the implementing agency on the PPP framework. The framework primarily was used to focus on evaluating the implementing agency on primary indicators of People, Processes, and Platforms.

As standalone components, people, processes, and platforms are necessary for evaluating an organisation to check their balance of human resources, the processes followed at execution of a programme, and technical support utilised towards successful completion of the project.



## 2.6 Ethical Practices for Consideration

- % Ethical Considerations in Data Collection: As part of the qualitative and quantitative data collection process for the current project, team members adhered to essential ethical protocols by obtaining informed consent from respondents before gathering their responses. Respondents were informed about the purpose of the study, the expected outcomes of data collection, and how their testimonials would be recorded accurately.
- % Sensitivity in Handling Personal Information: Given that the data collection tools involved gathering personal information that could potentially affect respondents' sentiments if not handled with care, the team took proactive measures to prevent any such issues. A sensitisation session was conducted for all enumerators and team members involved, guiding them on the appropriate procedures for data collection.
- % Assurance of Confidentiality: Respondents were assured that their personal information would remain confidential and that the data collected would be used strictly for research purposes.

## 2.7 Theory of Change

Activities	Output	Outcome	Impact
<ul style="list-style-type: none"> <li>% Installation of CT-Scan and MRI machines in the hospital.</li> <li>% Other apparatus supplied.</li> <li>% Training of the staff</li> </ul>	<ul style="list-style-type: none"> <li>% Number of CT-Scan machines installed: 1</li> <li>% Number of MRI machines installed: 1</li> <li>% Staff members trained: 6</li> <li>% Number of patients benefitted: 6,364</li> <li>% Additional apparatus supplied:</li> <li>% Power injector, UPS, Console, Work station (CT-Scan), Brain coil, Shoulder coil, Abdomen coil, UPS, chillers (MRI).</li> </ul>	<ul style="list-style-type: none"> <li>% Improved diagnostic accuracy and faster diagnosis for patients.</li> <li>% Enhanced capacity of the KMC healthcare facility to handle complex medical cases.</li> <li>% Increased utilisation of public healthcare services by the community.</li> <li>% Earlier detection and timely treatment of diseases, leading to improved health outcomes.</li> <li>% Reduced need for referrals to external diagnostic centres, lowering costs and time for patients.</li> </ul>	<ul style="list-style-type: none"> <li>% Reduction in morbidity and mortality rates due to earlier diagnosis and treatment.</li> <li>% Decreased health disparities among economically disadvantaged communities, contributing to overall public health equity.</li> <li>% More resilient and capable public healthcare infrastructure, better equipped to meet the needs of a large and diverse population.</li> <li>% Strengthened trust and confidence in the public healthcare system among the local population.</li> </ul>

## Chapter 3

# Impact Assessment Findings



The following report section indicates key findings and insights drawn from the impact assessment study based on field interactions and the OECD DAC standard parameters outlined in the study framework. Insights were drawn by adopting a 360-degree approach to data collection by gathering data from the quantitative and qualitative methods by engaging with different programme stakeholders.

## 2.7 Theory of Change

Activities	Activities
<b>(A) Equipment Related Information</b>	
Type and Features	<p><b>CT-Scan Machine:</b></p> <ul style="list-style-type: none"> <li>% It is a 40-slice multi-detector MDCT, which is capable of performing both standard and contrast-enhanced CT tests. However, it does not support cardiac CT, limiting its use in specific cardiac diagnostic scenarios.</li> <li>% The setup includes essential additional equipment such as a power injector for administering contrast, a UPS (Uninterruptible Power Supply) for backup power, a console for operation, and a workstation for image processing and analysis.</li> <li>% The CT scanner operates 24/7 in three shifts to ensure continuous availability, with a brief rest period from 3 am to 6 am for maintenance and system checks.</li> </ul>
	<p><b>MRI Machine:</b></p> <ul style="list-style-type: none"> <li>% The MRI machine is a 1.5 Tesla, 8-channel unit.</li> <li>% It is equipped with a brain coil, shoulder coil, and abdomen coil for specialised imaging, alongside a workstation for image analysis, a UPS for power continuity, and chillers to maintain the required operational temperature.</li> <li>% The MRI machine follows a similar 24/7 operational schedule, with one male operator assigned per shift to maintain service continuity and handle the specialised coils required for various types of scans.</li> </ul>
<b>(B) Management &amp; Administration</b>	
Management and Oversight	<ul style="list-style-type: none"> <li>% Reliable Diagnostic is responsible for regular operations, ensuring the smooth functioning of the machines, and liaising with both KMC and the manufacturer.</li> <li>% The KMC oversees the overall management, ensuring that service pricing remains accessible.</li> <li>% Rates are set at 62.4% lower than standard government rates.</li> </ul>

## 3.2 Observations Made under OECD-DAC Framework

### 3.2.1 Relevance of the project

- % According to Dr Subrata Roy and other medical staff, before the installation of this advanced diagnostic equipment, the hospital lacked such facilities, forcing patients to seek services at private hospitals or centres. This led to delays in diagnosis and treatment, which have now been mitigated.
- % According to Mr Kaushik Gupta, Senior VP and Cluster Head of HDFC Bank, the project was initiated after a crucial discussion with the Mayor of Kolkata. The primary focus of the project was to address the pressing healthcare needs of the urban poor in the Khidirpur area. The hospital was specifically chosen due to its strategic location in a densely populated area. The area has a high percentage of urban poor residents with limited access to advanced medical diagnostics. This choice was aimed at maximising the impact of the CSR initiative by targeting an area with significant healthcare needs.
- % The project was designed to provide low-cost, high-end diagnostic services to the community, directly addressing the financial barriers faced by patients in accessing such services.
- % The selection of the MRI and CT scan machines was made based on recommendations from KMC experts. HDFC Bank validated these recommendations by consulting with vendors to ensure the equipment met the specific needs of the hospital and would deliver the intended benefits.



Figure 2: Interaction with KMC CMHO, Dr Subrata Roy Chowdhury