HDFC BANK
PARIVARTAN
A step towards sustainable progress

Draft Impact Assessment of **Strategic COVID-19 Relief Partnership**

Project Code: C001

Table of Contents

Table of Figures

List of Tables

Abbreviations

Abbreviations	Details
GGSH	Guru Gobind Singh Hospital
CPAP	Continuous Positive Airway Pressure
IIMS	Indian Institute of Medical Sciences
IGMS	Indira Gandhi Institute of Medical Sciences
NICU	Neonatal Intensive Care Unit
NMCH	Nalanda Medical College and Hospital
PMCH	Patna Medical College and Hospital
SNCU	Special New-born Care Unit

Table 1: Abbreviations

Chapter 1

Project Background and Overview

This section offers an overview of the funding organisation, the foundational aspects of the project, and a detailed description of the interventions carried out.

1.1 CSR Initiatives of HDFC Bank

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 undertaken several CSR initiatives in the healthcare sector, aiming to enhance access to quality healthcare for marginalised communities.

The themes of HDFC's CSR project include:

Rural Development

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.

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.

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.

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 aimed to strengthen the Intensive Neonatal and Paediatric care at the government hospital facility by providing comprehensive support, including advanced equipment and essential supplies, to mitigate the disproportionate impact on neonates and children during subsequent COVID-19 outbreaks.

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.

HDFC Bank's Parivartan initiative is dedicated to ensuring access to medical facilities for everyone. As part of this commitment, the bank aimed at strengthening the Intensive Neonatal and Paediatric care at the government hospital facility in Patna, Bihar, ensuring preparedness and quality healthcare in the state capital.

Project Activities

Neonatal Intensive Care Unit in Public Hospital

- A 25 bedded high end Neonatal Intensive Care Unit (NICU) established in Guru Gobind Singh Hospital (GGSH), Patna.

Equipement deployment in NMCH Facility

- High-End Ventilator with HFO, 3 Conventional Neonatal Ventilators, High End Paediatric Ventilator and 3 Conventional Paediatric Ventilator deployed at a 30-bed pediatric intensive care unit at Nalanda Medical College and Hospital facility(NMCH).

1.2 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 below-mentioned table shows the alignments of the intervention with the approved activities by the Ministry of Corporate Affairs.

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

Table 2:Alignment with schedule VII

1.3 Alignment with ESG Principle

The project'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 project aligns with the principle mentioned below:

PRINCIPLE 2

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

1.4 Alignment with SDGs

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2016 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.

Sustainable Development Goal	Target	Alignment
	**Goal 3: Good Health and Well-being** **3.3** By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.	Completely
	Goal 9: Industry, Innovation and Infrastructure 9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure,	Completely

	to support economic development and human well-being, with a focus on affordable and equitable access for all.	
	**Goal 17: Partnership for the goals** 17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships	Completely

Table 3:SDG Alignment

Chapter 2

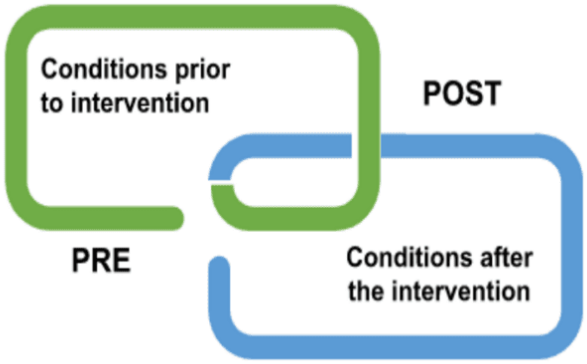
Design and Approach for Impact Assessment

This section offers an overview of the study's objectives, the adopted research methodology, and other pertinent details concerning the investigation.

2.1 Objectives of the project

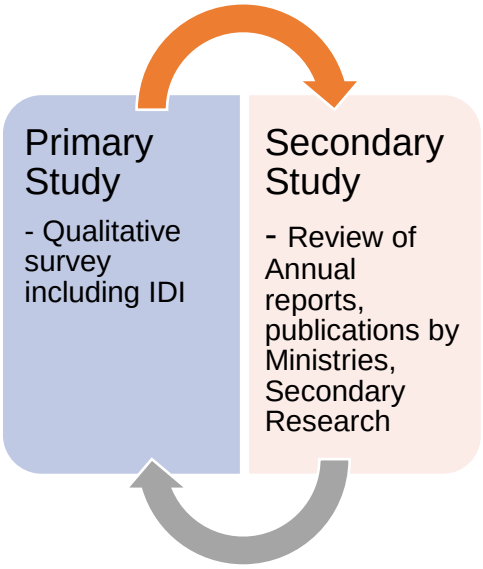
- To enable the identified hospital/s to be equipped and to tackle the COVID-19 situation and ensure preparedness for anticipated surges.
- To strengthen existing health facilities in identified 2 public hospitals in Patna - by establishing a 25-bed **Neonatal Intensive Care Unit (NICU)**

2.2 Evaluation approach, methodology and 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 our strategy for developing and implementing a robust, dynamic, 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, stakeholders were surveyed about their conditions before and after the programme intervention. Analysing the difference helps to discern the programme's contribution to enhancing the intended condition of the stakeholders. 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, the team 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 NICU 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 Doctors, Nurses, Medical Superintendent and Key machine operator.

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

OECD-DAC Framework

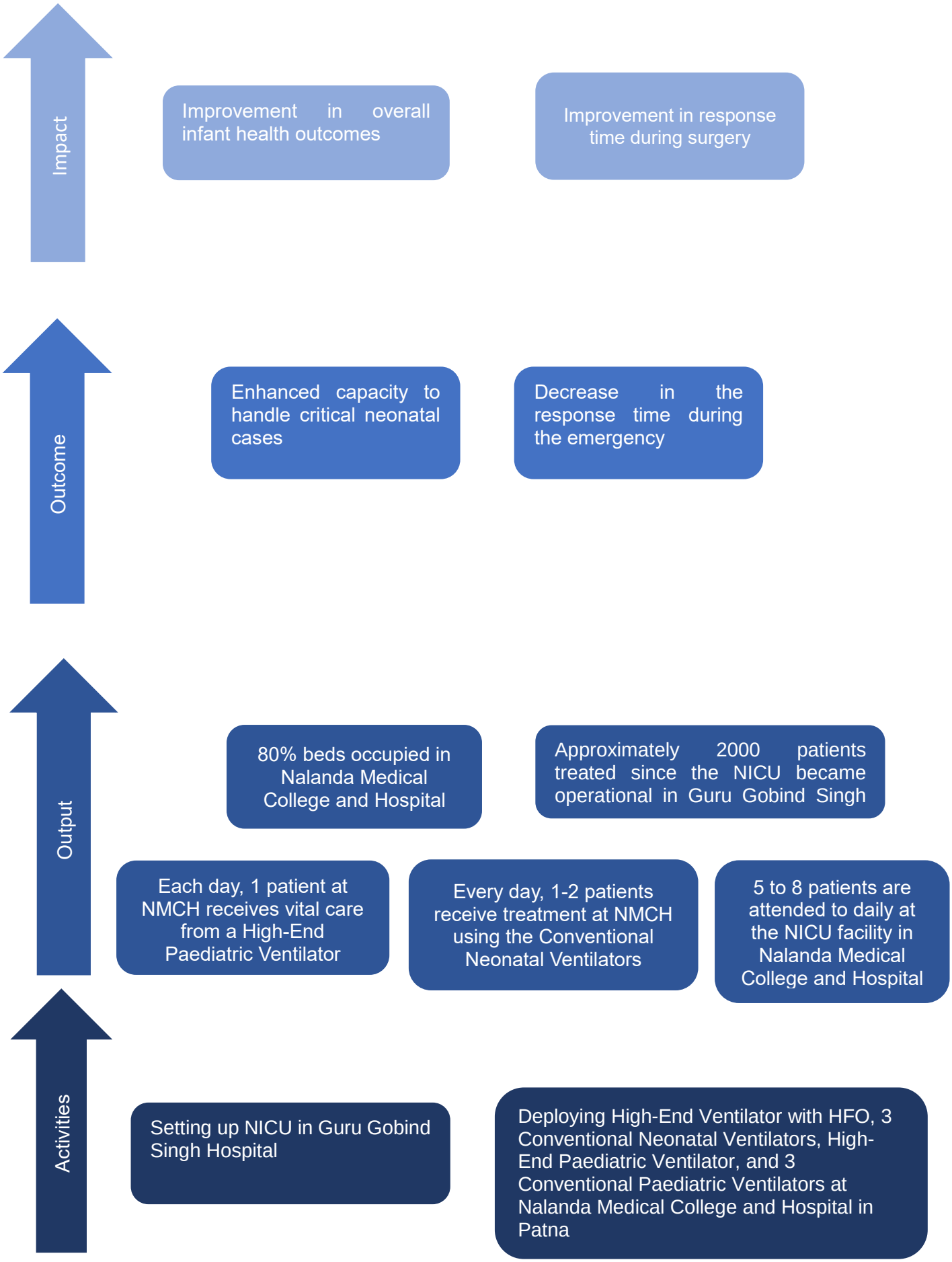
To determine the Relevance, Coherence, Effectiveness, Efficiency, Impact and Sustainability of the project, the evaluation used the OECD-DAC framework. Using the logic model and the criteria of the OECD-DAC framework, the evaluation assessed the HDFC team's contribution to the results while keeping in mind the multiplicity of factors that might have affected the overall outcome. The social impact assessment hinged on the following pillars:

2.3 Stakeholder mapping

S No.	Stakeholder	Method of Data Collection	No. of Interviews/ per location
1.	Paediatrician (Doctor)	IDI	1
2.	Nurse	IDI	1
3.	Social Worker	IDI	1
4.	Key Machine Operator	KII	1
		Total	**8**

Table 4:Qualitative Sampling

2.4 Theory of change



Chapter 3

Impact Assessment Findings

This section indicates the key findings and insights drawn from the impact assessment study based on the OECD-DAC framework's standard parameters as outlined. The insights have been drawn adopting a 360-degree approach to data collection by gathering data through qualitative methods from multiple stakeholders involved in the programme.

3.1 Relevance

The 2nd wave of COVID-19 strained healthcare resources, and it was particularly concerning for the unvaccinated children under 12 years of age. [1] Between March 1 and April 4, 2021, 79,688 children were infected by the virus. Recognising the urgency, Bihar prioritised strengthening its healthcare infrastructure to address both immediate and potential future challenges. HDFC's initiative aimed to strengthen the Intensive Neonatal and Paediatric care at the government hospital facility and ensure preparedness and quality healthcare in the state capital.

Through team's interactions with different hospital staff, it was discovered that prior to the intervention, the hospitals were grappling with various challenges related to NICU admissions.

Nalanda Medical College and Hospital (NMCH)

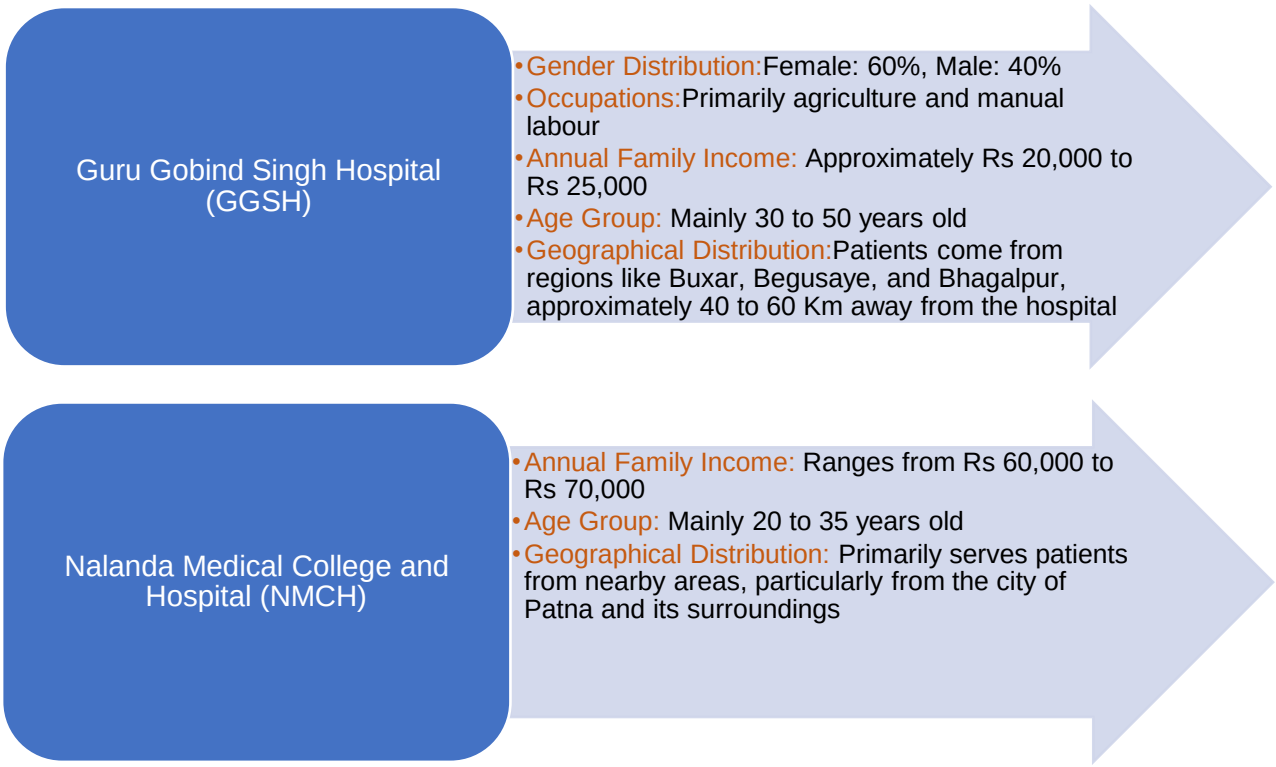
- Absence of NICU Facilities: Lack of a Neonatal Intensive Care Unit (NICU) deterred patients from seeking care, especially for critical newborn cases.
- Perceived Risk of Infant Mortality: Community members feared that infants would not receive adequate care, leading to concerns about infant mortality rates.
- Limited Emergency Treatment Options: The hospital faced difficulties in providing emergency care to newborns due to the absence of specialised facilities.
- Strained Parent-Provider Relationship: Challenges in communication and relationship dynamics between parents and healthcare providers in the NICU led to conflicts and decreased parent confidence.

Guru Gobind Singh Hospital (GGSH)

- Oxygen Supply Shortage: The hospital lacked a centralised oxygen supply system, posing a critical challenge to patient care, particularly for newborns.
- Limited Specialised Equipment: Before the availability of specialised equipment, the hospital struggled to provide comprehensive care for newborns, especially preterm infants.
- Insufficient infrastructure and resources hindered the hospital's ability to deliver optimal care to newborns, leading to treatment challenges.

The **demographic data** was collected from the interactions with the staff of the hospital, providing valuable insights into the patient population and emphasising the importance of targeted healthcare solutions tailored to diverse needs.

[1] https://scroll.in/latest/991698/coronavirus-over-79000-children-tested-positive-since-march-as-india-grapples-with-second-wave



3.2 Effectiveness

Increase in the accessibility of the NICU services and increase in the footfall

At **Guru Gobind Singh Hospital,** the implementation of a new Neonatal Intensive Care facility has significantly improved the accessibility of emergency services for patients in need. Prior to its establishment, patients relied on NICU facilities at nearby hospitals such as Patna Medical College and Hospital, located at a distance of 50-60km. Fortunately, with the NICU set-up, referrals have been reduced, minimising patient inconvenience and additional costs.

At present, the NICU facility caters to around 50k population, and the hospital primarily treats diseases such as Jaundice and respiratory issues, admitting approximately 2-3 NICU patients daily. The NICU introduction led to a significant tenfold rise in-patient admission, as reported by the nursing in charge, necessitating the expansion of staff to accommodate the rising workload. GGSH serves a population of 50 villages, with patients travelling distances ranging from 5 to 50 kilometres to access the facility.

Meanwhile, **Nalanda Medical College and Hospital,** the implementation of a NICU facility, has similarly improved the accessibility of emergency services. Previously, patients sought NICU facilities at private hospitals, with common referrals made to Patna Medical College and Hospital, Indira Gandhi Institute of Medical Sciences typically within a distance of 5 kilometres. NICU treatments at Nalanda Medical College and Hospital encompass various neonatal conditions like Patent Ductus Arteriosus with Respiratory Distress, Hypoxic Ischemic Encephalopathy, Systemic Inflammatory Response Syndrome Due to Sepsis, Meconium Aspiration Syndrome, Neonatal Jaundice, Late-Onset Neonatal Sepsis, Early-Onset Neonatal Sepsis with the hospital admitting 30 to 50 patients per month.

Since the establishment of the NICU, there has been a noticeable impact on patient flow and workload, with increased admissions for newborns. The hospital has observed a surge in patient load, particularly newborn admissions, reflecting the effectiveness of the NICU in addressing critical healthcare needs. Patient monitoring within the NICU is conducted timely and effectively, ensuring quality care for newborns and enhancing treatment outcomes.

Figure 1: NICU at NALANDA MEDICAL COLLEGE AND HOSPITAL

3.3 Efficiency

Number of patients treated with the help of the NICU facility

At GGSH, approximately 2,000 patients have been treated since the NICU became operational. The addition of the SNCU has significantly impacted overall newborn care within the hospital, leading to a decrease in infant mortality numbers. Similarly, at Nalanda Medical College and Hospital, approximately 30 to 50 patients are treated after the NICU's functionality.

Maintenance of equipment

The Special Newborn Care Unit at GGSH is equipped with various machines essential for neonatal care, including open care systems, radiant warmers with fixed height and trolley drawers, and oxygen bottles, among others. These machines serve critical functions, such as providing warmth and oxygen therapy to newborns. Maintenance schedules are diligently followed, with the next scheduled maintenance for February 2024, followed by May 2024. While ensuring compliance with regulatory standards and safety protocols, challenges like the centre's oxygen supply problem have been encountered, but they are promptly addressed to minimise disruptions. Operators undergo training to operate the machines effectively, ensuring proper usage and troubleshooting. Downtime and repair history are meticulously tracked and documented to optimise equipment performance and ensure uninterrupted neonatal care.

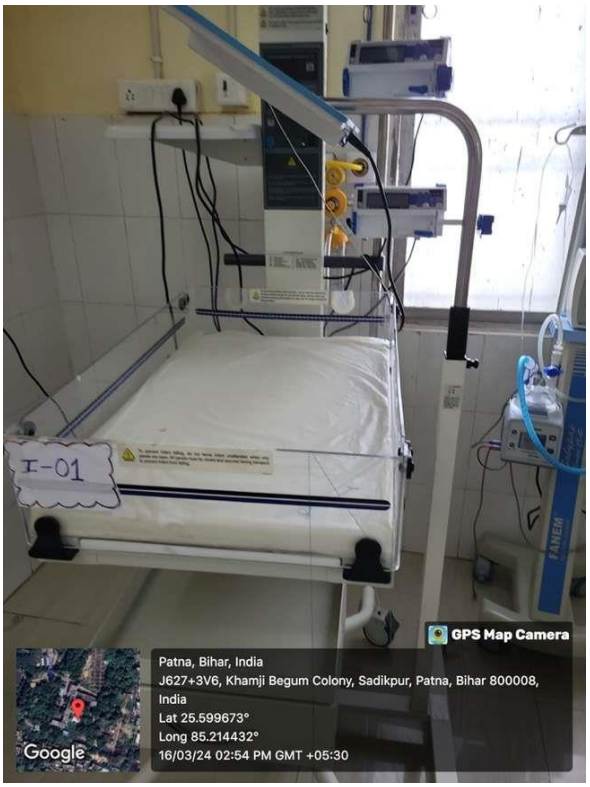
Guru Gobind Singh Hospital								
Equipment	**Condition of Equipment**	**Total Number of Patients Treated**	**Total Occupied Beds**	**Average Per Day Utilisation Time of the Machine**	**Down Time of the Machine**	**Date of Previous Service/ Maintenance**	**Next Scheduled Service/ Maintenance**	**Frequency of Calibration**
Incubators	Functional	2-3 per day	60 to 70%	8 to 12 hr	As required	12/24	04/24	Monthly
Radiant Warmers	Functional	2-3 per day	70 to 80 %	6 to 10 hr	As required	12/12/23	12/06/24	Monthly
Ventilators	Functional	1-2 per day	80 to 90%	8 to 10 hr	As required	12/12/23	12/06/24	Monthly
Continuous Positive Airway Pressure (CPAP)	Functional	2 - 3 per day	70 to 80 %	6 to 8 hr	As required	12/12/23	12/06/24	Monthly
Pulse Oximeters	Functional	2- 3 per day	80 to 90%	5 to 7 hr	As required	12/12/23	12/06/24	Monthly
Cardiorespiratory Monitors	Functional	2- 3 per day	80 to 85 %	10 to 12 hr	As required	12/12/23	12/06/24	Monthly
Phototherapy Units	Functional	2- 3 per day	60 to 70%	8 to 12 hr	As required	12/12/23	12/06/24	Monthly
Infusion Pumps	Functional	2- 3 per day	60 to 70%	8 to 12 hr	As required	12/12/23	12/06/24	Monthly
Blood Gas Analysers	Functional	1 -2 per day	30 to 40 %	4 to 5 hr	As required	12/12/23	12/06/24	Monthly
Bilirubinometers	Functional	1 -2 per day	60 to 70%	5 to 6 hr	As required	12/12/23	12/06/24	Monthly
Blood Pressure Monitors	Functional	2- 3 per day	80 to 85 %	8 to 12 hr	As required	12/12/23	12/06/24	Monthly
Glucometers	Functional	1 -2 per day	60 to 70%	6 to 8 hr	As required	12/12/23	12/06/24	Monthly
Intravenous (IV) Poles and Infusion Sets	Functional	2- 3 per day	70 to 80 %	6 to 8 hr	As required	12/12/23	12/06/24	Monthly
Neonatal Resuscitation Equipment	Functional	1 -2 per day	70 to 80 %	8 to 10 hr	As required	12/12/23	12/06/24	Monthly
Thermometers	Functional	12 -15 per day	80 to 90%	8 to 12 hr	As required	12/12/23	12/06/24	Monthly
Weighing Scales	Functional	1 -2 per day	60 to 70%	6 to 8 hr	As required	12/12/23	12/06/24	Monthly

At Nalanda Medical College and Hospital, the maintenance of Neonatal Intensive Care Unit machines is a priority to ensure continuous and reliable neonatal care. Scheduled maintenance is planned, with the next maintenance scheduled for March 2024, following the January 2024 session. All machines are currently within their service period, ensuring optimal functionality. Compliance with regulatory standards and safety protocols is strictly adhered to during equipment operation. While challenges or issues have not arisen thus far, operators receive training to operate the machines proficiently, ensuring proper usage and troubleshooting whenever necessary. This emphasis on maintenance and training contributes to the seamless operation of NICU equipment, facilitating efficient neonatal care delivery.

Table 5: GGSH Checklist

Nalanda Medical College and Hospital								
Equipment	**Condition of Equipment**	**Total Number of Patients Treated**	**Total Occupied Beds**	**Average Per Day Utilisation Time of the Machine**	**Down Time of the Machine**	**Date of Previous Service/ Maintenance**	**Next Scheduled Service/ Maintenance**	**Frequency of Calibration**
High-End Ventilator with HFO	Functional	NA	80%	8 to 10 hr	8 - 10 hr	Jan-24	Mar-24	Monthly
Conventional Neonatal Ventilators	Functional	1- 2 Per day	80%	8 - 10 hr	8 - 10 hr	Jan-24	Mar-24	Monthly
High-End Paediatric Ventilator	Functional	1 Per day	80%	8 - 10 hr	4 to 5 hr	Jan-24	Mar-24	Monthly

Table 6: NALANDA MEDICAL COLLEGE AND HOSPITAL NICU checklist



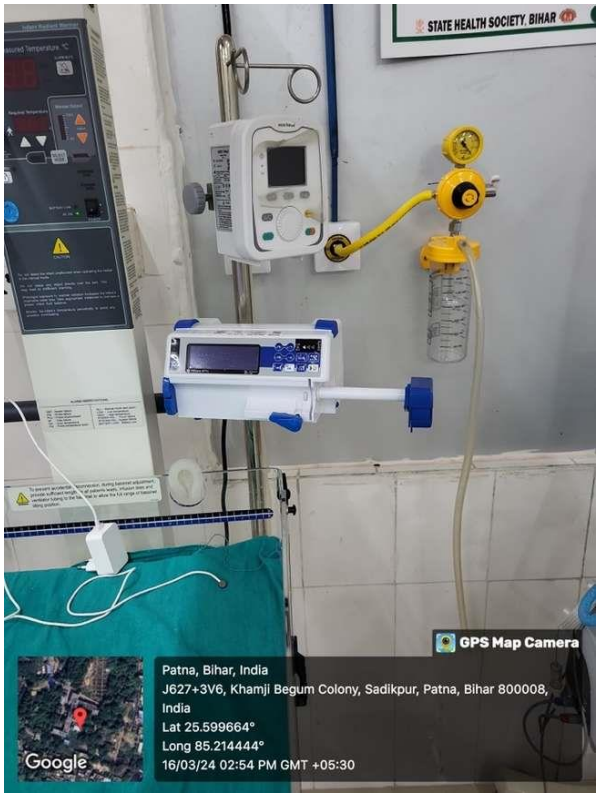


Figure 2: Equipment at GGSH NICU

3.4 Coherence

The HDFC Bank's initiative received support from the state government and is aligned with several key national health policies aimed at enhancing healthcare access and quality.

National Health Policy (NHP) 2017: The project aligns with the NHP 2017's goal of achieving universal access to healthcare services and reducing morbidity and mortality, especially among vulnerable populations such as newborns. By strengthening neonatal intensive care units (NICUs) in government hospitals, the initiative contributes to improving access to quality healthcare for underserved communities, in line with the objectives of the NHP.

Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PMJAY): The initiative supports the objectives of PMJAY by enhancing healthcare infrastructure and services, particularly in critical care for newborns. By providing free NICU services to families, the project aligns with PMJAY's goal of ensuring financial protection and access to quality healthcare for all.

National Urban Health Mission (NUHM) and National Rural Health Mission (NRHM): The initiative supports the objectives of NUHM and NRHM by strengthening healthcare facilities, improving access to essential services, and reducing health inequalities. By establishing NICUs in government hospitals, the project addresses the healthcare needs of urban and rural populations, particularly neonates requiring specialised care.

3.5 Impact

Reduction in response time

The project has significantly reduced response times during emergencies for newborns, enhancing the efficiency of critical care delivery. At GGSH, the provision of equipment in the Special Newborn Care Unit (SNCU) has led to prompt responses, ensuring timely treatment for newborns in critical conditions. Similarly, at Nalanda Medical College and Hospital, NICU enables consultation and check-up within 2 to 5 minutes, enhancing patient outcomes.

Reduction in medical expenses

The project has alleviated financial burdens on families by reducing the costs associated with new-born ICU services. According to doctors and nurses from both hospitals, families previously faced significant expenses, ranging from Rs. 10,000 to Rs. 20,000 per day at other facilities. However, at Guru Gobind Singh Hospital and Nalanda Medical College and Hospital, families no longer bear these costs, as Neotnatal Intensive Care Unit services are provided free of charge, ensuring equitable access to critical healthcare resources without financial strain.

> "If we didn't have the NICU here, we'd have to travel even farther to hospitals like NMCH, PMCH which are around 50 to 60 km away. And the cost for treatment there could easily be around 25k. But since May 2022, when the NICU started here, we don't have to pay for NICU services anymore. It's a relief for us. Usually, it takes about 5 days to get admitted to the NICU after we arrive, and the doctors come to check on the baby three times a day."
>
> -Anjali
> Resident of Mogama Village

Enhancement in treating crucial cases

At GGSH, the establishment of the NICU has resulted in a decline in neonatal deaths, indicating the effectiveness of the intervention in handling crucial cases. Additionally, there has been a 13.5% recovery rate for newborns treated in the SNCU, highlighting positive patient outcomes and recovery rates. At Nalanda Medical College and Hospital, the availability of NICU beds has facilitated timely admission and treatment, enhancing the hospital's ability to handle emergencies and critical cases.

Overall, the availability of NICU facilities has not only increased patient satisfaction and family experiences but also led to improvements in patient outcomes. Measures are in place to ensure the quality and safety of care within the ICU, with medical superintendents overseeing equipment maintenance and care protocols.

3.6 Sustainability

To ensure the sustainability of the project, several measures can be implemented

1. **Regular maintenance is vital for NICU equipment** to ensure uninterrupted neonatal care. Adhering to manufacturer-recommended schedules for inspections and calibration checks helps identify issues early and extends equipment lifespan. Qualitative interactions revealed that both hospitals have generators as power

backups, ensuring continuity of care during power outages. Additionally, considering the shelf life of NICU equipment, which typically ranges from 10 to 15 years, diligent maintenance practices are essential for maximising equipment longevity and contributing to the project's financial sustainability.

2. **Ongoing staff training:** Regular staff training is essential for maintaining and operating NICU equipment proficiently. These training sessions ensure healthcare staff have the necessary skills to handle equipment issues effectively. By investing in staff training initiatives, hospitals can improve equipment efficiency, minimise downtime, and optimise resource utilisation, contributing to the long-term sustainability of the project.

3. **Maintain Detailed Records:** It's essential to maintain detailed records of NICU equipment usage, maintenance activities, and patient outcomes. Collaborating with the implementation agency can streamline record-keeping processes and ensure accurate documentation of data like equipment performance and patient demographics.

4. **Continuous Staff Training:** Providing ongoing training to healthcare staff is crucial for optimising NICU equipment usage and ensuring quality patient care. Regular training sessions, facilitated by the implementation agency or external experts, can enhance staff proficiency in equipment operation and maintenance.

CSRBOX®

Doing Good in a **Better** Way

CSRBOX & NGOBOX

806-808, Shivalik Satyamev

Near Vakil Saheb Bridge, Bopal Rd,

Bopal, Ahmedabad, Gujarat 380058