Impact Assessment Study of EGF's CSR Support to Dr. Shroff Charity Eye Hospital (SCEH) for COVID-19 Isolation Facility

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1. Executive Summary

The report provides a thorough impact assessment of the Eicher Group Foundations (EGF) financial support to Dr Shroff's Charity Eye Hospital (SCEH) during FY 2021-2022 for a COVID-19 Isolation Facility programme. This initiative aimed to establish an isolation facility equipped with oxygen concentrators at the hospital in Darya Ganj, New Delhi, to support medical and other employees of SCEH to deliver uninterrupted eye care services during the pandemic.

The COVID-19 pandemic, declared by the World Health Organisation (WHO) in March 2020, brought unprecedented challenges globally and in India, which experienced severe waves of infections. The second wave, beginning in March-April 2021, was particularly devastating, leading to acute shortages of medical facilities and oxygen supplies. Delhi, one of the hardest-hit areas, faced critical shortages of ICU beds and oxygen. In April 2021 there were 17,752 beds for Covid patients in the capital, out of which only 2,824 were available and out of the 4,147 ICU beds, only 48 were available. The surge in bed occupancy also meant an increase in the need for uninterrupted oxygen supply.

In response to these challenges, SCEH with financial support from EGF initiated a COVID-19 Isolation Facility programme in April 2021 to provide safe isolation and medical care for its medical and other employees. The programme included the creation of two isolation centres with 15 beds and oxygen concentrators. These facilities aimed to reduce the risk of household transmission and provide necessary care for those affected. Staff received training on testing procedures, oxygen concentrator use, and patient flow management. SCEH also implemented a 24/7 helpline for medical advice and telephonic consultations, along with WhatsApp groups for real-time health updates and communication.

The project evaluation conducted by Samhita Social Ventures in FY 2024-25 assessed the outcomes of the isolation facility programme supported by EGF. The qualitative evaluation aimed to understand the impact of the intervention, identify key elements driving project-induced changes, and determine evidence of improved healthcare services. The research methodology included both primary and secondary data collection, involving in-depth interviews, observations, and document reviews.

The isolation facility significantly improved the well-being of SCEH employees by addressing fears of infection and ensuring access to necessary medical care. The programme's design supported all employees, trainees, and their families, regardless of their role within the organisation. This made sure the hospital employees were able to attend hospital shifts without missing their shifts and in turn contributed to uninterrupted eye care services to patients. The training and capacity-

building sessions also enhanced the staff's ability to handle COVID-19 cases effectively, preparing them for future health respiratory pandemics.

Post-pandemic, the resources and infrastructure initially used for the isolation facility have been repurposed to enhance SCEH's medical services. The isolation facilities have been converted into Outpatient Departments (OPD) and as a support for Project Prakash, an eye care and research initiative by SCEH. The equipment, including oxygen concentrators and beds, has been integrated into the hospital's wards, strengthening overall medical capacity.

In conclusion, it addressed critical needs during a time of acute medical shortages, provided comprehensive support, and prepared the hospital for future emergencies. The programme's alignment with Sustainable Development Goals (SDGs) 3, which focuses on health and well-being, underscores its importance in ensuring continuous healthcare services. The report recommends ongoing capacity-building initiatives, inter-departmental learning, and the development of an integrated emergency response plan to enhance the hospital's preparedness for future pandemics and other medical emergencies.

2. Introduction

Eicher Motors Limited (EML) is the listed parent company of Royal Enfield, a renowned brand in middleweight motorcycles. Established in 1901, Royal Enfield holds the distinction of being the world's oldest continuously produced motorcycle brand. Eicher Motors defines its commitment to the community in a holistic sense, encompassing social, economic, and environmental spheres within which it operates and contributes[1]. The company implements its Corporate Social Responsibility (CSR) initiatives either independently or through the Eicher Group Foundation (EGF), a Section 8 Company jointly established by Eicher Motors Limited and its unlisted subsidiary VE Commercial Vehicles Limited (VECV). This collaborative effort aims to facilitate and oversee CSR projects undertaken by both entities, ensuring a strategic and impactful approach to social responsibility.[2]

The present report offers a comprehensive impact assessment of EGF's financial support to Dr. Shroff's Charity Eye Hospital (SCEH) during FY 2021-2022, specifically for the COVID Isolation Facility programme. This initiative aimed to provide an isolation facility with oxygen concentrators at a hospital in New Delhi at DaryaGanj to enable employees of SCEH and Eicher group and their families respectively.

[1] Eicher :: Eicher Motors Limited :: About Us. (2016). https://eicher.in/about-us/heritage

[2] Annual Report on Corporate Social Responsibility (CSR) Activities for the financial year 2022-23. (2023). In STATUTORY REPORTS (pp. 178–179) [Report]. https://eicher.in/content/dam/eicher-motors/investor/corporate-governance/corporate-social-responsibility/CSR-Report-2022-23.pdf

3. About the Programme

3.1 About Implementation Partner - Dr Shroff Charity Eye Hospital (SCEH)

Founded in 1922, Dr. Shroff's Charity Eye Hospital (SCEH) has been a pioneer in providing comprehensive eye care services to the underprivileged sections of society, now comprising 8 hospitals and 53 vision centres. The mission of SCEH is to eradicate blindness and deafness in India through equitable healthcare services. SCEH's vision includes increasing access to eye care, achieving service excellence, developing eye care professionals, fostering innovation through research and technology, and reducing health inequalities through sustainable partnerships[3].

Since its establishment, SCEH has focused on comprehensive eye and Ear, Nose, and Throat (ENT) care, affordability and accessibility, community impact, research, education, and training. Over a hundred years, the hospital has grown into one of India's largest National Accreditation Board for Hospitals & Healthcare Providers (NABH) accredited eye care institutes, making significant contributions to eye care nationally.

3.2 COVID scenario in India

The World Health Organization (WHO) declared COVID-19 a pandemic on March 11, 2020. It caused unprecedented illness and mortality, with India experiencing three waves of infections since the WHO's declaration. The first wave extended from March 2020 to approximately November 2020, progressing slowly, while the second wave, beginning in March-April 2021, saw a rapid increase in cases and deaths over the following one to two months[4]. The second wave had more severe implications in terms of cases and mortality compared to the first wave. As of March 11, 2023, over 446 million Real-time reverse transcriptase-polymerase chain reaction (RT-PCR) confirmed cases were reported in India, with more than 530,000 deaths attributed to COVID-19[5].

The second wave of the COVID-19 pandemic emerged at a time when India had ended its first-wave lockdowns for most geographical areas and industrial sectors. There was a fresh sharp jump in confirmed cases of COVID-19 from states such as Maharashtra, Delhi, Andhra Pradesh, Telangana, Kerala and Odisha. The situation was more pronounced in Delhi, with the city reporting

[3] Dr. Shroff's Charity Eye Hospital. (2024, April 26). About Us – Dr. Shroff's Charity Eye Hospital. https://sceh.net/about-us/

[4] Ibid.

[5] Tendulkar, P., Pandey, P., Panda, P. K., Bhadoria, A. S., Kulshreshtha, P., Mishra, M., & Saxena, G. (2023). Comparative study Between the first and second wave of COVID-19 deaths in India: a single center study. *Curēus*. https://doi.org/10.7759/cureus.37472

the highest single-day spikes in COVID-19 cases during the second wave[6]. It was reporting 8593 new COVID-19 infections in one day which was its highest daily tally ever[7].

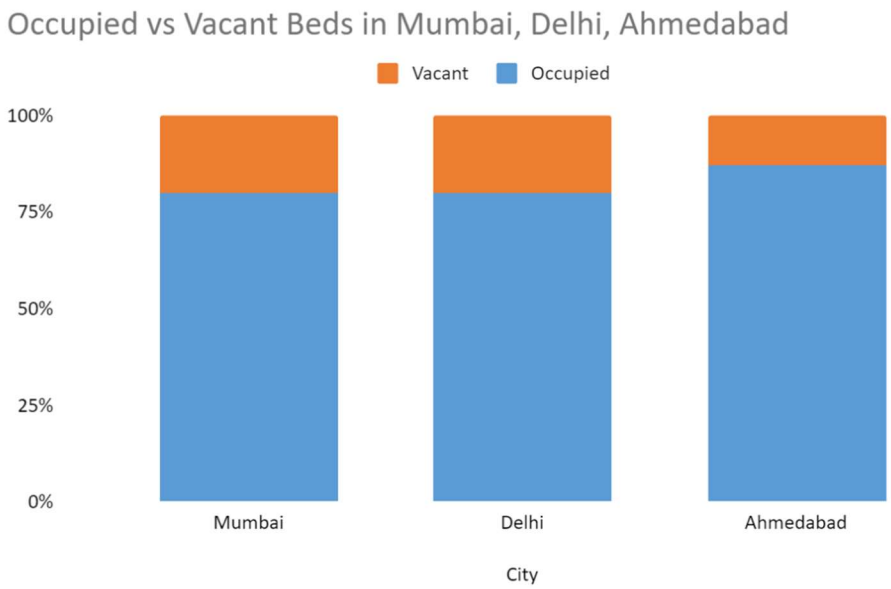

Figure 1 Occupied vs Vacant Beds in Mumbai, Delhi, Ahmedabad

The situation was further exacerbated due to the sudden increase in the need for hospitalisations and the extant public health infrastructure being extremely unequipped to handle it as shown in Figure 1. COVID-19 admissions reached triple digits from April 1-12, with 932 admissions[8]. Hospitals reported 1,218 admissions on April 13 and for the next 33 days, admissions remained above 1,000[9]. The number of patients discharged from hospitals was less compared to admissions for the first 20 days of April[10]. 'Dehi Corona', the Delhi government's mobile app providing COVID-related information, showed that 1,126 out of the 1,288 ICU beds with ventilators were occupied at the onset of the second wave of the pandemic[11]. Further, more than half of the COVID beds in private and government hospitals were occupied.

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[6] Thacker, T. (2020, November 13). As cases surge, Delhi hospitals struggle with shortage of beds. The Economic Times. https://economictimes.indiatimes.com/news/politics-and-nation/as-cases-surge-delhi-hospitals-struggle-with-shortage-of-beds/articleshow/79202741.cms?from=mdr

[7] Ibid.

[8] Anand, J. (2021, May 22). *Second wave sees 51 patients being admitted every hour*. The Hindu. https://www.thehindu.com/news/cities/Delhi/second-wave-sees-51-patients-being-admitted-every-hour/article34623962.ece

[9] Ibid.

[10] Ibid.

[11] Thacker, T. (2020, November 13). As cases surge, Delhi hospitals struggle with shortage of beds. The Economic Times. https://economictimes.indiatimes.com/news/politics-and-nation/as-cases-surge-delhi-hospitals-struggle-with-shortage-of-beds/articleshow/79202741.cms?from=mdr

3.3 About the Programme – COVID Isolation Centre at SCEH

During the COVID-19 pandemic, Dr Shroff Charity Eye Hospital (SCEH) in New Delhi, Daryaganj, initiated a crucial project to establish a COVID-19 Isolation Facility for medical and other employees of SCEH, to deliver uninterrupted eye care services during the pandemic. This programme was vital for ensuring the safety and well-being of the hospital staff, particularly in a time of widespread uncertainty and fear.

In response to the urgent need for medical facilities during the COVID-19 pandemic from April 2021 to September 2021, SCEH established two isolation facilities with 15 beds, oxygen concentrators, and essential medical equipment, physician/ GNM nurse to handle the isolation facility for employees. These centres provided a safe space for those who tested positive or exhibited symptoms, reducing household transmission risks. Staff were trained in testing procedures, oxygen concentrator use, and patient flow management. Free testing and medical advice were available to employees and their families, reducing stress and ensuring their well-being.

4. Research Methodology

In FY 2023-24, Samhita Social Ventures undertook a project evaluation of the COVID Isolation Centre programme supported by EGF and implemented by SCEH in FY 2021-22, with the intention of assessing the intervention's outcomes.

4.1 Research Objectives and Framework

4.1.1 Objectives of the Study

- Assess the impact and changes resulting from EGF-supported interventions at SCEH;
- Identify key elements triggering project-induced changes;
- Determine evidence of improved healthcare services

4.1.2 Analysis - IRECS Framework

IRECS is a tool that focuses on evaluating the performance of social development projects in terms of inclusiveness, relevance, effectiveness and efficiency, convergence, and sustainability. It helps gain a qualitative understanding of the impact created, stakeholder perception, extent of collaboration with other actors and sustenance of the change.

Parameter	Description	Indicators
Inclusiveness	• Extent to which communities equitably access benefits of assets created and services delivered • Role of different stakeholders in project design and implementation	• Availability of isolation facility for stakeholders
Relevance	• Whether the project is geared to respond to the needs of communities	• Need and programme design

Efficiency and Effectiveness	• The extent to which project implementation meets the expectations of communities, • Extent of intended and unintended positive (benefits), socioeconomic, and cultural changes accrued for beneficiaries • How efficiently resources are utilised	• Improved well-being of employees • Preparedness for future pandemic • Capacity building sessions for hospital staff
Convergence	• Degree of convergence with government/other partners and linkages with concurrent government programme in the field • Degree of stakeholder buy-in achieved	• Compliance with government rules and regulations • Collaboration with government
Service Delivery	• State of operations of programme outputs in terms of delivering intended services to beneficiaries	• Repurposing of resources

Table 1 IRECS framework indicators

4.1.3 Modes of Data Collection

Samhita adopted a mixed-methods study involving primary and secondary research. This involved the following:

1. Secondary Research

This stage included the review and analysis of documents about the programme including project inception reports, programme design, progress reports to map the various stakeholders involved and create a research framework.

2. Primary Research

Qualitative data collection was undertaken with primary stakeholders such as SCEH medical – doctors, nursing staff and non-medical staff – administrative staff, patient care department, local government officials and EGF programme SPOCs to triangulate findings and obtain a holistic understanding of programme implementation and impact.

The details of the methods used for this study are as follows -

- **In-depth interviews / Key Informant Interviews:** Face-to-face interviews based on interaction guides were conducted with key stakeholders like SCEH medical and non-medical staff, EGF programme coordinators, and local government officials to gain a comprehensive understanding of the impact of the programme.

- **Observations:** Observation of the COVID-19 Isolation Facility at Dr Shroff Charity Eye Hospital was carried out with the help of an observation checklist to gain an understanding of the location of COVID-19 Isolation Facility's usability of the space presently and efficiency of the use of resources including its repurposing.

4.1.4 Sampling

For the qualitative data collection, purposive sampling was followed to interact with programme stakeholders as per the sample sizes stated in the figure below.

Figure 2 Stakeholder sampling

5. Key Findings

Parameters	2020-21 (Pre-Intervention)	2021-22 (Post-Intervention)
Inclusiveness indicators		
Accessibility of isolation facility	• NA	• Isolation facility and the attached testing facilities were made accessible to medical and other employees of SCEH regardless of their designation • Employee definition included trainees as well
Relevance indicators		
Need based programme design	• Delhi faced acute bed shortages during the second wave, impacting medical and non-medical staff at SCEH	• Two dedicated isolation facilities were established at SCEH, with a total of 15 beds—10 in one facility and 5 in another for medical and other employees at SCEH • To ensure proper care, the hospital procured oxygen concentrators and provided training sessions for staff on their use • SoP was in place for use of the centre, and WhatsApp groups were established with the quarantine team to provide 24X7 assistance

Efficiency and Effectiveness indicators		
Improved well-being of employees	• Irregular attendance among employees due to fear of getting infected or carrying the infection home	• The isolation facility had attached testing facilities (RAT, RT-PCR) for COVID-19 infection • Sense of belonging and assurance of a bed boosted the morale of employees • Family members of employees also felt supported, enabling medical staff to fulfil hospital shifts during the second wave • This was not put to use by employees as the quarantine cases were easily manageable through home isolation as per the protocols at that time
Improved preparedness for future pandemics	• Prior to the intervention, employees of SCEH encountered significant challenges regarding the non-availability of beds at hospitals, and the supply of medical oxygen • During the first wave in 2020, oxygen cylinders were available solely for use in operating theatres (OTs), and the hospital	• Hospital can rebuild such facilities within a period of 24 to 48 hours due to the presence of updated infrastructure and in the event of a pandemic

	lacked oxygen concentrators • No preparedness to handle respiratory pandemics	
Relevant capacity building sessions	• The ability of staff to operate oxygen concentrators was limited as SCEH was a specialised eye hospital	• The staff were able to develop the skill of using tests such as RT-PCR and also got acquainted with standard operating procedures to be followed during the pandemic
Convergence indicators		
Compliance with government rules and regulations	• NA	• At SCEH, protocols were made for the use of the isolation facility in convergence with government guidelines • The hospital adopted testing protocols and quarantine measures, ensuring compliance with government guidelines
Collaboration with government	• NA	• SCEH designated the facility exclusively for the benefit and safety of medical and other employees at SCEH • It couldn't be open to the public to continue to provide essential eye care services without interruption and also eye care doctors did not have the expertise to handle COVID-19 infection cases

Service delivery indicators		
Repurposing of resources	• It was used for administrative and operational purposes	• Isolation facility has been dismantled and SCEH has repurposed these two facilities to serve as Outpatient Departments (OPD) and support Project Prakash, an initiative focused on eye care and research

6. Detailed Findings

6.1 Inclusiveness Indicators

6.1.1 Accessibility of isolation facility

The COVID-19 isolation programme at Dr Shroff Charity Eye Hospital (SCEH) in New Delhi was specifically designed to support medical and other employees at SCEH, during the challenging times of the pandemic's second wave. The definition of "employee" encompassed individuals working full-time or part-time, on rolls or outsourced, as well as trainees in any department. The programme aimed to provide a comprehensive safety net for those connected to SCEH.

> **"We couldn't turn a blind eye to the well-being of our employees - from the guard to the CEO, everyone was included. Our dedicated COVID-19 isolation centers, comprehensive training, and 24/7 support reflect our commitment to internal care and unity during challenging times."**
>
> **- Doctor, SCEH**

> **"Despite not being a COVID management center, our preparedness and access to resources, including an oxygen plant, meant that no staff member or their family was left struggling for basic needs during a crisis. This initiative was not just about fulfilling an obligation, but about showing that we genuinely care for our own. It was a blessing for everyone involved."**
>
> **– Director, Sustainability**

6.2 Relevance Indicators

6.2.1 Need-based programme design

During the COVID-19 pandemic, hospitals in Delhi issued urgent requests for emergency oxygen supplies, warning that patients' lives were at risk. Families of COVID-infected persons who could not secure a bed faced long waits, sometimes up to twelve hours, to obtain portable oxygen cylinders[12]. Often people were forced to isolation at home waiting for a bed for more than twenty

[12] Pandey, B. V. (2021, May 2). India Covid: Delhi hospitals plead for oxygen as more patients die. https://www.bbc.com/news/world-asia-india-56940595

four hours in Delhi[13]. Several major hospitals in Delhi were dependent on daily oxygen deliveries but lacked sufficient supplies to maintain an emergency reserve.[14] This crisis highlighted the critical need for a dedicated isolation facility, even at an eye hospital like SCEH, to provide care for its employees and their families. Given the uncertainty of who might be infected and the risk of household transmission, it became imperative to have a facility where staff and their families could be safely isolated and cared for.

Two dedicated isolation facilities were established, with a total of 15 beds—10 in one facility and 5 in another. To ensure proper care, the hospital procured oxygen concentrators and provided training sessions to staff on their use. Additionally, a WhatsApp group was created to facilitate regular updates on the health status of employees, categorised into medical and non-medical groups. This platform was essential for coordinating fit and unfit status reports, with telephonic medical advice provided to those unfit for hospital duty.

Screening was conducted by a counsellor who assessed COVID-19 symptoms, such as fever, cough, runny nose, body aches, sore throat, loss of taste and smell, diarrhoea, and difficulty in breathing. This information was documented in a reporting form and sent to the COVID care team for admission decisions. If admission was advised, the counsellor informed the patient. If denied, the patient or their attendant had to informed whether the patient can be managed at home or requires a higher care facility like an ICU bed. The admission to the isolation facility was to be determined by a doctor on COVID-19 duty. The per-day charges for using the facility were to be based on the patient's monthly salary structure.

Monthly Salary Band	Per day cost per bed for using Isolation Facility	Mode of Payment	Payment in Instalments
Up to Rs 30,000 per month	INR 1000	By HR from salary	Three
INR 31000 to 50000 per month	INR 1500	By HR from salary	Two
INR 51000 to 100000 per month	INR 2500	By HR from salary	Two
INR 101000 and above	INR 3500	By HR from salary	One

[13] Gupta, N. (2020, April 28). Delhi: Covid-19 patient forced to isolate at home after hospitals refuse admission for over 24 hours. India Today. https://www.indiatoday.in/india/story/delhi-covid-19-patient-forced-to-isolate-at-home-after-hospitals-refuse-admission-for-over-24-hours-1672236-2020-04-28

[14] BBC News. (2021, April 26). India overwhelmed by world's worst Covid crisis. BBC News. https://www.bbc.com/news/world-asia-india-56940595

Figure 3 SOP for isolation facility cost basis monthly salary

"Our primary focus was on creating a comprehensive system with clear Standard Operating Procedures (SOPs) to ensure the safety and well-being of our employees and their families. From setting up isolation wards and oxygen concentrators to establishing protocols for testing, isolation, and treatment, every aspect was thoughtfully planned."

- Administrative Staff, SCEH

6.3 Efficiency and Effectiveness Indicators

6.3.1 Relevant capacity building sessions

As an eye hospital, SCEH has extensive expertise and specialists in ophthalmology. However, the COVID-19 pandemic presented a significant challenge, as staff needed to be trained to handle the respiratory syndrome, which required a different set of tools and care protocols. While the foundational knowledge of the protocols for handling respiratory syndrome was covered academically in their course of study, there was a need for specific training tailored to the existing medical staff in the event of pandemic. SCEH addressed this need by utilising their in-house physician, who provided essential training to equip the staff with the necessary skills to manage COVID-19 patients effectively.

To address this need, training sessions were conducted for newly appointed staff on patient testing, oxygen concentrator use, and patient flow from the testing area to the rest of the hospital. Patients underwent a mandatory Rapid Antigen Test before entering the hospital, with entry granted only if the test result was negative. This testing was done by staff wearing PPE kits, and results were shared in a group for doctor approval before allowing patient entry. The isolation centres were built before 2021, comprising two facilities with a total of 15 beds. This setup ensured that family members of staff had a place for isolation and care, reducing the risk of household transmission.

Figure 4 Oxygen concentrators funded by EGF

In response to the COVID-19 pandemic, SCEH provided extensive training and capacity-building sessions to both existing and new medical staff to ensure proper testing and patient care procedures could be followed. These individuals received training on conducting RT-PCR and Rapid Antigen Tests (RAT) for COVID-19. This included detailed demonstrations of correctly performing nasal swabs for RT-PCR tests, crucial for accurate and reliable COVID-19 diagnosis. The RAT process, used for quick detection of coronavirus antigens from human nasal samples, was also covered, emphasising its use for symptomatic individuals and the need for follow-up RT-PCR testing for negative results to rule out infection.

Additionally, training included sessions on using oxygen concentrators, which are vital for providing oxygen to patients in moderate respiratory distress, as found through various interactions with nursing staff. Staff were taught how to operate these devices and manage the flow of patients from the COVID testing area to other parts of the hospital, ensuring safe and seamless care. All necessary resources were available to support the isolation centre's functioning, and Personal Protective Equipment (PPE) kits were used during testing to ensure safety. The

training ensured that all staff were well-prepared to handle COVID-19 patients efficiently and safely, maintaining high care and infection control standards.

6.3.2 Improved well-being of employees

Before the intervention by SCEH, the major issue the hospital faced was fear and apprehension among the personnel, particularly non-clinical staff, about contracting the infection, which led to irregular attendance and workforce shortages. This fear was less prevalent among clinical personnel, who were more accustomed to handling medical emergencies.

> **"When the second wave of COVID-19 struck, it was a harsh reality check for everyone. Our primary responsibility became the health and safety of our employees and their families. Establishing a dedicated COVID-19 isolation facility was the least we could do to assure them that we were there for them, providing immediate access to oxygen and care. "**
>
> **- Sustainability Head , SCEH**

"

SCEH during 2021 had around 700 staff members at the Daryaganj hospital. The attendance levels varied during this period - doctors and nurses attended daily, while some non-clinical staff could manage to come only once a week. To effectively manage the health and safety of its workforce during the COVID-19 crisis, SCEH implemented several strategic measures.

The hospital created WhatsApp groups segmented by staff category—medical and non-medical. These groups served as platforms for regular health updates and communication. Staff members were asked to report their health status daily - Those fit to work were requested to come to the hospital, while those unfit were connected to telephonic medical advisors for treatment guidance and medication. The criteria for determining unfitness included symptoms such as a runny nose, loss of smell or taste, and fever. Staff exhibiting these symptoms were advised to stay home and were later instructed to get tested at the hospital if symptoms persisted. These testing services were provided free of charge to the employees. Through interactions with doctors and the CEO it was found that home isolation and online consultancy services helped the employees and this isolation facility at the hospital did not end up being put to use. For cases where a family member was unwell, the hospital also provided free medical advice. These efforts by SCEH for the employees showed its commitment towards their physical well-being.

"We got a confidence that our employer is doing something for us in the event of the second wave when Delhi hospitals were running short of oxygen beds. We could come diligently to work our shifts without much to worry."

- Nursing staff 2, SCEH

The COVID Isolation Facility at SCEH, though not fully equipped with life-saving or ICU facilities, acted as a crucial safety net for interim medical management. It significantly contributed to the mental well-being of employees and their families by reducing stress levels and boosting morale. Knowing that they had access to a dedicated isolation facility encouraged more regular attendance among hospital staff, ensuring that critical medical services continued without interruption.

"We provided round-the-clock support and guidance through our helpline and WhatsApp groups, ensuring that no one faced this crisis alone. This structured approach not only offered immediate medical care but also significantly reduced stress levels among our staff during an incredibly challenging time."

- Administrative staff, SCEH

6.3.3 Preparedness for future pandemic

Prior to the intervention, employees of SCEH encountered significant challenges regarding the non-availability of beds at hospitals, and the supply of medical oxygen. During the first wave in 2020, oxygen cylinders were available solely for use in operating theatres (OTs), and the hospital lacked oxygen concentrators. This limitation was resolved by the support of EGF when the intervention took place in the second wave in 2021 supplying the required infrastructure for building a COVID Isolation Facility including beds, oxygen concentrators, and other required infrastructure.

The pandemic revealed a broader issue of Delhi's reliance on external oxygen supplies, which became glaringly apparent during shortages. This prompted SCEH to strategically reevaluate its oxygen supply needs. Recognising the necessity of self-sufficiency in oxygen concentrators

bought through EGF's support ensures that, in the event of another crisis similar to COVID-19, SCEH will have the capacity to adequately support its patients without relying on external sources. This proactive measure enhances the hospital's preparedness for emergencies.

Based on interactions with different stakeholders including doctors, nursing staff at the hospital and physical observations, it was found that 1 oxygen concentrator could serve 2 patients simultaneously. The interactions with CEO, SCEH revealed that now the hospital can rebuild such facilities within a period of 24 to 48 hours since all the required infrastructure exists and is completely prepared to face any similar virus breakdown.

> **"For that period, we as a hospital arranged the facility within a week or two weeks considering the gravity of the situation. However, now if told to set up the facility we are well equipped to set up in a day or two. "**
>
> **- Doctor1, SCEH**

6.4 Convergence Indicators

6.4.1 Compliance with government rules and regulations

The Indian Medical Association (IMA) played a crucial role in guiding healthcare professionals and the public during COVID-19 crisis. IMA's multifaceted guidelines for citizens and continuous monitoring of the COVID-19 situation were instrumental in keeping a check on the spread of infection. They also established a 24x7 helpline for public assistance, highlighting the dedication of medical professionals to maintaining community safety and well-being[15].During the pandemic, both the Delhi government and the central government issued daily protocols for hospitals to manage COVID-19. These included social distancing measures, mandatory use of masks, frequent handwashing, and proper sanitization. These protocols were crucial for preventing the spread of the virus in healthcare settings.

At SCEH, with the creation of the COVID Isolation facility, a standard operating procedures (SoP) document was also created with deliberation. These protocols were strictly followed by medical and non-medical staff. SoP covered the criteria for admissions to the facility and testing protocols and quarantine measures, ensuring compliance with government guidelines. This information and

[15] Indian Medical Association. (2021). *COVID-19 guidelines for hospitals and doctors*. https://www.ima-india.org/ima/pdfdata/COVID-19-Guidelines-for-Hospitals-n-Doctors.pdf

guidelines were conveyed efficiently through a dedicated WhatsApp group and regular training sessions.

> **"We had to see the government websites on daily basis to adapt to the ever changing rules to be followed as a part of healthcare ecosystem."**
>
> **- Head of administrative department, SCEH**

6.4.2 Collaboration with Government

During the COVID-19 pandemic in early 2020, SCEH established a COVID-19 isolation facility in Saharanpur to provide necessary care for affected individuals. Initially, the isolation facility was open to the public, and the government eventually took over its operations on 31st March 2020. This takeover included the use of one of SCEH's vision centres in Saharanpur. However, the government retained control of this facility for an extended period, significantly delaying the resumption of regular eye care services. As a result, many eye patients experienced considerable disruption and hardship due to the lack of available services during that period.

In light of this experience, SCEH revised its policy regarding the establishment of new isolation facility. It was decided that any future isolation facility would be designated exclusively for the benefit and safety of SCEH employees and their family members. As reported by CEO, SCEH this decision was made to ensure that the hospital can maintain control over its facilities and continue to provide essential eye care services without interruption. This approach aimed to safeguard both the health of the individuals requiring eye care and treatment and the continuity of specialised medical services. Consequently, a new COVID-19 isolation facility was built at Daryaganj in Delhi, supported by EGF. This facility was designated for the employees of SCEH and Eicher, along with their families.

> **"We had a COVID facility in Saharanpur which was taken over by government and there our eye patients suffered a lot and that is one of the primary reasons we did not open the isolation facility for the general public in Delhi."**
>
> **- Director, Sustainability**

6.5 Service Delivery Indicators

6.5.1 Repurposing of resources

Before the establishment of the COVID-19 isolation facility, the space allocated for it at SCEH was utilised for administrative and operational purposes. In response to the pandemic, these areas were cleaned and restructured, particularly the sections nearest to the hospital gates. This strategic location ensured that any individual testing positive for COVID-19 could be efficiently directed from the testing area to the isolation ward, minimizing exposure risk and facilitating ease of isolation.

> **"We had set up 2 isolation facilities both near the gates for ease of access along with keeping in mind not to affect the daily flow of patients."**
>
> **- Nursing staff 2, SCEH**

However, in FY 2022-23, with the decline in COVID-19 cases and the subsequent reduction in the need for isolation facilities, SCEH has repurposed these two facilities to serve as Outpatient Departments (OPD) and support Project Prakash, an initiative focused on eye care and research as reported by CEO, SCEH. The equipment initially procured for the isolation facilities, including oxygen concentrators, stethoscopes, masks, and beds, has been integrated into the hospital wards, enhancing the overall medical infrastructure. Furthermore, the human resources recruited for the isolation facilities have been retained as part of the medical staff, ensuring continuity of care and leveraging the skills and experience gained during the pandemic. This repurposing effort not only optimises resources but also strengthens SCEH's capacity to provide comprehensive healthcare services.

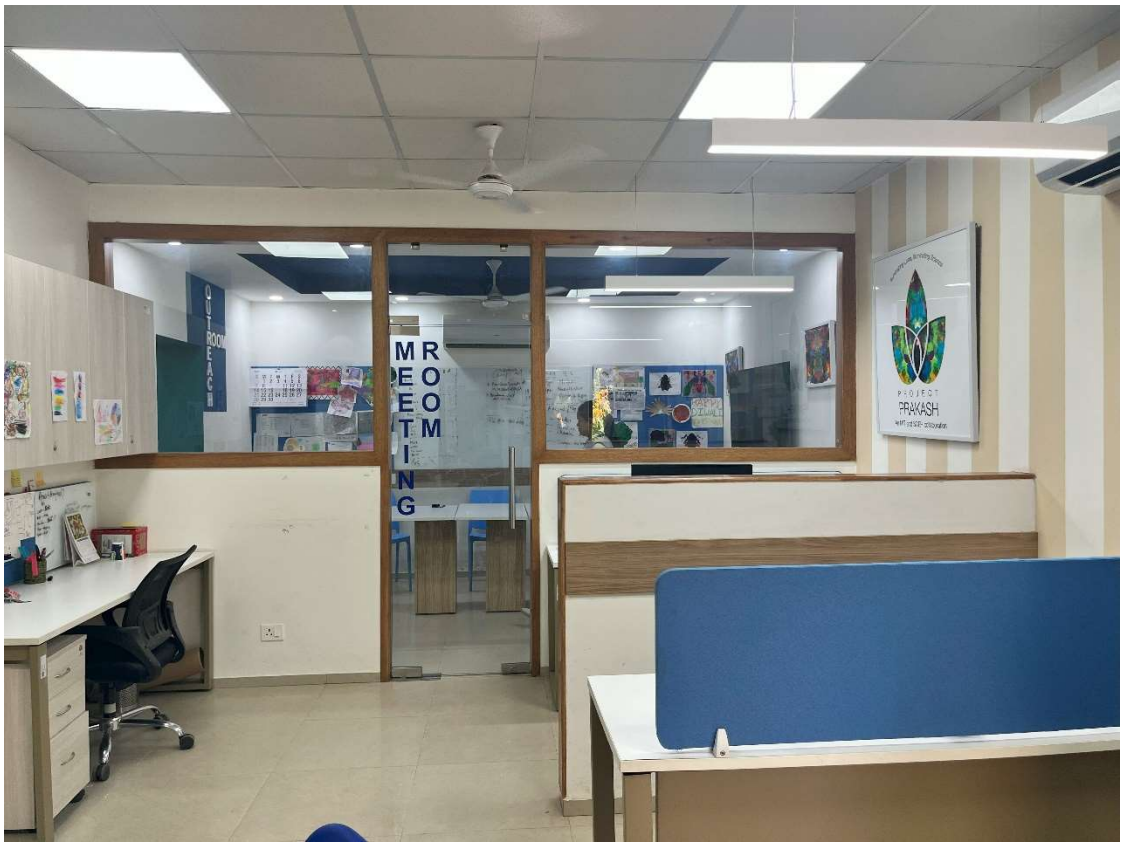

Figure 5 COVID-19 isolation facility repurposed to support Project Prakash

"It was a blessing in disguise , we cleaned up some parts of the hospital for building these facilities however realised there was no usage of these facilities for 6 months so we repurposed it to OPDs as we kept increasing the number of patients"

- CEO, SCEH

7. Conclusion

The COVID isolation facility project at SCEH funded by Eicher Group Foundation brought about an improvement in the well-being of the medical and other employees of SCEH. This addressed issues such as fear among employees to come for their designated shifts due to the spread of infection and the prevailing paucity of oxygen beds in Delhi. This programme is also in alignment with the following Sustainable Development Goals (SDGs):

By establishing isolation facility equipped with beds, oxygen concentrators, and essential medical equipment, SCEH ensured access to necessary health services for its employees, trainees, and their families during the pandemic. This way it was helpful for the hospital to provide healthcare services in an uninterrupted manner which in turn led to contributing to SDGs 3 health and well-being of all.

The programme was designed to support all employees, trainees, and their families, regardless of their position within the organisation. This inclusive approach ensured that everyone had access to medical care and support. By providing free testing and medical advice, the programme ensured that financial constraints did not prevent any employee or family member from accessing essential health services.

8. Recommendations

8.1 Preparation of a Disaster Preparedness Plan for SCEH

A disaster preparedness plan is crucial for every hospital as it ensures a structured and efficient response to emergencies, thereby safeguarding the health and safety of patients, staff, and the community. The National Disaster Management Authority provides guidelines[16] focused on hospital facilities, but many hospitals lack a concrete disaster management plan. A written plan is essential for preparedness, but having a plan on paper alone is not enough. Many hospitals fall victim to 'paper plan syndrome,' a tendency to believe that merely completing a written plan equates to being prepared. Effective disaster preparedness requires not just documentation but also practical implementation, regular training, and continuous updates to ensure readiness for real-world emergencies[17]. Developing and regularly updating an integrated emergency response plan that includes protocols for various health emergencies is crucial for effective disaster

[16] National Disaster Management Authority & Government of India. (2016). *National Disaster Management Guidelines: Hospital safety*. https://nidm.gov.in/PDF/pubs/NDMA/18.pdf

[17] Hendrickx, C., D'Hoker, S., Michiels, G., & Sabbe, M. (2016). Principles of hospital disaster management: an integrated and multidisciplinary approach. *ResearchGate*. https://www.researchgate.net/publication/310915383_Principles_of_hospital_disaster_management_an_integrated_and_multidisciplinary_approach

preparedness for SCEH. Involving both medical and non-medical staff in the development and review of these plans ensures they are practical and tailored to the hospital's specific needs.

It enables hospitals to maintain essential services, manage resources effectively, and coordinate with external agencies. Regular drills and simulations should be part of this plan to enhance staff readiness, ensuring they are equipped to handle diverse emergency scenarios as advised by WHO[18]. Ultimately, a robust disaster preparedness plan is vital for minimising the impact of emergencies, preserving lives, and maintaining uninterrupted healthcare services. The creation of this robust plan could also result in the planning to open the isolation facility to the public when the centre was in less demand among the medical and other employees at SCEH, as all cases could be managed through home isolation. This would increase the impact that the project has achieved.

8.2 Capacity Building Through Diversified Medical Training

Part of the disaster management plan is to ensure the future readiness of hospitals for pandemics, through continuous capacity building via diversified medical training. This has been outlined in the National Disaster Management Guidelines for hospital safety[19]. The training for SCEH staff should include cross-disciplinary education in fields beyond ophthalmology, such as respiratory medicine and infectious diseases. Guest lectures from experts in various medical specialities can provide valuable insights on pandemic preparedness and the management of infectious diseases. This was also recommended by CEO, SCEH since SCEH along with EGF support was tackling the problem after it had occurred and they were not prepared beforehand with all the adequate skills to deal with the second wave of the pandemic.

Training sessions on advanced medical equipment not typically used in ophthalmology, such as ventilators and emergency care devices, should be arranged to enhance the hospital's capability to handle diverse medical emergencies. Practical workshops will ensure staff are proficient in using new equipment. Facilitating inter-departmental learning sessions and establishing knowledge exchange programmes with other hospitals can enhance staff knowledge and preparedness. By implementing these recommendations, SCEH can build a versatile workforce capable of effectively responding to future pandemics and other medical emergencies, ensuring the health and safety of both staff and patients.

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[18] Sharma, N. (2024, April 1). *Simulation Training for Emergency preparedness: Readying healthcare workers for crisis situations*. Digital Engineering & Technology | Elearning Solutions | Digital Content Solutions. https://www.hurix.com/simulation-training-for-emergency-preparedness-readying-healthcare-workers-for-crisis-situations/

[19] National Disaster Management Authority & Government of India. (2016). *National Disaster Management Guidelines: Hospital safety*. https://nidm.gov.in/PDF/pubs/NDMA/18.pdf