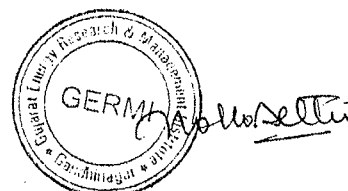




## **SOCIAL IMPACT ASSESSMENT OF CSR INITIATIVES OF GUJARAT STATE PETRONET LIMITED**

DHANVANTARI COVID HOSPITAL (DCH) - A GoG - DRDO-  
GUJARAT UNIVERSITY INITIATIVE



Study conducted by : Gujarat Energy Research & Management Institute, Gandhinagar  
Team : Narinderjit Kaur Sethi, Krupali Mehta, Sandhya Radhakrishnan, Sunita Gamit, Vikram Barot,  
Nilesh Patel & Bhavyajitsinh Hada  
Supported by : Arvind Patel, Neha Shah & Sajitha Charles ( SoCH Development Support Private. Ltd.,  
Ahmedabad).  
Study done in : March 2023



## Preface

This report of Social Impact Assessment (SIA) is prepared by Gujarat Energy Research & Management Institute (GERMI) for Gujarat State Petronet Limited (GSPL). GSPL supported the evolvment and establishment of Dhanvantari COVID Care Hospital (DCH) during the COVID-19 pandemic. In pursuance to the requirement as per section 135 (Schedule VII) of the Companies Act, 2013 the spending on the CSR activities for the financial year 2021 – 2022 has been considered.



*Mohammed Ali*

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## Executive Summary

The Dhanvantari COVID Care Hospital, started on 24<sup>th</sup> April 2021 was established with robust speed and was set up in record span of 10 days. It was located at the Gujarat University Convention and Exhibition Centre, Ahmedabad. It was set up by the Government of Gujarat in collaboration with the Defence Research and Development Organization (DRDO), through the Gujarat University Consultancy Foundation (GUCF) The Dhanvantari COVID Hospital (DCH) aimed to alleviate the additional stress on the healthcare infrastructure of the state due to the COVID-19 pandemic.

It was equipped with a capacity of more than 900 beds, had all necessary crucial medical infrastructure facilities including intensive and critical care for COVID patients. All beds were equipped with 100 percent oxygen supply and 150 of these beds were ICU beds with ventilators. More than 200 medical and paramedical staff including 50 doctors and Duty Medical Officers was deployed in the hospital. The hospital was linked with VS Hospital, Ahmedabad, as its base. The hospital functioned as a Referral Hospital, with no OPD, in order to provide efficient and dedicated critical care to the COVID patients.

Some of the key findings from the study include:

- Majority of the respondents who were treated at Dhanvantari hospital belonged to informal occupations, therefore it is evident that it provided services to the neediest.
- Out of total 50 patients surveyed, 45 i.e. 90 % patients were admitted from Ahmedabad city, which establishes that the decision to establish Dhanvantari Hospital in Ahmedabad was very much relevant.
- About 84% (42 nos.) patients interviewed faced no problem at point of admission in the hospital and said that the procedure was 'easy' for them. 12 % (6 nos.) of them felt that the procedure was 'not easy'.
- 72% (36 nos.) respondents were satisfied and mentioned that the basic facilities like food, sanitation etc. were good at the hospital.
- About 86% (43 nos.) patients did not face any shortage in oxygen supply.
- In case of medicines supply, 42 patients (84%) had no problem in procuring them on time. All other medical facilities were also supplied systematically according to 43 (86%) patients.
- 40 patients (80%) out of 50 were satisfied and happy to receive the medical services and treatment in respect to their ailments. 8 (16%) patients were not satisfied with the medical and treatment services.
- Crucial addition of highly trained medical manpower boosted the functioning of the hospital which was witnessing long queues of patients.
- 37 out of 50 patients were constantly connected with their family through their own mobile.
- 41 patients out of 50 mentioned that they would recommend this hospital in the future.

Altogether, setting up of an emergency facility like Dhanvantari has been a learning experience for all stakeholders. It has indeed helped hundreds of patients with free of cost on-time health services.



## CHAPTER I - Background

### A. COVID 19: An Era of Emergency and Scarcity

The Dhanvantari project was established in response to the severe strain the second wave of COVID-19 created on the healthcare infrastructure across India. The Delta variant of the virus was spreading faster than previous variants, causing a sudden surge in the demand for critical requirements like beds, oxygen, ICU, and ventilators.

In Gujarat, the situation was particularly dire, as the virus was creating significant pressure on the healthcare infrastructure. Due to the high demand for critical care beds, patients across the state suffered and many were dying especially while en route to the hospital, waiting for a critical care bed to become available.

Recognizing the need of the hour, the Government of Gujarat decided to create temporary hospitals to augment the healthcare infrastructure of the state. The objective of the Dhanvantari project was to establish a hospital with approximately 900 to 1000 beds in a short period, all of which would be fully equipped with oxygen support and all required facilities. Also, around 200 of these beds were designated as critical care beds with ICU and ventilator support.

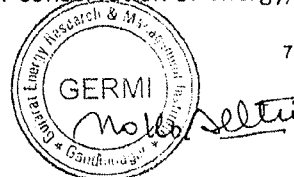
The creation of such a hospital in mission mode was envisioned to dramatically increase the number of oxygenated and critical care beds in Gujarat state. The project's timelines were set with urgency in mind, with the hospital's completion to be within a short period. Upon completion, the hospital was made operational in record time, with all necessary facilities in place to provide timely medical support to COVID-19 patients.

The Dhanvantari Hospital's establishment highlights the Government of Gujarat's commitment towards providing timely medical support to COVID-19 patients. By augmenting the healthcare infrastructure of Gujarat state, the project successfully provided critical support to COVID-19 patients in dire need.

### B. Gujarat State Petronet Limited and Corporate Social Responsibility

Gujarat State Petronet Limited (GSPL) - a GSPC Group Company, is a pioneer in developing energy transportation infrastructure and transmitting natural gas across the state of Gujarat. The transmission network of the Company envisages development of seamless pipeline network across Gujarat connecting various suppliers and delivery points. GSPL being committed in fulfilling its Corporate Social Responsibility has been engaged in various social initiatives through its intervention in the areas of promoting Healthcare/ Eradication of Malnutrition/ Poverty/ Promoting Education etc. in accordance with the Corporate Social Responsibility Policy of Company.

The company undertakes the Corporate Social Responsibility as a genuine expression of goodwill and gratitude towards society and is keen to make significant contributions towards development of social infrastructure, economic, environmental and social upliftment of communities in and around the areas of its operation in the major thrust areas such as community development, promoting education, creating awareness for conservation of energy,



environment sustainability, healthcare etc. through its service, conduct, business practise and social initiatives.

### C. GSPL CSR Initiative: Dhanvantari COVID Hospital (DCH) - A Government of Gujarat - DRDO - Gujarat University Initiative

Dhanvantari COVID Hospital in Ahmedabad has played a crucial role in the fight against the COVID-19 pandemic, providing timely and effective treatment to patients and reducing the impact of the virus on the community. Gujarat State Petronet Limited (GSPL) has contributed towards this initiative to help the government in setting up an emergency facility at the most crucial time. The benefits of the initiative were as follows:

- Increased hospital bed capacity for COVID-19 patients: With the surge in COVID-19 cases during the second wave, Dhanvantari COVID Hospital in Ahmedabad provided more beds and medical equipment to accommodate patients. This was a timely and effective method of off-loading stress from the existing health infrastructure.
- Dedicated facilities for COVID-19 patients: The hospital had dedicated facilities and staff for COVID-19 patients. This helped in preventing the spread of the virus and ensured a safer environment for everyone.
- Advanced medical equipment: The hospital was equipped with advanced medical equipment such as ventilators, oxygen concentrators and other critical care equipment which helped in providing effective treatment to COVID-19 patients.
- Additional care facilities: The hospital was equipped with additional care wherein equipment such as dialysis machine. A post-COVID ward for convalescence of patients was also established. Out-transfers of critical patients to other hospitals for critical illnesses/complications was also provided through dedicated Life Support Ambulance.
- Skilled Medical Professionals: Dhanvantari hospital deployed medical contingents from the Indian Army and Indian Navy. DCH Management under the Governing Committee also undertook recruitment of staff at an unprecedented pace, with a staff of over 350 personnel including, medical officers, nurses, AYUSH Doctors, medical interns and other healthcare workers within a week. This helped to ensure that patients receive the best possible care and treatment.
- Reduced mortality rate: With the timely and effective treatment provided, the mortality rate for COVID-19 patients could be reduced.
- Increased access to COVID-19 testing and vaccines: This platform also helped in increasing access to COVID-19 testing and vaccines, which helped in identifying cases early and prevent the spread of the virus. Refer to Annexure 1 for the online references and data provided by GUCF.



#### D. CSR Initiative: Activities Undertaken

Following were the activities taken up under the aegis of the Governing Committee constituted for setting up Dhanvantari hospital:

- Infrastructure setup in close consultation by DRDO, which included setting up of ambulance bays, triage, ICU, oxygen plants and pipelines, general wards, installation of ventilators, back office establishment, 24x7 CCTV surveillance, security, tele-communications and internet networking, IT systems, electronic patient systems, CT scan and other labs etc.
- Recruitment of hundreds of staff and doctors as well as several others were deputed and their on-boarding and training. The hospital had also employed some of the best doctors from the state for consultation. In addition to new recruitment visiting specialist were empanelled.
- On-boarding variety of agencies such as housekeeping, food and refreshments, lab testing, etc. There were about 12 agencies that worked under one roof.
- Setting up of various medical and paramedical processes and systems, arrangement of quarters and accommodation arrangement for staff, maintenance and housekeeping procedures, etc.
- Various administrative processes were also established during this period, in accordance with the financial guidelines and purchase procedures of government. A team of Gujarat University, Knowledge Consortium of Gujarat (KCG) and other divisions of the Education Department were brought together to ensure smooth functioning of the hospital. Some of the other facilities like pharmacy, doctor waiting lounge, cloud based registration system, in-house 35 KL Liquid Medical Oxygen Station for continuous oxygen supply and 24 hours House Keeping and Laundry Services were key features that helped in smooth functioning of the hospital.
- Followed strict safety norms for doctors and support staff in doffing area, donning area, sanitizer dispensers and sanitized toilet blocks. Keeping in mind the volatility of oxygen plants, the hospital complied with all the Fire and Electrical Safety Norms. Hydrant Fire-Fighter system was also installed with Fire Extinguishers inside the Hall and Galleries of the hospital.
- Provided nutritious and hygienic meals to the patients and all the staff engaged with the hospital.



## E. CSR Initiative: Outcomes

The CSR initiative has several outcomes, which definitely has strengthened handling such cases during an emergency situation. These outcomes and the learning experiences gained would definitely help to deal with such exigencies in the future.

- Large Triage: In line with the best practices adopted by hospitals around the world, the Dhanvantari COVID Hospital had one of the biggest triages in the region to handle a large number of patients. Entry and enrolment systems were also streamlined to ensure handling of patients at large scale.
- Free of Cost Services: All the services offered by Dhanvantari COVID Hospital were absolutely free of cost. This included fully air-conditioned hospital premises, all medical and non-medical expenses, expenses pertaining to the stay in the hospital, food expenses, and all lab testing expenses.
- COVID Saathi: This initiative enabled video-calling between patients and their relatives. This service helped many patients get in touch with their family members on a regular basis.
- Wi Fi-enabled Hospital: The hospital premises were fully Wi Fi-enabled, which allowed the administration to record registrations online and also allowed patients to use it free of cost.
- Post-COVID ward: The hospital saw its peak during the months of April, 2021 shortly after opening, all the way through May, 2021. As the COVID-19 wave weakened, the number of daily patients decreased and the discharges increased. As bed availability increased at the Hospital, a post-COVID ward was established to help patients with post-COVID (or now known as long COVID) symptoms convalesce.

## F. CSR Initiative: Role of Stakeholders Involved

Several stakeholders were involved in setting up the Dhanvantari hospital, as it required lot of efforts within a stipulated time. Let us understand the stakeholders who were involved in the initiative and their roles and responsibilities.

- Governance by Government of Gujarat: The Government of Gujarat assigned the overall responsibility of establishing the hospital to the Education Department, as the hospital was set up in a mission mode. A senior IAS, Principal Secretary to the Government, was appointed as the Chairperson of the Governing Committee of the Hospital. Other members of the Governing Committee included:
  - Secretary, R&B Government of Gujarat
  - The Defence Research & Development Organization (DRDO) of the Ministry of Defence was roped in as a key partner by the Government of Gujarat in setting up and running the hospital. With extensive experience in establishing several hospitals across the country in response to the COVID-19 pandemic, DRDO was responsible for bringing in all the necessary equipment and technical know-how



for the hospital's establishment. It also played a crucial role in liaising with various armed forces to provide necessary medical staff for the hospital.

- Government also appointed another IAS officers as the Administrator of the Hospital.
- An experienced doctor from the Government set up was appointed as the Medical Superintendent of the Hospital.
- Vice-Chancellor, Gujarat University
- Representative of Gujarat Medical and Education Research Society (GMERS)
- Government selected the Gujarat University Convention and Exhibition Centre (GUCEC) as the location for the hospital due to its city-centric location in Ahmedabad, flexible spaces and it being part of a public university. The Government also choose the Gujarat University's consultancy arm Gujarat University Consultancy Foundation (GUCF) to provide and look after the support functions for the hospital.

- GSPC Group: GSPC group companies namely GGL and GSPL provided CSR funds towards the initiative - Rs. 20 crore sourced from the CSR funds of GSPC Group Companies.

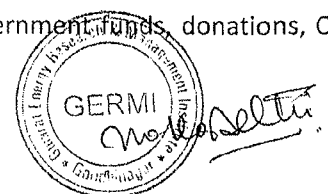
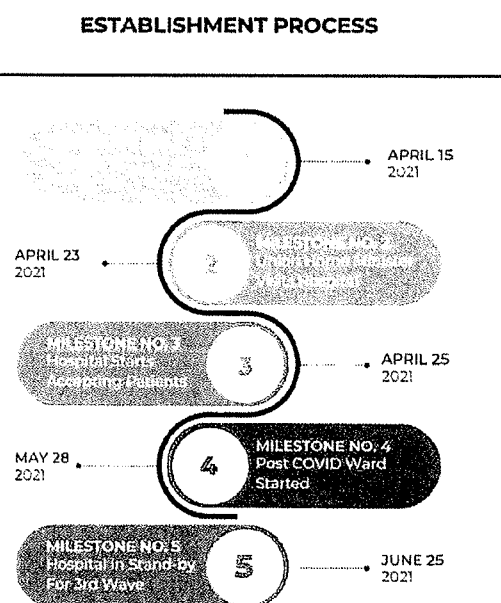
The Governing Committee of the Hospital also received wide ranging support from several government organizations, like Ahmedabad Municipal Corporation (AMC) and the Institute of Kidney Diseases and Research Centre (IKDRC), as well as civil society organizations such as the Gujarat Chamber of Commerce & Industry (GCCI).

## G. Gujarat: Policy, Legal and Administrative Framework during COVID 19

To help the country's civil administration tackle the surge in COVID cases in the second wave of the pandemic, temporary hospitals were set up by DRDO across the country as per the directive of the Central Government. Gujarat government immediately sprang into action and formed a governing body to help in setting up of the Dhanvantari hospital in a record time. Details of stakeholders are given in point 1.F, which gives clear evidence about the partnerships formed by the Gujarat government to set up the hospital in a span of 10 days with the assistance of DRDO. The following info-graphic the milestones and the timeline of the establishment process of Dhanvantari COVID hospital.

While DRDO was the executing body, the cost of setting up of the hospital with

required equipment and facilities were met with the state government funds, donations, CSR



funds and the PM CARES fund. In Gujarat, GSPL has donated Rs. 10 crores from its CSR funds to this cause. As the Hospital was set up in a mission mode, the hospital administration undertook a number of simultaneous processes to commission the hospital on time in order to save as many lives as possible. The establishment and the running of the hospital can be categorized into the following main phases:

**Establishment:** The period during the second and the third week of April 2021, the government decided to begin the hospital and it was set up in a mission mode with a number of agencies, departments, and organizations.

**Scale:** The hospital, as soon as it started, achieved scale in operations due to high demand for beds. The hospital continued to witness operations at full capacity for a few weeks until the third week of May 2021.

**Cyclone Tauktae:** During the scale period, in the first week of May 2021, Gujarat state witnessed the landfall of Cyclone Tauktae in the region. While no casualties or damage was reported in the hospital, the hospital administration undertook multiple steps such as fire drills, strengthening of fire safety, setting up of portable oxygen infrastructure, installation of backup generators, etc. to ensure patients' safety.

**Slow down:** After the fourth week of May 2021, the hospital witnessed a slow-down in its operations. In the month of June 2021, the operations were put on a stand-by mode and in September the same year, the hospital infrastructure and operations were handed over to the State Health Department. All the equipment and re-usable infrastructure were dismantled and given to various government hospitals spread across different districts.



## CHAPTER II - Social Impact Assessment Study

### II. A – Details of the Study

#### 1. Scope of the study

Gujarat Energy Research and Management Institute (GERMI) was hired as an independent consultant to do the Social Impact Assessment study to understand the impact of the project “Dhanvantari COVID Hospital (DCH), a DRDO-GU Initiative”. The study included; secondary research, preparation of research tools, training of GERMI staff, data entry, analysis and development of report.

The study intended to understand the following aspects:

1. Impact of the intervention
2. Relevance during pandemic
3. Possibilities to enhance services

#### 2. Research Methodology

As the study involved multiple stakeholders and was to be done within a stipulated time, it was decided to use ‘qualitative research methodology’ to understand impact of the intervention. It has helped in understanding concepts, strategies, plans, mechanisms, implementation process and experiences.

#### 3. Sample for Study

For primary data, GERMI has used random sampling method to select beneficiaries, from the data provided by GUCF, the nodal agency for the implementation of the project. GERMI team contacted 50 beneficiaries from the list of 1723 patients to understand the impact of the project. The demographic details of the beneficiaries surveyed are given in Table 1.

#### 4. Tools Development

Preliminary meeting was conducted with GSPL team to understand the study and its scope. Secondary study of documents provided by GSPL and GUCF has helped in understanding the initiative. Online resources were also referred as part of the study. Based on this, research tools were developed. A team of 5 data collectors were provided with in-depth explanation about social impact assessment process and an orientation was given about the tools. Two in-depth questionnaires were then developed for all stakeholders. However, due to sensitivity of the data, it was agreed with GSPL to implement the questionnaires focusing on beneficiaries for SIA. Refer to Annexure 2 for the final questionnaires.

#### 5. Data Collection

The data collection was done by GERMI team during March, 2023. The data collection team included social scientists, administrative officials and project management executives. After the data collection, the duly filled questionnaires were analysed by the team. A total of 50 beneficiaries were contacted.



## 6. Limitations of the Study

GERMI undertook the social impact assessment study of 'Dhanvantari COVID Hospital (DCH), a DRDO-GU Initiative' vide work order GSPL/GERMI/CSR/IA/2023/03 dated 6-March, 2023. GERMI has taken utmost possible care in conducting the social impact assessment study in its true sense i.e. "Social impact can be defined as the effect on people and communities that happens as a result of an action or inaction, an activity, project, program or policy"<sup>1</sup>.

Even then, we have found certain limitations of the study, which are as follows:

1. **Sensitive data:** Due to the sensitive nature of data and as the project continued for a short period due to downfall in COVID cases, so there was limited scope to reach diverse beneficiaries and stakeholders.
2. **Deputed human resources:** As it was an emergency intervention, many of the key officials were deputed from different hospitals of Gujarat and therefore it was categorically decided to contact only beneficiaries who voluntarily agreed to give their feedback.
3. **Time limitation:** Due to paucity of time, all stakeholders could not be met to understand the impact in a holistic way.
4. **Lack of standardization:** There is no standard methodology for conducting SIAs, and different practitioners may use different methods and criteria for assessment, which can affect the consistency and comparability of results.
5. **Limited Documentation:** The research team had limited access to different documentation, due to sensitivity of the data.

## II. B) Data analysis

### 1. Relevance of the Intervention

The intervention of Dhanvantari COVID hospital was crucial in providing medical assistance to a large number of COVID-19 patients who were struggling to find hospital beds and access medical care during the peak of the pandemic in India. This hospital played important and crucial role in reducing the burden on other hospitals in the city and helped in effective management of the pandemic.

**Demographic Profile of Targeted Beneficiary:** All the patients were affected by the shortage of beds in their region and were in need for immediate and critical care support such as oxygen support, ICU support or ventilator support. The hospital was open to all patients of COVID-19 or those with COVID-19 like symptoms. The following table shows the gender distribution and marital status of the total sample of 50 patients/beneficiaries interviewed:

**Table No. 1: Gender Distribution of the patients admitted**

| Gender       | Total     | Married | Unmarried |
|--------------|-----------|---------|-----------|
| Males        | 44        | 39      | 5         |
| Females      | 6         | 6       |           |
| <b>Total</b> | <b>50</b> |         |           |

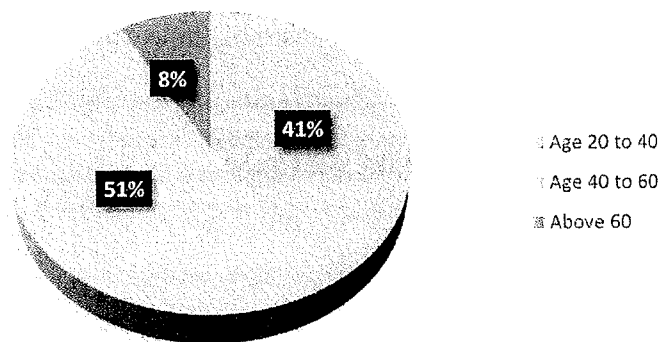


<sup>1</sup><https://www.goodfinance.org.uk/latest/post/what-social-impact-and-how-do-i-measure-it#:~:text=Social%20impact%20can%20be%20defined,work%20with%20and%20buy%20from>

**Age Distribution:** The following pie chart shows the age distribution of the total 50 samples studied. It is observed that there was not a single patient admitted below 20 years of age. 20 patients, i.e., 40% were admitted from the age group of 20 to 40 years, 25 patients – 50% from the age group of 40 to 60 years and 5 patients – 10% from the age group of senior citizens i.e., above 60 years of age.

Pie Chart No. 1: Age distribution of patients admitted

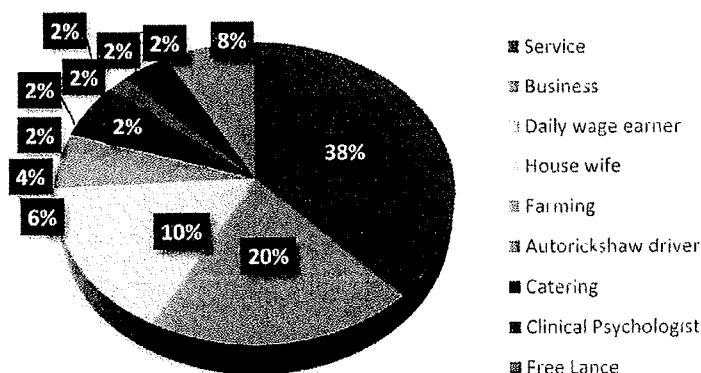
Age Distribution of Patients Admitted



**Occupation of the patients admitted:** As can be seen from data, 38% (19) and 20% (10) beneficiaries had mentioned service and business respectively as their occupation. While among the remaining 42% beneficiaries, the majority belonged to one or other type of informal sector which establishes that the intervention has reached to those who were in real need of services.

Pie Chart No. 2: Occupation of patients admitted

Occupation of Beneficiaries



**Patient's Place of Origin:** According to the data it was found that out of total 50 patients surveyed, 45 i.e., (90 %) patients were admitted from Ahmedabad city, which establishes that the decision to establish Dhanvantari Hospital in Ahmedabad was very much relevant. Remaining 10 % patients were from other districts and States of the country.



## 2. Effectiveness & Efficiency of the Intervention

The intervention of Dhanvantri Hospital had a short span and based on reports and media coverage, the intervention in the COVID-19 pandemic has been viewed as positive and effective.

One of the significant contributions of Dhanvantari COVID Hospital was to provide free-of-cost treatment to COVID-19 patients, which was crucial in ensuring that everyone who required medical attention could receive it. The hospital was also equipped with the necessary medical equipment, including ventilators and oxygen support, to manage severe cases of COVID-19. Moreover, the hospital was staffed with trained medical professionals who provided quality medical care to patients, which was essential for ensuring positive outcome.

Following section explores experiences of beneficiaries of Dhanvantari Hospital. It focuses on aspects like who referred the patients to the hospital, when they were admitted and discharged, what was their experience about the admission procedures and what is their opinion about the basic facilities like restrooms, hygiene, sanitation, food and drinking water.

**Arrival of patients at the Hospital:** 46 out of 50 patients interviewed – (92%) mentioned that they were brought to the hospital via 108 ambulance services. During COVID-19, Ahmedabad had 120 ambulances under the centralized 108 ambulance service, which was receiving thousands of calls a day from desperate patients and their family members. Later on, Ahmedabad Municipal Corporation relaxed its rule regarding hospital admission to COVID patients, lifting the restricting of admission to only COVID-19 patients arriving in EMRI (Emergency Management and Research Institute) 108 ambulances at civic body-run hospitals.

One patient was referred to Dhanvantari by another hospital and one mentioned that family members were aware about this hospital and hence they brought the patient here. Two patients refused to give any response in this regard.

**Total number of days in Hospital:** From the 50 beneficiaries interviewed as can be seen from the table below, highest number of beneficiaries (40%) stayed in hospital for 1 to 5 days, followed by 24 % and 22 % stayed for 6 to 10 and 11 to 15 days respectively. Only 8 % stayed for more than 20 days. This can be because of fast recovery of patients due to adequate facilities and qualified staff.

**Table No. 2: Total days spent in hospital**

| Sr. | No. of days in Hospital | No. of Respondents | Percentage |
|-----|-------------------------|--------------------|------------|
| 1   | Less than a day         | 1                  | 2          |
| 2   | 1 to 5                  | 20                 | 40         |
| 3   | 6 to 10                 | 12                 | 24         |
| 4   | 11 to 15                | 11                 | 22         |
| 5   | 20 to 30                | 3                  | 6          |
| 6   | More than 30            | 1                  | 2          |
| 7   | No response             | 2                  | 4          |



**Experience of Admission Procedure:** The below given table depicts those 42 (84%) patients faced no problem at point of admission in the hospital and that the procedure was 'easy' for them. 6 (12%) of them felt that the procedure was 'not that easy'. When probed about their difficulties, out of these 6 patients – 3 of them mentioned that they faced difficulty in getting admission as they had arrived in private ambulances or by own vehicle, 1 mentioned that the hospital was over-crowded, 1 mentioned about getting admission 'forcibly' in the hospital due to government guidelines and 1 did not prefer to mention any reason about their experience. While 2 patients refused to share any experience.

**Table No. 3: Admission Procedure**

| Response     | No. of patients |
|--------------|-----------------|
| Easy         | 42              |
| Not Easy     | 6               |
| No answer    | 2               |
| <b>Total</b> | <b>50</b>       |

**About Basic Facilities (restroom, hygiene, sanitation, drinking water, food etc.):** As per the following table, 36 (72%) patients were satisfied and mentioned that the facilities were good at the hospital. 1 patient was unhappy and 13 (26%) out of 50 did not share their opinion about the facilities at the hospital.

**Table No. 4: Responses about facilities**

| Response     | No. of patients |
|--------------|-----------------|
| Good         | 36              |
| Not Good     | 1               |
| No Answer    | 13              |
| <b>Total</b> | <b>50</b>       |

### 3. Quality of the Intervention

The quality of Dhanvantari hospital's intervention in COVID-19 can be evaluated based on various parameters, including patient care, medical facilities, and staff training. Based on reports and media coverage, Dhanvantari COVID Hospital provided quality medical care to COVID-19 patients. The hospital had well-equipped medical facilities to manage severe cases of COVID-19. The hospital also had sufficient number of health care professionals who were trained to manage critical COVID-19 patients. Moreover, the hospital's focus on providing free-of-cost treatment to COVID-19 patients made it accessible to everyone in need, irrespective of their financial status. The hospital also followed strict protocols for infection control, which ensured that patients received medical attention in a safe and clean environment.

**Impressions about Medical Facilities at Dhanvantari Hospital:** The tables hereafter depict experiences of the patients about various types of facilities provided at the hospital. Table No. 5 shows that 43 (86%) patients did not face any shortage in oxygen supply. As we all know, oxygen supply played key role in COVID-19 patient's survival. Moreover, since the start of the COVID-19 pandemic, we had heard of severe cases where patients needed a ventilator and high-flow oxygen.

In case of medicines, 42 (84%) patients had no problem in procuring them on time. All other medical facilities were also supplied systematically according to 43 (86%) patients. Only 1 patient had minor problem in medicine accessibility. Also, 8 (16%) patients did not share any response when asked about the shortage in supply of oxygen, medicines and other facilities.

**Table No.5: Supply of oxygen, medicines and other facilities**

| Supplies  | No | Yes | No response | Total |
|-----------|----|-----|-------------|-------|
| Oxygen    | 43 | 0   | 7           | 50    |
| Medicines | 42 | 1   | 7           | 50    |
| Others    | 43 | 0   | 7           | 50    |

Table No. 6 below tries to see the satisfaction level of the medical and treatment services provided at the hospital. 40 (80%) patients out of 50 were satisfied and happy to receive the medical services and treatment in respect to their ailments. 8 patients were not satisfied with the medical and treatment services and 2 of the family members were not in the position to respond as they lost their family member at the Hospital.

**Table No. 6: Satisfactory medical and treatment services**

| Satisfaction Level | Response  |
|--------------------|-----------|
| Yes                | 40        |
| No                 | 8         |
| No Answer          | 2         |
| <b>Total</b>       | <b>50</b> |

**Table No. 7: Regular standards of hygiene maintained in short time**

| Standard of Hygiene | Response  |
|---------------------|-----------|
| Yes                 | 41        |
| No                  | 3         |
| No Answer           | 6         |
| <b>Total</b>        | <b>50</b> |

As shown in the above table no. 7, majority of the patients – 41 (82%) mentioned that the regular standards of hygiene were maintained even when the hospital was established in such a short time. Also, we can see from the table no. 8 below that 42 (84%) patients were satisfied with the overall cleanliness and maintenance at the hospital. 2 (4%) patients were not satisfied and 6 (12%) of them have not given any answer.

**Table No. 8: Overall cleanliness and maintenance:**

| Satisfaction Level | Response  |
|--------------------|-----------|
| Satisfactory       | 42        |
| Not satisfactory   | 2         |
| Not answered       | 6         |
| <b>Total</b>       | <b>50</b> |



#### **Adequate Hospital Staff:**

As it can be seen from the Table No. 9, in terms of adequacy of Hospital Staff 78% respondents mentioned that the staff was adequate while 6% said that the staff was in adequate and 16% did not responded.

**Table No. 9: Staff sufficient/adequate enough in hospital:**

| Staff adequacy | Response  |
|----------------|-----------|
| Yes            | 39        |
| No             | 3         |
| Not answered   | 8         |
| <b>Total</b>   | <b>50</b> |

All the medical and para-medical staff was trained in management and care of critical COVID-19 patients. A 57-member medical team from the Indian Navy was deputed to the Dhanvantari hospital. The team of 4 doctors, 7 nurses, 26 paramedics and 20 supporting staff, including battlefield nursing attendants, from 5 Naval hospitals around the country, was deployed for 2 months.

This crucial addition of highly trained medical manpower boosted the functioning of the hospital which was witnessing long queues of patients. Gujarat Naval Area had also offered support to the civil administration for transport of critical medical stores and equipment to COVID-affected areas, setting up of community kitchens and other technical help.<sup>2</sup>

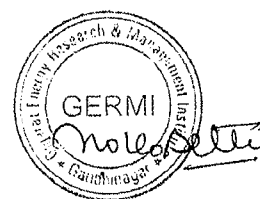
**Adequate information about medical condition, treatment options and specific instructions imparted:** As per table no. 10, 48% of the beneficiaries responded that the treatment options were explained whereas 46% of them felt that the treatment options were not explained to them properly.

**Table No. 10: Adequate information about medical condition and treatment options:**

| Information sufficiency | Response  |
|-------------------------|-----------|
| Yes                     | 23        |
| No                      | 24        |
| Not answered            | 3         |
| <b>Total</b>            | <b>50</b> |

**Table No. 11: Specific Instructions given to patients:**

| Specific Instructions | Response  |
|-----------------------|-----------|
| Yes                   | 7         |
| No                    | 33        |
| Not answered          | 10        |
| <b>Total</b>          | <b>50</b> |



<sup>2</sup> Covid-19: Naval medical team deployed in Ahmedabad | Ahmedabad News, The Indian Express

Also, regarding **specific instructions given to patients** – from table no. 11 we can see that only 7 out of 50 mentioned that they were given instructions like “Take Medicine on time”, “Medicine and quarantine for 14 days”, “Mobile for communication with family”, other 2 responses were “Outside material and relative entry was restricted”, and “Given exercise bubble”.

In table no. 12 about **guidance and follow-up after discharge**, only 5 patients mentioned that they were guided once through a phone call after one month from their discharge from the hospital.

**Table No. 12: Guidance to patients on follow-up after discharge**

| Follow up    | Response  |
|--------------|-----------|
| Yes          | 5         |
| No           | 45        |
| Not answered | 0         |
| <b>Total</b> | <b>50</b> |

For **patient’s connectivity with their family members**, 37 (74%) out of 50 were connected through their own mobile and data, whereas, 13 (26%) were not connected with their family members.

**Table No. 13: Connectedness with family members of patients:**

| Connectedness with family members | Responses |
|-----------------------------------|-----------|
| Yes                               | 37        |
| No                                | 13        |
| <b>Total</b>                      | <b>50</b> |

The patients were asked about whether they would recommend Dhanvantari hospital for such crisis in future. Here 41 (82%) patients mentioned that they would recommend this hospital while 9 (18%) of them mentioned that they would not recommend this hospital.

**Table No. 14: Recommend Dhanvantari hospital to others in future:**

| Hospital Recommendation | Responses |
|-------------------------|-----------|
| Yes                     | 41        |
| No                      | 9         |
| <b>Total</b>            | <b>50</b> |

The following are the suggestions given by the beneficiary’s / family members interviewed:

- Patients brought/ came in using any form of transportation other than 108 ambulance services should also have been equally treated from the beginning of the hospital.
- Timely services were provided that created positive impression and shows that the care of the patient is of utmost importance.
- Precise entry and exit systems would leave a smile on face of the patient and their family members.



- iv. Post COVID treatment should also be provided in the same hospital as the rapport is established between the patient and the staff.
- v. Though this hospital was the largest among all the COVID hospitals with 900 beds, some of the patients felt that many severe patients were devoid of critical care due to unavailability of beds. Hence, number of beds should have been increased.
- vi. Along with medical services, positive environment enforcement activities help to motivate patients and facilitate faster recovery especially in such pandemic.



## CHAPTER III: Impact of The Intervention and Observations

### III. A) Impacts

#### Direct Impacts

- Saving lives of thousands: Dhanvantari hospital has acted as life saving for many persons suffering from COVID -19. Also it has helped prevent the infection and helped to control the pandemic.
- Strengthened capacity of the State to deal with similar emergencies in future: Setting up of Dhanvantari Hospital was first of its kind experience for the stakeholders, wherein all of them worked together on war foot and created a lifesaving infrastructure in record time. It also strengthened inter-departmental coordination during pandemic in the state.
- As per the data, total 1723 patients were directly benefited (As per information available with GUCF) because of Dhanvantari Hospital established in a short span of time.

#### Indirect Impacts

- Improved image in the eyes of public about public health facilities: Due to Dhanvantari hospital, especially during the COVID 19 pandemic, people found respite from their never-ending search for hospital beds and oxygen supply in Ahmedabad. The intervention provided comprehensive service to the patients at one place. This has created a positive image among people.

### III. B) Conclusion

The whole project has set an example of emergency response right in the middle of the pandemic and that too in record time. Though it served for a short period due to downfall of COVID-19 second wave immediately after setting it up, it still had provided respite to a large number of patients in their crucial phase. Therefore, the efforts of all stakeholders were applauded at all national platforms, among beneficiaries and also by people at large. Such intervention through CSR fund has set an example utilization of funds by the government in emergencies.



## ANNEXURE 1 – Online References and Information Provided By GUCF

- **Videos produced by the Hospital**

- Dhanvatari Hospital Video - Short English Version ([YouTube Link](#))
- Dhanvantari Hospital Video - Long Gujarati Version ([YouTube Link](#))

- **News Reports**

- News Report - DeshGujarat - Shri Amit Shah, Hon'ble Union Home Minister, Visits Dhanvantari COVID Hospital ([YouTube Link](#))
- News Report - ABP Live - Dhanvantari Hospital setup in 8 Days ([YouTube Link](#))
- News Report - TV9 Gujarati - Exercise Session for Patients at Dhanvantari Hospital ([YouTube Link](#))
- News Report - ABP Asmita - Training for Doctors at Dhanvatari Hospital for Third Wave Preparations ([YouTube Link](#))



## ANNEXURE 2 – Questionnaires Developed for The Study

### Questionnaire for FOR FACILITATORS AND IMPLEMENTERS

[Government officials, DRDO, Gujarat University, Hospital staff, Doctors and Nurses]

### INFORMED CONSENT FORM

Please read this consent agreement carefully before agreeing to participate in this study. We request for your participation in the study on *"Social Impact Assessment of CSR projects of Gujarat State Petronet Limited"* as a participant with the details as below:

#### What will you do in this study?/Your Role

Upon your agreement to participate, we kindly ask you to participate in survey questionnaire attempting to understand the impact of project **"Establishment of Dhanvantari Hospital"** which was done during FY 2021-2022. Please note that this process of interview would take around 45 to 60 minutes to complete.

#### Voluntary Withdrawal

Your participation in this study is completely voluntary. You may skip over any questions or you may withdraw from the study at any time without penalty. However, it is important to us that you answer as many questions as possible.

#### Confidentiality

The records of this study (field notes, photographs, audio and video recordings, if any) will be kept private and confidential. Research records will be stored securely and only researchers will have access to the records. The results of this reflection process may be published and only upon your request, your name will not be attached in any of the published documents. However, it is preferable to state your name as this would like to emulate the spirit of transparent global practice.

#### Further Information

If you have any questions, please contact GERMI.

**Thank you very much for your time and participation. We highly appreciate your support for this process.**

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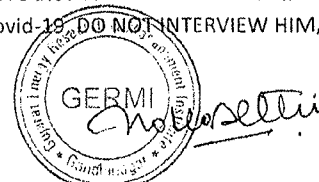
#### Statement of Consent:

The purpose and nature of this research have been sufficiently explained and I agree to participate in this study.

---

Respondent's Signature/ Date

**Note:** Please verify whether the staff being interviewed served in the work related to or at the Dhanvantari Hospital established during Covid-19. If the staff has changed or appointed after Covid-19, **DO NOT INTERVIEW HIM/HER.**



### Details of Respondent

|                         |                   |
|-------------------------|-------------------|
| Name:                   | Age:              |
| Gender:                 | Education:        |
| Occupation/Designation: | Income:(Optional) |
| Department/Hospital:    | Religion:         |
| Marital status:         | Contact:          |
| Location/Address:       |                   |

### FOR FACILITATORS AND IMPLEMENTERS

[Government officials, DRDO, Gujarat University, Hospital staff, Doctors and Nurses]

#### **A. About setting up, functioning and monitoring (For all)**

1. How was your experience of working on war-footing with multiple departments and agencies? Can you please name the departments, your tie up and experience of working with them?

\_\_\_\_\_

2. How many days it took to set up the hospital and make it functional? Also please mention the dates of starting the hospital and its last date.

a. Days took to make the hospital functional: \_\_\_\_\_

b. Started functioning from: on \_\_\_\_\_

c. Last date of hospital: \_\_\_\_\_

3. Can you explain the process of implementation followed for setting up Dhanvantari hospital pertaining to your departmental role?

\_\_\_\_\_

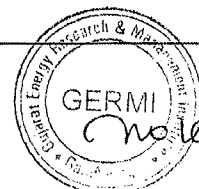
4. What was the capacity of the hospital and how many patients were treated during the COVID period?

a. No. of Beds: \_\_\_\_\_

b. No. of Patients: \_\_\_\_\_

5. Were there any specific recruitment procedures? How were you selected for the work?

\_\_\_\_\_



6. How were the shifts managed?

---

7. Were the patients directly coming to the hospital or were referred by government hospitals?

a. Directly coming to the hospital [YES] [NO]

b. Referred by government hospital [YES] [NO]

c. Name the referral hospital: \_\_\_\_\_

8. What were the facilities provided by Dhanvantari hospital to citizens?

---

9. What were the monitoring mechanisms devised to ensure proper functioning of the hospital and who were in-charge of it?

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10. What was your experience of handling the hospital during Cyclone Tauktae and did it affect the functioning of hospital in any way?

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11. What were the key challenges faced with regard to the functioning of hospital? How did you manage it?

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**B. Facilities created (For hospital staff, doctors, nurses etc.)**

1. Were the facilities (restroom, drinking water, electricity and so on) arranged, sufficient enough?

a. Yes b. No

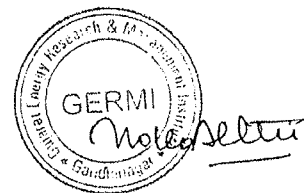
If No, please explain what was not sufficient:

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2. Were the maintenance works of the hospital attended to as required?

a. Yes b. No



3. Was the remuneration sufficient enough? Or were you paid for overtime or any other facilities were given?

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4. Was there sufficient number of PPE kits/safety gears for the doctors and other medical staff?

a. Yes      b. No

5. Was the environment conducive enough to work and were there any counselling sessions provided for you?

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6. Name the aspects which helped in the smooth functioning of the system in the hospital

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7. Name the aspects where you faced difficulties in functioning of the system in the hospital

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8. Dhanvantari hospital was set up to function in a mission mode. Do you think it served the purpose?

a. Yes      b. No

9. Were the number of staff sufficient enough in the hospital?

a. Yes      b. No

10. Was there any incident where you faced shortage in the supply of oxygen, medicines and other facilities?

a. Yes      b. No

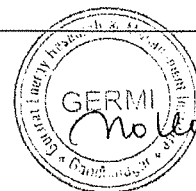
If Yes, what was the shortage for \_\_\_\_\_

10. Did the hospital maintain regular standard of hygiene as it was set up on a very short notice?

a. Yes      b. No

11. How long did it take to sanitize and arrange a new bed as the patient got discharged?

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12. How equipped the hospital was in addressing the following issues? Please tick the option

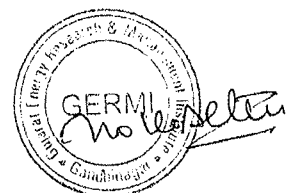
- a. Area and mechanism for registration, triage etc. [SUFFICIENT] [INSUFFICIENT]
- b. Supply of the oxygen [SUFFICIENT] [INSUFFICIENT]
- c. Supply of medicines, injections [SUFFICIENT] [INSUFFICIENT]
- d. Mobilizing the ambulance [SUFFICIENT] [INSUFFICIENT]
- e. Medical equipment and its services [SUFFICIENT] [INSUFFICIENT]
- f. Sanitization department [SUFFICIENT] [INSUFFICIENT]
- g. Coordination with other departments like transferring patients for further treatment or deceased to crematoriums [SUFFICIENT] [INSUFFICIENT]
- h. Wifi and other communication (calling) facilities [SUFFICIENT] [INSUFFICIENT]
- i. Food and water for staff and patients [SUFFICIENT] [INSUFFICIENT]

13. Did you get any training for fire safety, evacuation and so on?

- a. Yes              b. No

14. Any comments/suggestions on specific areas that need to be organized well the next time if any disaster strikes?

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**Thank you very much for your time and participation. We highly appreciate your support for this process.**

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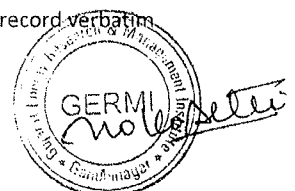
### Statement of Consent:

The purpose and nature of this research have been sufficiently explained and I agree to participate in this study.

---

Respondent's Signature/ Date

**Note:** Please verify whether the beneficiary/patient being interviewed was admitted in the Dhanvantari Hospital established during Covid-19. Since we are looking for their experiences, please record verbatim.



### Details of Respondent

|                         |                   |
|-------------------------|-------------------|
| Name:                   | Age:              |
| Gender:                 | Education:        |
| Occupation/Designation: | Income:(Optional) |
| Marital status:         | Religion:         |
| Location/Address:       | Contact:          |

### FOR PATIENTS [BENEFICIARIES]

1. How did you choose the hospital, did you come on your own/brought by family or referred by any other hospital?

\_\_\_\_\_

2. Can you recollect the dates on which you were admitted and discharged?

a. Admitted on \_\_\_\_\_

b. Discharged on \_\_\_\_\_

3. Were the admission procedures easy to follow?

a. Yes                      b. No

If No, please explain why: \_\_\_\_\_

4. How were the basic facilities (restroom, hygiene, sanitation, drinking water, food and so on)?

\_\_\_\_\_

5. Was there any incident where you faced shortage in the supply of oxygen, medicines and other facilities?

6. Were you satisfied with the range of medical services and treatments offered at the hospital?

a. Yes                      b. No

If No, please explain why: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



*M. K. Seltu*

7. How satisfied were you with the medical care provided by the doctors and the nurses at the hospitals?

- a. Satisfied                      b. Not satisfied

If Not satisfied, please explain why:

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8. Did the hospital maintain regular standard of hygiene as it was set up on a very short notice?

- a. Yes                      b. No

9. How would you rate the overall cleanliness and maintenance of the hospital?

- a. Satisfied                      b. Not satisfied

10. Were the number of staff sufficient enough in the hospital?

- a. Yes                      b. No

11. How efficient was the staff in handling the patients?

- a. Efficient                      b. Not efficient

12. Did you receive adequate information about the medical condition and treatment options at the hospital?

- a. Yes                      b. No

13. Were there any specific instructions given to follow in the hospital premises? If yes, what were they?

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14. Did the hospital provide any follow-up services after discharge?

- a. Yes                      b. No

If Yes, please explain what services:

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15. Were you able to get in touch with your family members on a regular basis with the facilities provided by the hospital like wifi, video calling and so on through Covid Sathi programme?

a. Yes                      b. No

16. Would you recommend Dhanvantari hospitals to others in need of medical care in the future?

a. Yes                      b. No

17. Any comments/suggestions on specific areas that need to be organized well the next time?

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## Gujarat Energy Research and Management Institute

An ISO 9001:2015 certified Institute

Gujarat Energy Research & Management Institute (GERMI) is a centre of excellence in the energy sector, promoted by Gujarat State Petroleum Corporation Limited (GSPC), a Government of Gujarat Undertaking. GERMI has four mandates:

- Research and Development
- Consultancy
- Training
- Education

**Contact Address:**

1<sup>st</sup> Floor, Energy Building, PDEU Campus, Raisan Village, Gandhinagar 382426, Gujarat, INDIA



