Impact Assessment Report

of

Deepak Medical Centre
under
Deepak Phenolics Limited's
CSR Initiative

April, 2026

Prof. (Dr.) Bhavna Mehta

Dr. Pooja Kantariya

Dr. Nazish Campwala

Submitted by:
Faculty of Social Work
The Maharaja Sayajirao University of Baroda,
Vadodara

Executive Summary

Access to quality healthcare infrastructure is fundamental to improving health outcomes, particularly in underserved and vulnerable communities. Recognizing this, Deepak Phenolics supported the development and strengthening of medical infrastructure at KGP Hospital through its Corporate Social Responsibility initiatives. This impact assessment was undertaken to evaluate the effectiveness of this intervention and to understand its contribution to healthcare access, service delivery, and community well-being.

The assessment adopted a mixed-methods approach, combining quantitative and qualitative data collected from 30 patients and 26 hospital staff members. Patient surveys captured beneficiary experiences, while Key Informant Interviews (KIIs) with hospital staff provided institutional perspectives on infrastructure utilization, service delivery, and operational improvements.

The findings demonstrate that the infrastructure intervention has significantly enhanced healthcare delivery across four key dimensions—availability, accessibility, quality, and affordability. Approximately 81% of hospital staff reported improvements in the availability of healthcare services, citing better consultation spaces, improved sanitation, and enhanced patient management capacity. From the patient perspective, 97% reported that access to healthcare services had become easier following the infrastructure upgrade, while a substantial majority expressed high levels of satisfaction with the hospital facilities.

The intervention has also improved the quality of patient care and overall healthcare experience. More than 93% of patients reported being satisfied or very satisfied with the hospital's infrastructure and services. Staff similarly noted improvements in working conditions, operational efficiency, and the hospital's ability to manage increased patient volumes. Importantly, the upgraded infrastructure has reduced the need for patients to travel to distant healthcare facilities, thereby lowering transportation costs and out-of-pocket healthcare expenditure.

A notable finding of the assessment is the enhanced climate resilience of the hospital. Given the hospital's proximity to the Vishwamitri River, flooding had historically disrupted operations. Staff reported that the new infrastructure has substantially mitigated flood-related challenges, ensuring greater continuity of healthcare services during adverse weather conditions.

While the overall impact has been highly positive, the assessment identified opportunities for further strengthening. Patients recommended larger waiting areas, improved seating arrangements, and enhanced sanitation facilities. Staff highlighted the need for specialized infrastructure such as a small ICU, pediatric consultation spaces, and additional patient support amenities.

Overall, the KGP Hospital infrastructure initiative stands as a strong example of how strategic corporate investment can strengthen public healthcare systems, improve healthcare equity, and create lasting community value. The findings affirm that Deepak Phenolics has made a significant contribution to advancing accessible, affordable, and quality healthcare for the surrounding communities. With continued attention to maintenance, expansion, and sustainability, the hospital is well-positioned to serve as a resilient and trusted healthcare institution for years to come.

Preface

Access to quality healthcare infrastructure remains a cornerstone of equitable and inclusive development. For communities, a well-equipped and resilient healthcare facility is far more than a building—it is a source of trust, security, and hope. Recognizing this, Deepak Phenolics, through its Corporate Social Responsibility initiatives, supported the strengthening of medical infrastructure at KGP Hospital with the vision of enhancing healthcare access and improving patient experiences for surrounding communities.

This impact assessment has been undertaken to evaluate the outcomes of this important intervention. The study examines how the upgraded infrastructure has influenced healthcare availability, accessibility, quality, and affordability, while also capturing the perspectives of both beneficiaries and hospital staff. It seeks to understand not only the immediate improvements in service delivery and patient satisfaction, but also the broader social and economic benefits generated for the local community.

The findings presented in this report highlight the transformative role that strategic infrastructure investments can play in strengthening public healthcare systems. They demonstrate how thoughtfully designed healthcare facilities can improve operational efficiency, enhance patient comfort, build institutional resilience, and foster greater trust among communities.

As healthcare systems continue to face evolving challenges—from increasing service demand to climate-related risks—investments in resilient and sustainable infrastructure become ever more critical. The KGP Hospital initiative stands as a compelling example of how corporate partnerships can create enduring public value and contribute meaningfully to community well-being.

It is hoped that this report will serve not only as an assessment of impact, but also as a guide for future investments, partnerships, and innovations aimed at building stronger, more inclusive, and more sustainable healthcare systems.

Acknowledgement

This impact assessment would not have been possible without the support, guidance, and cooperation of numerous individuals and institutions. We are thankful to The Maharaja Sayajirao University of Baroda, Vadodara for giving us the environment to take up such projects to enhance our academia and industry interface.

We extend our sincere gratitude to the Dean, Faculty of Social Work, Prof. (Dr.) Sunita Nambiar whose encouragement and institutional support provided the foundation for this study.

We would like to express our heartfelt appreciation to the management, administration, and staff of KGP Hospital for their generous cooperation, openness, and active participation. Their willingness to share their experiences and perspectives greatly enriched the quality and depth of this study.

Our deepest gratitude goes to the patients and community members who took the time to participate in the survey and share their valuable experiences. Their voices form the core of this assessment and provide meaningful insights into the impact of the infrastructure intervention.

We also acknowledge with appreciation the support of Deepak Phenolics for its commitment to strengthening healthcare infrastructure and for facilitating this important initiative. Their vision and investment have created lasting value for the community.

Finally, we extend our sincere appreciation to the team of students- Pruthvi Gadhavi, Jinal Suthar, Mihir Kayastha, Shruti Gurjar, Vishal Tadvi, Nandan Manavadariya, Aman Makwana, Daksh Solanki - whose dedication, hard work, and professionalism were instrumental in conducting the fieldwork, collecting data, and contributing to this report. Their commitment to rigorous inquiry and social impact made this assessment possible.

Introduction

Access to quality healthcare is often described as a basic human right—but for millions of people, it still feels out of reach. Across the world, especially in low- and middle-income countries, getting timely and reliable medical care is not always easy. For those living in rural or underserved areas, even a simple doctor's visit can mean long travel, high costs, or limited treatment options.

In India, while there have been remarkable advances in medical technology and the expansion of healthcare infrastructure, these benefits have not reached everyone equally. People in rural and semi-urban regions still struggle with gaps in availability, affordability, and accessibility. For many families, accessing healthcare is not just about treatment—it's about overcoming distance, cost, and systemic barriers just to receive the care they need.

Deepak Phenolics Limited (DPL) is a subsidiary of Deepak Nitrite Ltd. that manufactures phenol, acetone, and isopropanol (IPA) at a state-of-the-art, large-scale facility in Dahej, Gujarat. The company is the largest producer of these chemicals in India, focusing on import substitution and serving a wide customer base with a focus on efficiency, dependability, and sustainability. DPL's facilities are designed with the lowest thermal footprint and are IoT-enabled, positioning them as a leader in the Indian chemical intermediates market. Under the CSR of initiatives, Deepak Phenolics Limited has constructed Deepak Medical Centre at Medical Care Centre Trust's premises as part of its CSR initiatives aimed at improving healthcare infrastructure and services in Vadodara City.

To understand the effectiveness and outcomes of this project, an impact assessment was required to evaluate the social, economic, and health-related benefits delivered to the target community. The Deepak Foundation supported the development of medical infrastructure at the Kashiben Gordhandas Patel Children Hospital with the objective of strengthening healthcare access and improving service delivery for surrounding communities. The provision of improved medical infrastructure plays a critical role in strengthening healthcare systems, particularly in underserved areas. Recognizing this, the Deepak Foundation supported the development of a newly constructed hospital building at the Trust Hospital.

This report presents the findings of an impact assessment conducted to understand the effectiveness of the infrastructure support in improving healthcare access and outcomes.

Objectives of the Study

The primary objectives of the impact assessment were to:

- Evaluate the extent to which the hospital building has improved healthcare access and services.
- Assess the social and economic benefits to the local community.
- Identify challenges or gaps in utilization and service delivery.
- Provide recommendations for sustainability and potential improvements.

Methodology

A mixed-methods approach was used, combining quantitative and qualitative methods. The assessment was conducted using an analytical framework on the parameters of **Availability, Accessibility, Quality and Affordability.** This framework enables a multi-dimensional understanding of how infrastructure investments translate into improved healthcare outcomes.

Sample	Description	Sample Size and Methodology	Actual Sample Size
Patients	Beneficiaries of the Deepak Medical Centre in Vadodara	~100 respondents selected on a random basis	29 Patients
Key Informant Interviews	Hospital Management/MOs/Nurses	As per purposive sampling through a list of staff provided	26 KII

Data Collection Tools

Structured tools for data collection were used both, for hospital staff and for the patients.

Sample Size

A list of hospital staff who have worked under the old and new hospital building of KGP hospital was provided to the research team, out of which all staff members were covered for the Key Informant Interview.

Key Findings

- A majority of respondents reported improved access to healthcare
- Patient comfort and experience improved due to enhanced infrastructure
- Reduced dependency on distant healthcare facilities
- Some gaps in utilization and maintenance were observed

Availability of Healthcare Services

Availability refers to the presence and adequacy of healthcare infrastructure, including physical spaces, facilities and functional service units.

The assessment indicates a significant improvement in the availability of healthcare services at KGP Hospital following the infrastructure support. Approximately 81% of hospital staff reported enhanced service availability, particularly in terms of OPD consultation spaces, waiting areas, and sanitation facilities.

Patient responses further reinforce this finding, with a majority reporting noticeable

improvements in infrastructure and rating the overall facilities as good to very good.

These findings suggest that the infrastructure development has strengthened the hospital's capacity to deliver healthcare services and accommodate a higher patient load.

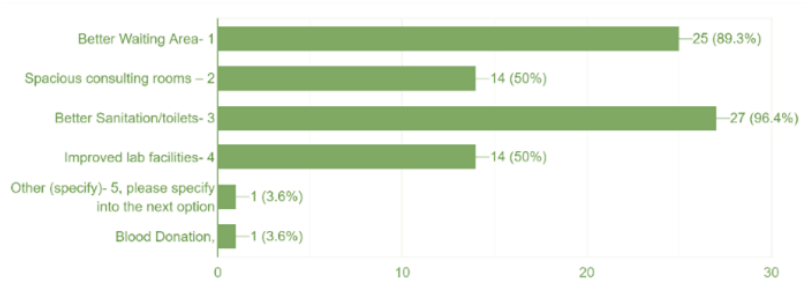
The infrastructure development at KGP Hospital has significantly enhanced the availability of healthcare services through:

- Expansion and improvement of OPD consultation spaces
- Strengthening of diagnostic and support facilities
- Improved waiting areas and patient handling capacity
- Better sanitation and utility infrastructure

21 out of 26 staff (~81%) reported that healthcare access and service availability have improved following the infrastructure development. The staff reported that the improved infrastructure has enabled them to:

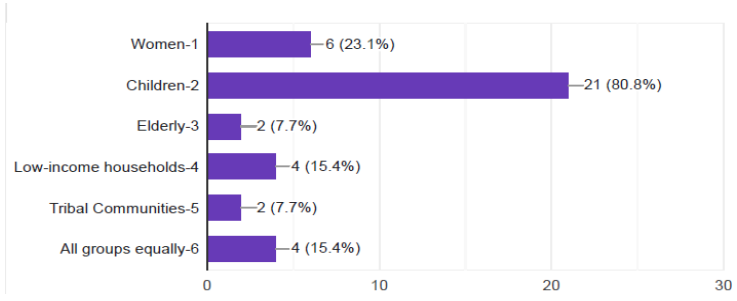
- Manage higher patient loads
- Deliver services more efficiently
- Utilize space more effectively

Patients also indicated that they observed visible improvements in:



- Cleanliness and hygiene
- Availability of basic facilities (waiting areas)
- Spacious consulting rooms

Figure 1: Patient Responses on visible improvement in infrastructure



The beneficiaries of the new hospital building built by Deepak Foundation as per the staff interviewed were largely children. KGP is known for their childcare services and now with improved infrastructure, the footfall of children patients has increased at a multifold level.

Figure 2: Staff responses on major beneficiaries of the new hospital building

Accessibility of Healthcare Services

Accessibility refers to the ease with which patients can reach and use healthcare services, including physical distance, time, and convenience.

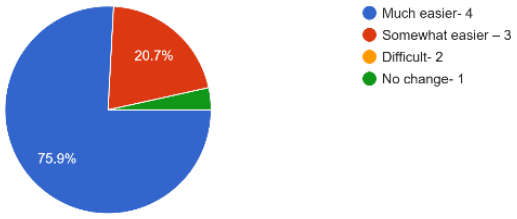


Figure 3: Responses on ease of access to healthcare services

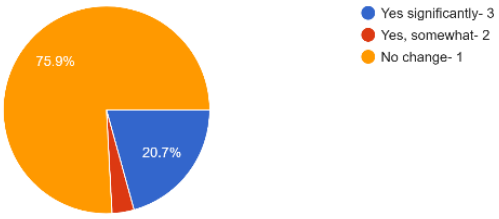


Figure 4: Responses on reduction in travel to other hospitals

The assessment indicates a strong improvement in accessibility:

- A majority of patients reported that healthcare access has become easier after the infrastructure development
- There is a reduced need to travel to distant hospitals
- Increased patient inflow suggests improved utilization and ease of access
- Better organization of spaces (reducing confusion and delays)

"Earlier, the blood bank and gynaecology ward were side by side and benches were limited. If blood bank patients came and sat, there would be no space for gynaecology patients. We had to ask the blood bank patients to get up and wait outside to let pregnant women sit. Now since both facilities are in different wings, it has more space."- Blood Bank staff

- Improved patient flow within the hospital
- Increased willingness to seek care locally

"Pehle jate the bade dawakhane (SSG Hospital), ab yahin ban gaya hai to yahan aate hai, paas padta hai." (Earlier we used to go to the SSG hospital, now this has been made, so we come here, it is closer). – Patient

The findings demonstrate a substantial improvement in healthcare accessibility following the infrastructure development. Patients and staff also reported a reduced need to travel to distant healthcare facilities, suggesting that the hospital is increasingly serving as a primary point of care for the surrounding communities.

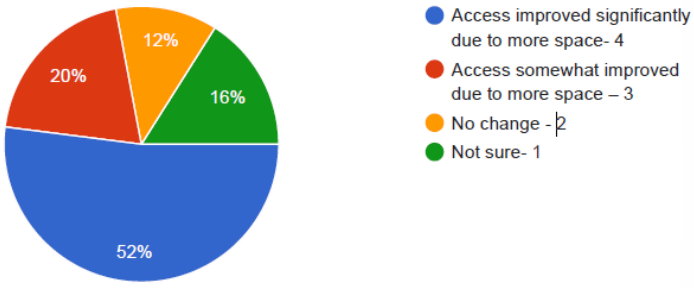


Figure 5: Responses of staff on Accessibility to Healthcare

Staff responses corroborate these findings, with a majority reporting increased patient footfall and improved access. More space means more patients can be accommodated. This indicates that the infrastructure intervention has effectively reduced geographical and logistical barriers to healthcare access.

Quality of Healthcare Infrastructure

Quality refers not only to clinical care but also to the overall patient experience, including comfort, cleanliness, safety, and efficiency.

With regard to quality of healthcare infrastructure, the patients reported increased comfort during visits, greater satisfaction with the facilities and improved perception of the hospital environment.

The staff also noted improved better working conditions and better ability to deliver services effectively owing to improved medical infrastructure.

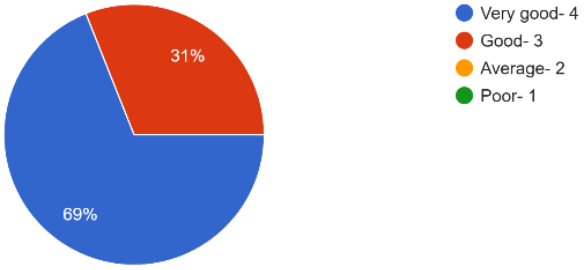


Figure 6: Overall rating of new Hospital Building and Facilities

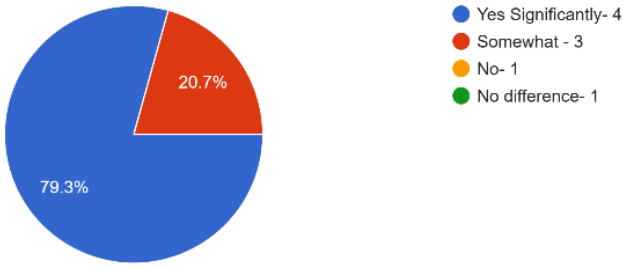


Figure 7: Perceived Improvement in Comfort due to enhanced Infrastructure

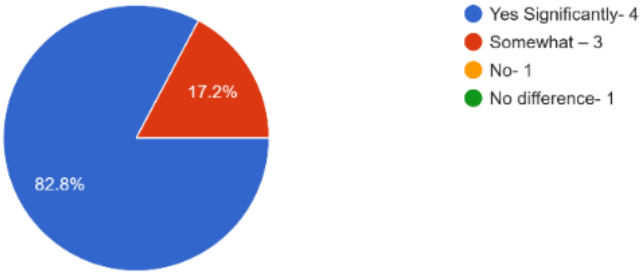


Figure 8: Change in Patient trust following Infrastructure Improvements

The upgraded infrastructure has led to a marked improvement in the quality of healthcare experience at KGP Hospital. A majority of patients rated the hospital facilities as good to very good and reported enhanced comfort during their visits. Additionally, increased levels of trust in the hospital were observed among beneficiaries owing to better facilities in terms of spacious areas in the children's wards, with good natural lighting.

From the provider perspective, hospital staff highlighted improvements in the service delivery environment, including better space management and working conditions.

"Pehle baithne ke rooms thode cramped up the, jagah kam thi and purana building tha to tubelight ki zarurat padti thi din bhar. Ab thoda spacious hai and natural light bhi kaafi aati hai."- (Earlier the rooms were cramped up, space was less and there was a need for tube light whole day. Now it is spacious and there is ample natural light).- Hospital Staff

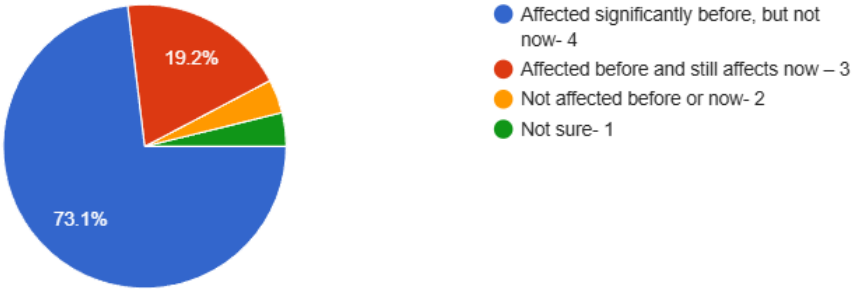


Figure 9: Perceived Impact of Flooding on Hospital Infrastructure Before and After Construction

Given KGP Hospital's proximity to the Vishwamitri River, flooding has historically posed a significant challenge to the hospital's operations and infrastructure. Staff responses indicate that the newly developed infrastructure has substantially improved the hospital's resilience to flood-related disruptions. Nearly three-fourths of respondents (73.1%) reported that flooding had significantly affected the hospital prior to the construction, but no longer poses a major concern. This highlights the effectiveness of the infrastructure design in mitigating a key environmental risk.

A smaller proportion (19.2%) noted that while the situation has improved, flooding continues to present occasional challenges. Only a negligible number of respondents reported no prior impact or were uncertain. These findings underscore the importance of climate-resilient infrastructure, particularly in geographically vulnerable areas.

The intervention demonstrates how strategic infrastructure investments can enhance not only healthcare delivery but also institutional resilience against environmental shocks. By reducing flood-related disruptions, the hospital is better positioned to provide uninterrupted services, especially during periods of climatic stress.

These findings suggest that the infrastructure intervention has positively influenced patient experience, service delivery quality and institutional resilience to climate shocks, which are critical determinants of healthcare utilization.

"Patients are more satisfied now compared to the old building."
— Paramedical Staff

"The new building has improved facilities and working conditions a lot."
— Medical Staff

"Facilities have improved compared to earlier"
"Hospital building is very good"
— Patients

Affordability of Healthcare Infrastructure

Affordability refers to the financial ease of accessing healthcare, including direct and indirect costs such as travel, consultation, and treatment expenses.

The infrastructure support has contributed to improved affordability in the following ways:

- Reduced need for travel to distant or private healthcare facilities
- Lower transportation costs for patients
- Increased reliance on local, more affordable services

Patients reported:

- Reduction in overall healthcare expenditure
- Greater ability to seek timely care without financial strain

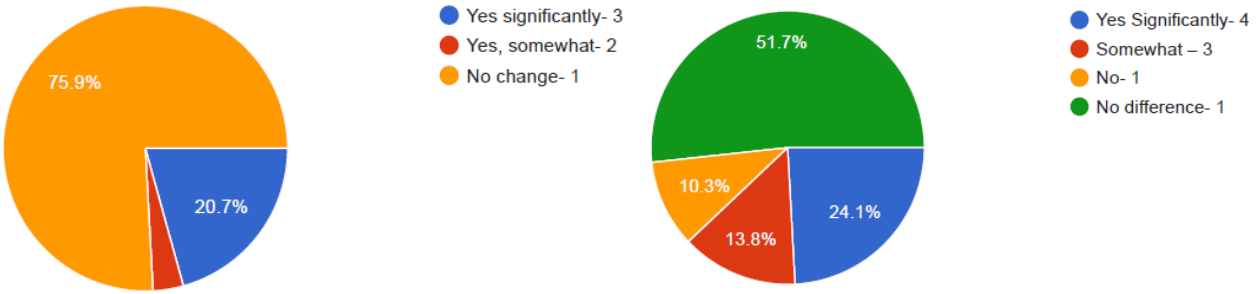
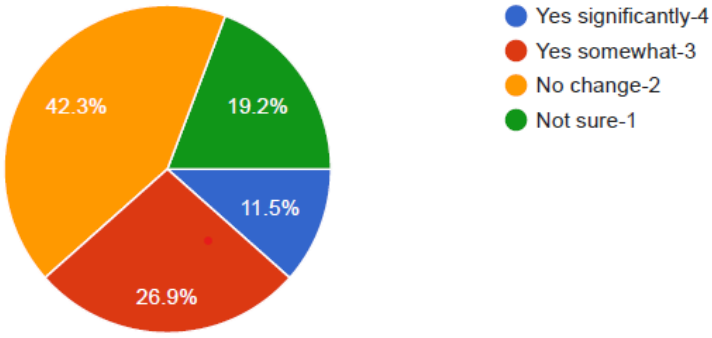


Figure 10: Patients perception on reduction in expenses to travel to distant hospitals and overall reduction in healthcare expenses

The infrastructure support has also contributed to improving the affordability of healthcare services for the local community. A majority of patients reported a reduction in the need to travel to distant hospitals, leading to lower transportation costs.

Additionally, patients indicated a reduction in overall healthcare expenditure, as the improved facilities enabled them to access services locally rather than relying on private or distant providers. Patients responded a significant reduction in healthcare expenses incurred as the new hospital premises were accessible and were quite closer to their homes which cut their transport charges to a great extent.



Staff perceptions further support this finding, highlighting a reduced financial burden on patients.

This demonstrates that the intervention has enhanced financial access to healthcare by lowering out-of-pocket expenses.

Figure 11: Staff perception on reduction of patients' need to travel for healthcare

Overall, the findings across availability, accessibility, quality, and affordability indicate that the medical infrastructure support has led to a comprehensive improvement in healthcare access at KGP Hospital, strengthening its role as a reliable and inclusive healthcare provider for the surrounding communities.

Perception of Respondents towards the New Hospital Infrastructure

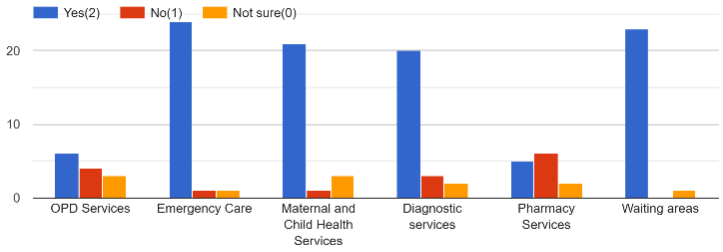


Figure 12: Perception of Hospital Staff on New Hospital Building

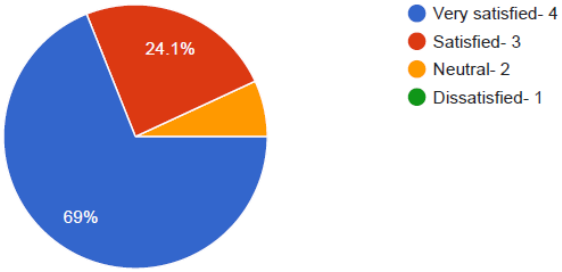


Figure 13: Satisfaction of Patients regarding New Hospital Building

The assessment findings indicate a high level of satisfaction with the hospital's upgraded infrastructure among both staff and patients. Staff responses reveal overwhelmingly positive perceptions regarding the quality of the new building's infrastructure across key parameters such as ventilation and lighting, water supply, electricity availability, waste management systems, patient accessibility, and adequacy of space. The vast majority of staff rated these components as "Good," with only a negligible proportion assigning average or poor ratings to select aspects. This reflects the functionality, reliability, and suitability of the infrastructure in supporting effective healthcare delivery.

Patient perceptions further reinforce these findings. Nearly seven out of ten respondents (69%) reported being "Very Satisfied" with the hospital facilities, while an additional 24.1% indicated they were "Satisfied." Only a small proportion expressed neutral views, and none reported dissatisfaction. Overall, more than 93% of patients expressed positive satisfaction with the hospital infrastructure. These findings demonstrate that the infrastructure support has significantly enhanced patient experience, comfort, and confidence in the hospital, while also creating an enabling environment for healthcare providers. Collectively, the results highlight the substantial contribution of the infrastructure intervention to improving both service delivery and beneficiary satisfaction.

Gaps and Recommendations from Respondents

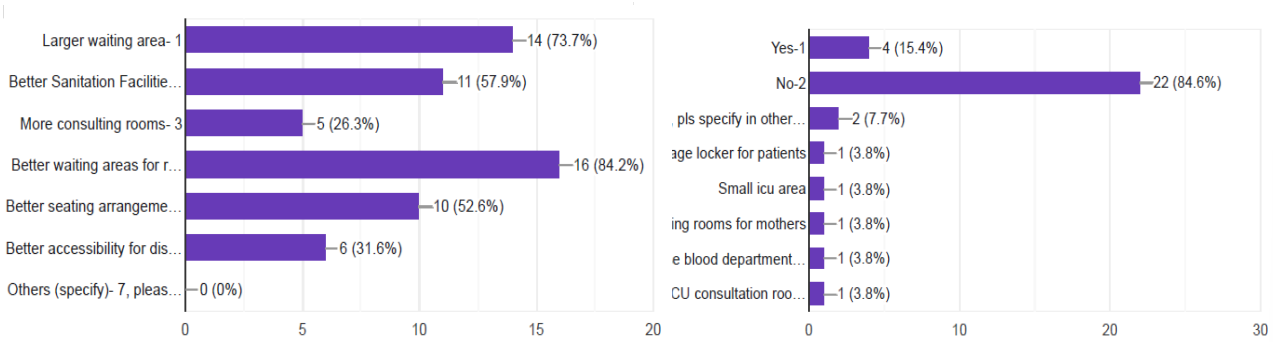


Figure 14:Patient and Staff suggestions for further improvement in Hospital Infrastructure

While the overall assessment reflects a high degree of satisfaction with the hospital's infrastructure, both patients and staff identified a few priority areas for further strengthening. Among patients, the most frequently suggested improvement was the provision of better

waiting facilities for attendants and relatives, cited by 84.2% of respondents. This was followed by the need for a larger waiting area (73.7%), improved sanitation facilities (57.9%), and better seating arrangements (52.6%). Additionally, some respondents recommended enhanced accessibility features for persons with disabilities and an increase in the number of consulting rooms to accommodate growing patient volumes.

Staff responses similarly indicated that, although the existing infrastructure adequately supports most services, certain specialized facilities would further enhance service delivery. Approximately 15.4% of staff reported that some services could not yet be fully provided despite the available infrastructure. Specific suggestions included the establishment of a small ICU, dedicated PICU consultation space, feeding rooms for mothers, luggage storage facilities for patients, and strengthening infrastructure for blood-related services. These recommendations reflect evolving service needs and increased utilization following the infrastructure upgrade.

Collectively, the findings suggest that the infrastructure intervention has laid a strong foundation for quality healthcare delivery. Future investments aimed at expanding patient convenience areas and introducing specialized service spaces would further improve patient experience, operational efficiency, and the hospital's ability to meet emerging healthcare demands.

"More seating arrangement required"
— Patients

"Separate rooms and basic facilities for staff are required."
— Paramedical Staff

"There is no proper sitting arrangement for staff."
— Support Staff

"Waiting area is better now but more facilities are needed for relatives."
— Paramedical Staff

"Doctors need better lounge and rest facilities near OT."
— Medical Staff

Conclusion

The assessment clearly demonstrates that the medical infrastructure support provided by Deepak Phenolics at KGP Hospital has generated substantial and meaningful improvements in healthcare delivery and community well-being. The intervention has significantly enhanced the hospital's physical capacity, improved accessibility to healthcare services, strengthened the quality of patient care, and reduced the financial burden on beneficiaries. Both patients and hospital staff expressed high levels of satisfaction with the upgraded facilities, reflecting the relevance and effectiveness of the investment.

The findings indicate that KGP Hospital has emerged as an increasingly trusted and accessible healthcare institution for surrounding communities. Improved infrastructure has not only increased patient footfall and service utilization but has also reduced dependence on distant healthcare facilities, thereby saving both time and money for local residents. The intervention has thus contributed meaningfully to improving healthcare equity and access in the region.

At the same time, the assessment highlights opportunities for further strengthening the hospital's capacity. Patient recommendations point toward the need for larger waiting areas, better seating arrangements, improved sanitation facilities, and enhanced amenities for attendants. Staff have also identified the need for specialized facilities such as a small ICU, dedicated paediatric consultation spaces, feeding rooms for mothers, and additional patient support amenities.

Recommendations

To ensure the long-term sustainability and impact of the infrastructure investment, the following measures are recommended:

- Establish a structured preventive maintenance system for the hospital building, utilities, and equipment.
- Allocate dedicated annual budgets for repairs, upkeep, and replacement of critical infrastructure components.
- Strengthen facility management systems, including regular audits of cleanliness, sanitation, water supply, and electrical systems.
- Build the capacity of hospital staff in infrastructure management, infection control, and efficient space utilization.
- Introduce periodic beneficiary feedback mechanisms to continuously assess patient satisfaction and identify emerging needs.

Deepak Foundation can further deepen its impact by supporting the next phase of healthcare strengthening at KGP Hospital through:

- Development of specialized care units, including ICU and paediatric facilities.
- Expansion of patient waiting and attendant support areas.
- Enhancement of disability-friendly infrastructure and universal accessibility features.
- Support for digital health systems, patient management, and telemedicine services.

- Capacity building for hospital staff and administrators to maximize infrastructure utilization.

The flood-resilient design of the hospital reflects an important commitment to sustainable and future-ready infrastructure. In an era of increasing climate variability, healthcare facilities must be designed to withstand environmental risks while ensuring continuity of essential services.

Going forward, there is an opportunity to further strengthen sustainability by incorporating green building features such as rainwater harvesting, solar energy systems, energy-efficient lighting, natural ventilation, and improved waste management systems. Such measures would not only reduce the hospital's environmental footprint but also lower operational costs and enhance long-term resilience.

By integrating climate resilience with green infrastructure, Deepak Phenolics can position KGP Hospital as a model for sustainable healthcare infrastructure in vulnerable geographies. The KGP Hospital infrastructure initiative stands as a strong example of how strategic corporate social responsibility can transform public healthcare systems. By combining quality infrastructure with a long-term sustainability approach, Deepak Phenolics has created a lasting asset for the community—one that will continue to improve health outcomes, strengthen trust in public healthcare, and serve as a beacon of accessible and inclusive healthcare for years to come.

1. Impact At a Glance

93%

Patients satisfied or very satisfied with the infrastructure and services

81%

Staff reported improved availability of healthcare services

Reduced

Out-of-Pocket expenditure and travel burden

2. Satisfaction Survey of Patients Post Assessment

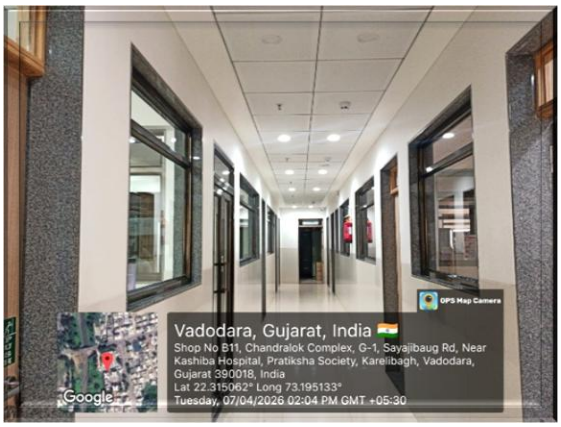


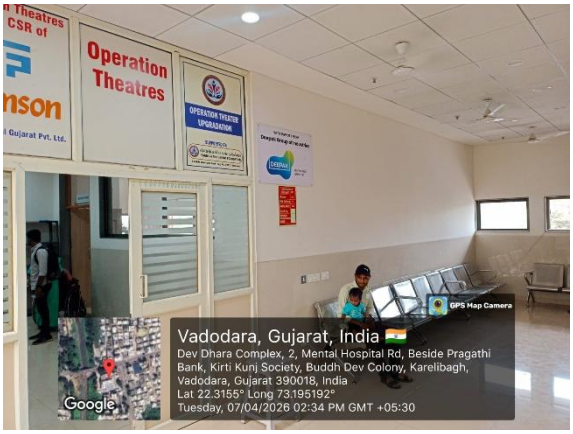
What Patients Appreciate the Most

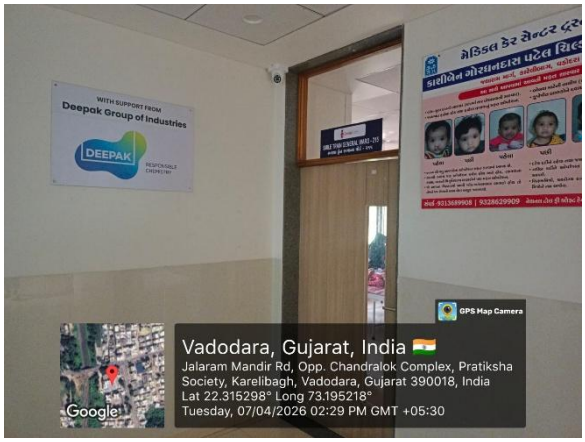
- Clean & well-maintained facilities
- Better Consultation Rooms & Facilities
- Improved care & staff behaviour
- Reduced travel & healthcare costs

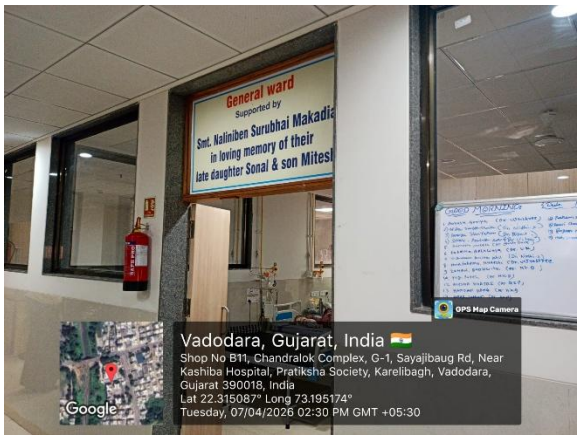
3. Infrastructure

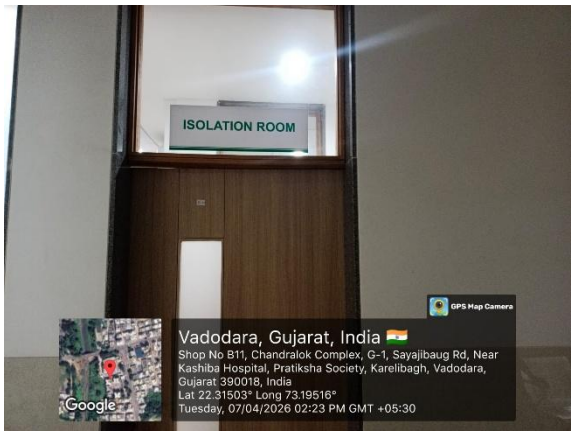






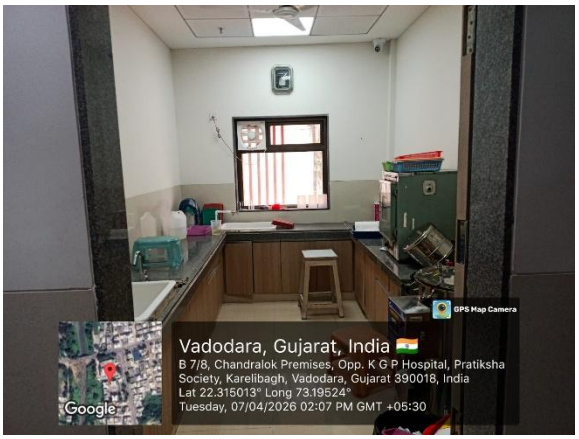






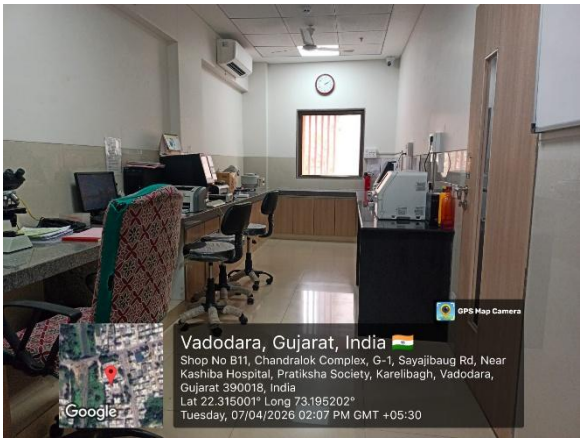














- Energy efficient lighting
- Spacious Rooms
- Waste Management Svstems

4. Glimpses from the Field



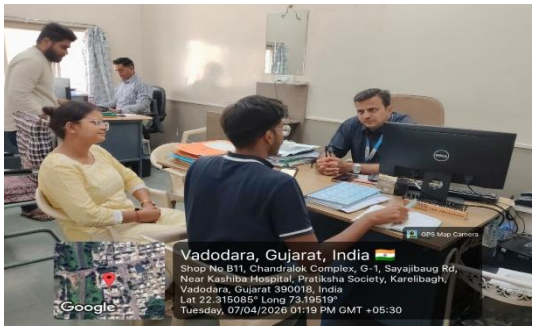
Image 1: Pilot Testing and Preliminary Visit

Interactions with Medical and Paramedical Staff









Interactions with Patients and their Families







Prepared by:
Faculty of Social Work,
The Maharaja Sayajirao University of Baroda, Vadodara

Prof. (Dr.) Bhavna Mehta	Principal Investigator and Professor
Dr. Nazish Campwala	Member of Research Cell
Dr. Pooja Kantariya	Assistant Professor
Team Members	
Pruthvi Gadhavi	Mihir Kayastha
Jinal Suthar	Shruti Gurjar
Vishal Tadvi	Nandan Manavadariya
Aman Makwana	Daksh Solanki