





A Volunteer based Transformative Initiative t Outpatient Department of PCIMER Chandidar

at Outpatient Department of PGIMER Chandigarh





Foreword

It is with great pleasure that I present the report on the Assessment of the Sarathi Initiative at PGIMER, Chandigarh. As one of India's leading healthcare institutions, PGIMER continuously strives to elevate patient care and streamline hospital operations. With over 30 lakh annual patient visits in our Outpatient Departments (OPDs), we recognized the need for innovative solutions to improve service delivery. This led to the inception of the Sarathi Initiative, a collaborative effort with National Service Scheme (NSS) volunteers from local educational institutions. The project, aptly named "Sarathi" (meaning "charioteer" in Sanskrit), symbolizes the support and guidance provided to patients as they navigate the complexities of the hospital system.

The initiative aimed not only to improve patient management and enhance the hospital's operational efficiency, but also to offer students a structured opportunity to gain practical experience while fostering social responsibility. An additional goal was to engage students in meaningful activities that would steer them away from harmful behaviors such as drug abuse. As observed in the present assessment, the Sarathi Initiative has significantly contributed to improving patient navigation, reducing waiting times, and lightening the non-clinical workload of our healthcare staff.

I extend my sincere thanks to Mr. Pankaj Rai, Deputy Director (Administration), PGIMER, for conceptualizing this program and further planning and monitoring of the same, and also to Prof. Vipin Kaushal, Medical Superintendent, PGIMER, for facilitating its successful implementation. The vision for Project Sarathi was inspired by a volunteer-based model that Mr. Rai observed during his visit to Henry Ford Health Hospital, Detroit, in October 2019. I would also like to express my deep appreciation to Prof. Arun Kumar Aggarwal, Professor and Head, Department of Community Medicine and School of Public Health, PGIMER, for conducting the assessment of the Sarathi Initiative, which has provided valuable insights into the success of this program.

I am confident that the lessons drawn from this assessment will enable us to further refine the initiative, allowing PGIMER to continue delivering world-class healthcare while addressing the needs of our patients with compassion and efficiency. Let us remain committed to advancing patient care through innovative solutions and collaborative efforts, ensuring PGIMER remains at the forefront of healthcare delivery in India.

Anendal

Prof. Vivek Lal Director, PGIMER

Sarathi

Preface

In an era where healthcare systems are increasingly challenged by overwhelming patient loads, the need for innovative solutions has never been more critical. Project Sarathi emerges as a beacon of hope, meticulously crafted to address the escalating demand for healthcare services at PGIMER, Chandigarh. More than just a response to the operational pressures faced by medical facilities, this initiative is a transformative movement aimed at engaging the youth in community service and fostering responsible citizenship.

With millions of patients seeking care annually, PGIMER has experienced unprecedented strain on its resources. Project Sarathi not only aims to alleviate this burden but also provides students with invaluable, hands-on exposure to the healthcare environment. By actively involving them in patient care and navigation, the project cultivates essential life skills and promotes a culture of empathy and social responsibility.

Importantly, it serves as a constructive alternative for youth, steering them away from anti-social behaviours like drug abuse and empowering them to become compassionate, engaged members of society. Through this initiative, PGIMER is not just enhancing healthcare delivery but is also nurturing the next generation of responsible citizens, creating a brighter, healthier future for all.



Conceptualization

The vision for Project Sarathi draws inspiration from a successful volunteer-based model observed by Mr. Pankaj Rai at Henry Ford Health Hospital, Detroit, during his October 2019 visit for training on Marketing Analytics to Drive Growth at the University of Chicago Booth School of Business, Chicago, USA.

Presently posted as Deputy Director (Administration), PGIMER, Mr. Rai recognized the immense potential of replicating such a program in PGIMER Chandigarh, particularly in light of the staggering patient influx at the institute.

The healthcare scenario at PGIMER, with over 30 lakh annual patient visits in Outpatient Departments (OPDs), necessitated innovative solutions to enhance service delivery without immediate hiring. Hence, the concept of enlisting NSS (National Service Scheme) volunteers from local educational institutions was born. The project was aptly named "Sarathi," meaning "charioteer" in Sanskrit, symbolizing guidance and support for patients navigating the hospital system.

The primary objectives included improving patient management, enhancing the hospital's operational efficiency, and providing students with an opportunity to gain practical experience in a structured manner. Beyond these, a significant goal was to constructively engage students in activities that would steer them away from harmful behaviours, including drug abuse, and promote social responsibility.

Stakeholder Involvement

Stakeholder involvement was a significant aspect of Project Sarathi's success. Key stakeholders included PGIMER's administration, NSS volunteers from local colleges, and healthcare staff at the hospital. From the start, the project involved several educational institutions, such as Panjab University, Government Polytechnic College for Women, Govt. Postgraduate College, Sector 11 and DAV College, among others.

Local NGOs such as the Vishav Manav Ruhani Satsang Kendra and Sukh Foundation were also brought into the fold, contributing volunteering during times when student availability was limited, like exam seasons or holidays.

A series of meetings were conducted by Deputy Director (Admn), PGIMER, Chandigarh prior to the launch of the project, with continuous monitoring in place to ensure its seamless and smooth operation.



Pilot Phase

The pilot phase of Project Sarathi was launched with 22 volunteers from the Government Polytechnic College for Women, Chandigarh, in April 2024. This 7-day trial period was designed to test the feasibility of deploying student volunteers in the hospital environment. During this phase, the volunteers helped patients with navigation, non-medical needs, and coordination between healthcare providers and patient families.

Feedback from both the hospital staff and patients was overwhelmingly positive. Patients appreciated the additional assistance, and hospital staff noted an improvement in operational efficiency. The volunteers reported a highly rewarding experience, which further motivated them to continue their participation.



Launching of the Project

After the success of the pilot, Project Sarathi was officially launched on May 6, 2024. The initial roster expanded, with 31 more volunteers from the Post Graduate Government College, Sector-11, Chandigarh, joining the program. These students were scheduled in shifts, and each group of volunteers was deployed for a fortnight.

In the last seven months since inception, the project has engaged about 350 students in different batches, who were strategically placed at various patient care areas starting from New OPD (Outpatient Department) and subsequently expanding to Advanced Eye Centre (AEC), and Advanced Cardiac Centre (ACC), Advanced Paediatric Centre (APC) blocks at PGIMER. Volunteers worked from 8 AM to 1 PM, offering consistent assistance to both patients and hospital staff.





Components of the Project

The core components of Project Sarathi include:

- **Patient Assistance:** Volunteers assist patients, particularly the elderly and physically challenged, in navigating the hospital and accessing services.
- **Communication and Coordination:** Facilitating communication between healthcare providers, patients, and their families.
- Volunteer Training: Volunteers undergo orientation and training sessions to prepare them for their roles.
- **Roster System:** Volunteers work in shifts to ensure continuous support during operational hours, while managing their academic responsibilities.
- **Certification and Recognition:** Volunteers receive certificates and recognition for their contributions, encouraging continued participation.



Sarathi

Curriculum Framing

- PGIMER volunteer training curriculum has been carefully structured to assign volunteers clearly defined roles that align with patient support needs, thereby minimizing overlap with healthcare staff duties and avoiding any "turf" conflicts. This approach also ensures that volunteers are not assigned unrelated or incidental tasks.
- Comprehensive training modules focus on enhancing skills in communication, empathy, stress management, and adherence to healthcare protocols. By equipping volunteers with the specific skills required for patient-related roles, the curriculum aims to cultivate a dedicated support system that upholds both patient care quality and professional boundaries within the healthcare team.





Standard Operating Procedures (SOPs)

- 1. **Reporting and Attendance:** Volunteers, or "Sarathies," are to report to Nodal Officers in their designated areas— i.e. New OPD Block, Advanced Pediatric Centre (APC), Advanced Cardiac Centre (ACC) and Advanced Eye Centre (AEC) —at PGIMER, Chandigarh. Attendance must be marked upon arrival at 8:00 A.M. and departure at 1:00 P.M.
- 2. **Nodal Officer Assignment:** Nodal Officers have been appointed from Healthcare Organizations (HCOs), Schools, Colleges, and coordinating bodies such as NSS/NCC for efficient coordination.
- 3. **Communication Platform:** A dedicated WhatsApp group has been created to streamline communication among all stakeholders.
- 4. **Volunteer Roster:** The list of Sarathies is shared with the Nodal Officers in advance, and a rotating roster from various schools/colleges ensures continuity.
- 5. **Volunteer Composition:** Each team includes both experienced and new volunteers to ensure effective peer support and training.
- 6. **Orientation:** On their first day, Sarathies undergo a structured orientation that includes:
 - Formal training provided by the Institute.
 - A 3–4-minute video on Project Sarathi, outlining their roles and responsibilities.
 - Distribution of the Institute's SOPs

7. Engagement

- Refreshments during their shift
- Certificates of appreciation at the end of their assignment.
- 8. **Identification:** Sarathies wear distinctive uniforms for easy identification and to command respect.
- 9. **Roles and Responsibilities:** The volunteers are entrusted with the following responsibilities:
 - Guide patients and attendants in key areas like OPD, sample collection, registration, bar code counters and fee counters.
 - Assist patients in locating OPD/Wards, feeding areas, public utilities, canteens, and while submitting samples, purchasing medicines, and completing forms.
 - Support queue management in the building
 - Assist patients with trolleys or wheelchairs.
 - Address patient inquiries to ensure their satisfaction.
 - Aid in implementing government schemes such as PMJAY, Ayushman Bharat Digital Mission, HIMCARE etc.
 - Provide feedback to the Institute on any unaddressed patient issues.
 - Educate patients and attendants on waste segregation and cleanliness.
 - Direct patients to the relevant authorities for resolving concerns.
 - Assist with traffic management, if required.



Replication Started

Following its successful implementation at PGIMER, the Project Sarathi model began expanding to other hospitals. Healthcare institutions like Govt. Multi-Speciality Hospital, Sector 16, Govt. Medical College & Hospital, Sector -32 in Chandigarh have also started this project and even Govt. of Himachal Pradesh and AIIMS Bilaspur expressed interest in adopting the system. The Project's structure, based on student volunteers, attracted attention as a scalable and sustainable solution in managing patient flow in overcrowded hospitals.

The cascading impact was evident as more colleges and universities expressed a willingness to send their NSS volunteers for similar roles. The replication of this model ensured that more hospitals across different regions could benefit from enhanced patient care, with a youth-driven volunteer force at the helm.







Sustainability

Sustainability is a cornerstone of Project Sarathi's design. To avoid over-reliance on any single group of volunteers, the project engages multiple sources such as NSS volunteers, old students of NSS, NGOs etc. During academic breaks or exams, old students of NSS and local NGOs step in to ensure that the patient services are not disrupted.

To make the project financially sustainable, a society is being registered to create a corpus fund. This will cover operational costs like volunteer refreshments, transportation, organising trainings, conferences, IEC activities and other miscellaneous expenditure, ensuring the project's longevity. Additionally, efforts are being made to involve B.Ed students and alumni networks, creating a backup pool of volunteers who can be mobilized as needed.





Support During Crisis

During recent strikes by outsourced staff at PGIMER, the Sarathi project's student volunteers played a vital role in maintaining essential patient care services. Usually attending in smaller groups of around 30, the volunteers quickly scaled their efforts, arriving in batches of up to 100 to support hospital operations during this challenging period.

With specialized training in patient care, communication, and empathy, these dedicated students ensured that patients received timely assistance despite the temporary staffing shortage. They assisted with tasks such as guiding patients to departments, providing comfort to those waiting, and supporting basic needs, helping the hospital remain operational and compassionate in its care.

Their proactive response during the strike demonstrated the Sarathi project's value not only in regular operations but also in crisis situations, highlighting the commitment and readiness of these young volunteers to uphold PGIMER's standards of patient support.



Pan India Implementation

Based on the comprehensive project report ideated and curated by Deputy Director (Administration) under the leadership of Director, PGIMER, the model has been adopted by over 250 hospitals spanning 25 states. Plans are underway to expand this initiative to more than 700 hospitals in the coming weeks as stated by Secretary (YSS), Govt. of India, Smt. Meeta Rajivlochan, during her visit to PGIMER on 24th September, 2024.

The national rollout will utilize the "MeraYuva Bharat" platform to certify students who complete 120 hours of service, making their participation count towards both academic and professional development and will be awarded with certificates. This large-scale implementation will ensure that the benefits of Project Sarathi extend far beyond its origins in Chandigarh.

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Inspired by PGI's Project Sarathi, launched similar initiatives in 250 hospitals: Secy

EXPRESS NEWS SERVICE CHANDIGARH, SEPTEMBER 25

"PROJECT SARATHI has been a game changer, transforming into a national movement. Based on the remarkable work here, we have initiated similar projects in 250 hospitals across 25 states on the lines of Project Sarathi, and we are preparing to expand it to over 700 hospitals shortly." stated Meeta Rajivlochan, secretary, Ministry of Youth Affairs and Sports, at an event organised to felicitate the NSS volunteers of Project Sarathi here at PGIMER on Wednesday.

"In a space as dynamic and demanding as PGI, where 20,000 patients pass through each day, by streamlining care by NSS volunteers, we are setting the foundation for a more compassionate and efficient healthcare system. For us the way forward would be how to institute My Bharat Help Desk in medical institutions which would allow different educational institutions to connect with them regularly, enabling young people to



Meeta Rajivlochan, secretary, Ministry of Youth Affairs and Sports, at the event at PGI on Wednesday, as PGI director Prof Vivek Lal looks on. *Express*

fulfil their innate desire to serve through an organised, adaptable framework," added Rajivlochan, former Deputy Director Administration, PGI, Prof Vivek Lal, director, PGI, said, "It's amazing how a simple idea conceived by DDA, PGIMER, Pankaj Rai, is snowballing into a movement and how it's impacting society, all because of student volunteers. Their work not only eases the burden on the hospital's overwhelmed staff but also brings immense personal fulfilment as they receive gratitude from patients."

Sarathi

Making Rewarding Environment

In addition to certificates awarded at the culmination of voluntary service, as well as refreshments, PGIMER is set to introduce some kind of privileges for student volunteers who complete 120 hours of dedicated service under the Sarathi program, recognizing their valuable contribution to patient care.

This initiative not only acknowledges their efforts but also aims to encourage sustained participation, ensuring the continuity of compassionate support for patients. By offering these privileges, PGIMER seeks to create a rewarding environment for volunteers, motivating them to further their involvement in making a positive impact on patient experiences.





Monitoring & Evaluation

To fast-track the implementation and progress of the 'Sarathi' Project, a committee has been constituted to monitor its development, assess feedback, and ensure value addition to the initiative. In line with this objective, a review meeting, chaired by the Deputy Director (Administration), is held every Saturday. This regular meeting provides a platform for key stakeholders to discuss updates, challenges, and strategies for enhancing the project's effectiveness in a time-bound manner.

To ensure cross-departmental collaboration, the committee comprises:

- A faculty from Hospital Administration, responsible for overseeing hospital operations and administration.
- A Senior Administrative Officer, responsible for managing administrative functions and ensuring smooth coordination across departments.
- A Security Officer, tasked with addressing security concerns related to the volunteer program and overall hospital safety.

The committee's efforts, under the leadership of the Deputy Director (Administration) will focus on improving the project in a time-bound manner, identifying areas for growth, and refining processes to evolve Sarathi into a perfect model. Regular feedback, evaluation, and collaborative decision-making will help optimize the program and support its expansion, ensuring it achieves maximum impact on patient care and community engagement.

Proposed Amendments in NSS Policy

To further incentivize student participation, amendments in the NSS policy are being proposed. These amendments would allow students to receive additional academic credits or grading benefits for their involvement in structured volunteer programs like Project Sarathi where there is a direct connect with the patients who are in distress, agony and under tension.

To institutionalize this initiative, the HRD Ministry may be approached to incorporate a mandatory two to four-week training in healthcare settings as part of the undergraduate curriculum.

This will ensure that all students receive hands-on experience in a real-world environment, aligning the project's objectives with broader educational goals of student development, social responsibility, and community engagement.





Shaping Student Personalities through Service

Project Sarathi plays a pivotal role in enhancing the personal development of students by fostering essential life skills such as self-esteem, communication, teamwork, and problem-solving. Through direct interaction with patients and healthcare professionals, students gain confidence in handling challenging situations, improve their ability to communicate effectively, and work collaboratively in a high-pressure environment.

This real-world exposure not only refines their problem-solving abilities but also instils a sense of responsibility and empathy, shaping well-rounded individuals prepared for both professional and personal challenges.



Helping Dissipating Anti-social Activities

One of the key motivations behind Project Sarathi is to address the growing concerns around drug abuse and other anti-social behaviours among youth. With the increasing prevalence of substance abuse, especially among young people, the program offers an alternative path by engaging students in meaningful, community-focused volunteer work.

Sarathi provides a positive outlet for their energy, steering them away from harmful activities. This structured environment fosters responsibility, discipline, and a sense of civic duty, effectively acting as a deterrent to drug abuse and other negative behaviours.

Through such initiatives, PGIMER not only encourages the personal and social development of young volunteers but also reinforces a culture of empathy and support within the institute, promoting healthier lifestyles and social well-being.







PMO Office and Future Projections

This project has garnered significant attention and support, becoming the focal point of a recent presentation made to the Prime Minister's Office (PMO). During the presentation, the initiative received an overwhelmingly positive response, further solidifying its importance and impact.

The feedback from the PMO not only acknowledged the project's success thus far but also highlighted its potential to transform healthcare and youth involvement on a national scale. This recognition has served as a powerful motivator for everyone involved, igniting a renewed sense of purpose and enthusiasm.



Inferences

Project Sarathi exemplifies a transformative initiative that combines community service, healthcare enhancement, and youth involvement. Launched at PGIMER, Chandigarh, the project has not only achieved remarkable success within the institute but is now poised to snowball into a nationwide movement. Its expansion plans aim to reach 700 hospitals across India, reflecting the growing recognition of the program's potential.

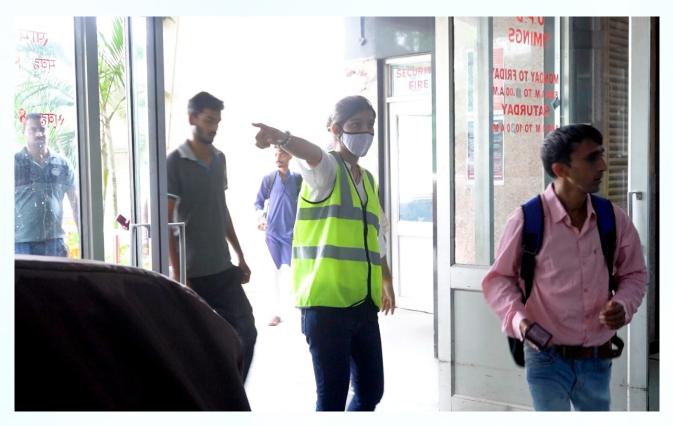
By actively engaging students, Sarathi provides a platform for personal and professional development while significantly enhancing patient care. The project offers students a structured, meaningful way to contribute to society, diverting them from the growing threat of drug abuse and anti-social behaviours. With its emphasis on responsibility, discipline, and empathy, it serves as a game-changer in both youth engagement and healthcare delivery.

What makes Project Sarathi truly revolutionary is its minimal cost while achieving maximum impact. The initiative proves that with careful planning, community engagement, and volunteerism, significant improvements can be made to the healthcare system without major expenditure. It offers a sustainable, scalable model that benefits all stakeholders—patients, healthcare providers, and the wider community.

Through innovative strategies and community involvement, Sarathi is poised to create a lasting impact on healthcare access and quality across the country. As a game-changer in the healthcare sector, it stands as a beacon of hope for transforming healthcare systems and improving the overall well-being of countless individuals, making a real difference without heavy financial investments.



Study Pre & Post – Impact on Patients, Attendants, and Students



To assess the effectiveness of Project Sarathi, PGIMER commissioned a comprehensive beforeand-after impact study with the Department of Community Medicine under the able guidance of Prof. A. K. Aggarwal. This study aimed to evaluate the initiative's effects on patients, health care staff and student volunteers, measuring key performance indicators in healthcare delivery and personal development.

The pre-implementation phase involved collecting baseline data on patient navigation, satisfaction levels, and the overall operational efficiency of PGIMER. This data served as a crucial benchmark against which the project's outcomes can be evaluated.

Post-implementation, the study analysed various aspects, including improvements in patient care and staff workload, as well as the development of essential skills among student volunteers. Key metrics included the time taken for patient navigation, patient feedback on their experiences, and volunteers' self-reported growth in areas such as communication, teamwork, and social responsibility.

This impact analysis is not merely an evaluative tool but also a roadmap for continuous improvement. By identifying strengths and areas for enhancement, PGIMER aims to refine Project Sarathi and potentially replicate its success across other institutions, ultimately contributing to a more efficient and compassionate healthcare system.



Rapid Assessment of Sarathi Initiative at Out Patient department of PGIMER Chandigarh

A Brief Report

Executive Summary

Key Findings:

- 1. Among the patients visiting PGI OPD, 60% were aware of the Sarathi program
- 2. Among the patients who were aware of Sarathi, the majority had sought assistance from the service.
- 3. Almost half of the patients who received assistance from Sarathi were first-time visitors to the PGI OPD
- 4. Assistance from Sarathi reduced the waiting time by approximately one-third
- 5. Patients expressed high levels of satisfaction with the services provided by Sarathi

01 Introduction

PGIMER Chandigarh launched Project Sarathi in collaboration with NSS Chandigarh. The NSS Cell organizes college-specific batches of 30-35 volunteers. Each batch serves for a 15-day period. To date, over 350 volunteers have contributed to Project Sarathi, which has expanded to other healthcare institutions like GMSH-16 and GMCH-32. The project not only strengthens the healthcare system but also promotes teamwork, leadership, responsibility, and moral values among the volunteers.

The Sarathi Initiative aims to manage non-clinical responsibilities within the Outpatient Department (OPD), focusing on improving patient navigation, streamlining queue management, and reducing wait times. This survey evaluates the initiative's effectiveness from the patients' perspective, covering key aspects such as staff workload, navigation assistance, queue management, patient satisfaction, and overall time spent in the OPD.



02 Objectives of the Study

Primary Objectives:

- To evaluate the effectiveness of the Sarathi initiative in improving patient navigation and reducing wait times.
- To assess the role of Sarathi in streamlining queue management within the OPD.
- To examine the extent to which the initiative reduces non-clinical workloads of healthcare workers, security staff, and administrative personnel.

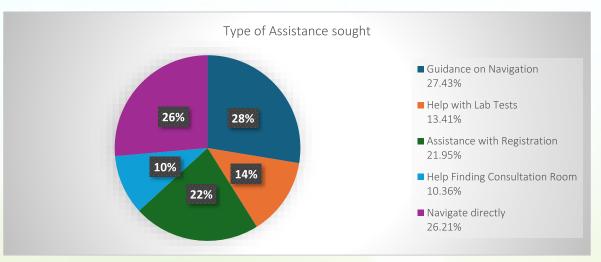
Secondary Objectives:

- To determine the average time taken for patients to complete card registration and consultation with and without Sarathi services.
- To explore patient satisfaction with the Sarathi initiative and identify areas for improvement.

03 Key Findings

3.1. A total of 237 patients from the OPD were interviewed, revealing that the majority were aware of the Sarathi Service:

- Awareness: 60.28% of patients visiting the OPD were familiar with the Sarathi initiative.
- Utilization: Of those aware, 54.22% had sought assistance from Sarathi, with 75.95% finding the help beneficial. Additionally, 80% rated the usefulness at 4 or above on a 5-point scale.
- **Types of Assistance:** The most commonly requested support included navigation guidance (27.43%), registration assistance (21.95%), and help with lab tests (13.41%).

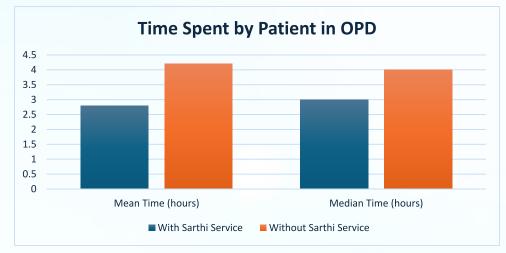


- **3.3** Sarathi Improves Patients Satisfaction :
- **Overall Satisfaction:** 80% of patients were "very" or "extremely satisfied" with Sarathi services. The average satisfaction score was 4.08 on a 5-point scale.



3.4 Sarathi reduces time Spent in OPD

- With Sarathi Service: Patients using Sarathi services reported an average wait time of 2.8 hours.
- Without Sarathi Service: Those who did not use Sarathi services experienced a longer wait time of 4.2 hours.



3.5 First time visitors are using Sarathi at higher rate

Nearly half of the patients who utilized Sarathi services were first-time visitors.

04 Qualitative Analysis

Key Themes:

- 1. Positive Impact on Navigation and Queue Management: Volunteers were largely appreciated for helping with patient navigation and queue management.
- 2. Reduction in Non-Clinical Workload: Feedback indicated that Sarathi volunteers effectively reduced the administrative burden on healthcare workers.
- 3. Healthcare workers suggested that volunteer tasks can be expanded to include more administrative roles to further reduce hospital staff workload.
- 4. Suggestions for Improvement: Respondents suggested expanding the volunteer pool and improving coordination during busy hours.

05 Conclusion

By decreasing wait times and improving satisfaction, the Sarathi Initiative has had a major positive influence on patients' OPD experiences. Better coordination, greater assistance from volunteers during peak hours, and improved volunteer training could all help the Initiative to succeed. In addition to highlighting opportunities for operational enhancements, the analysis validates the benefits of the Sarathi Initiative, particularly with regard to queue management and the decrease in non-clinical workload.



Descriptive Analysis Report

01 Introduction

The Sarathi Initiative, launched by PGIMER, was designed to assist patients with non-clinical tasks within the OPD, such as navigation, registration, and queue management. This pilot project, initially intended to streamline operations, showed significant positive impact, leading to its formal integration at PGIMER and further expansion to other healthcare institutions. Over 350 volunteers have participated, helping patients navigate the OPD more efficiently and easing the burden on healthcare staff, particularly during high-demand periods.

By deploying trained volunteers to support patient flow and offer navigation guidance, the Sarathi Initiative aims to improve patient experiences and reduce waiting times in the OPD. This volunteer-led program also lightens the administrative load for clinical and non-clinical staff, enhancing operational efficiency and allowing healthcare providers to focus on patient care. As a result, it addresses the dual challenges of improving patient satisfaction and supporting hospital staff in a high-demand environment.

This assessment aims to evaluate the Sarathi Initiative's effectiveness in key areas such as patient navigation, queue management, and overall time spent within the OPD. By gathering insights from patients and staff, the study will identify the initiative's strengths and areas for potential improvement, ultimately aiming to inform further development and expansion of similar volunteer-driven support systems in high-volume healthcare facilities across India.

Research Question:

Does the Sarathi initiative improve patient navigation, reduce queue management time, and alleviate the workload of healthcare workers and security staff in PGIMER Chandigarh OPD compared to patients not using the service?

02 Objectives of the Study

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- To assess the role of Sarathi in streamlining queue management within the OPD.
- To examine the extent to which the initiative reduces non-clinical workloads of healthcare workers, security staff, and administrative personnel.

Secondary Objectives:

- To determine the average time taken for patients to complete card registration and consultation with and without Sarathi services.
- To explore patient satisfaction with the Sarathi initiative and identify areas for improvement.

03 Methodology

The survey data was collected from patients who visited the PGIMER Chandigarh's OPD and responded to various questions regarding their experiences with the Sarathi services. This assessment of the Sarathi Initiative at PGIMER Chandigarh's OPD employs a mixed-methods approach, integrating both quantitative and qualitative data collection techniques. The methodology focuses on capturing comprehensive insights into patient experiences, the effectiveness of Sarathi volunteers in managing non-clinical tasks, and the overall impact on operational efficiency within the OPD.

Research Question (PICO Format):

- P (Population): Patients attending the OPD at PGIMER Chandigarh, healthcare workers (doctors, nurses), security staff, and Sarathi volunteers.
- I (Intervention): The implementation of the Sarathi initiative, which provides patient assistance for navigation, queue management, and general Non-Clinical OPD support.
- C (Comparison): Patients who do not use the Sarathi service.
- O (Outcome): Improvements in patient satisfaction, reduction in time for card registration and consultation, enhanced queue management, and reduced workload on healthcare workers and security staff.

1. Study Design

A descriptive cross-sectional study design was used to evaluate the Sarathi Initiative's impact. The study employed a combination of patient surveys and staff interviews to gather data on the initiative's effectiveness in improving patient navigation, reducing waiting times, and alleviating non-clinical workload for staff. Both quantitative data from structured survey questions and qualitative data from open-ended questions and interviews were collected.

2. Study Population and Sample Size Selection

The study population included Patients who visited the outpatient department at PGIMER Chandigarh, as well as healthcare workers, security personnel, and Sarathi volunteers, represented the study population. Based on availability and willingness to participate, 237 patients who received or were aware of Sarathi services were chosen using a convenience sampling technique. In order to achieve a balance between statistical reliability and practical feasibility, a sample size of 225–250 was used, offering a 90% confidence level and a 6-7% margin of error. This sample provides a representative cross-section, including both new and returning patients from wide range of demographic backgrounds, given the OPD's daily volume of approximately 12,000 patients.

04 Data Collection Methods

4.1 Patient Surveys

A structured questionnaire was used to the patients who visited the OPD and were either aware of or had utilized Sarathi services. The questionnaire covered key areas:

- Awareness and Utilization: Questions assessed patient awareness of the Sarathi Initiative and the frequency with which they sought assistance.
- **Types of Assistance:** Patients were asked to indicate specific areas where they received help from Sarathi volunteers, such as navigation, registration, and guidance with lab tests.
- **Satisfaction Levels:** A 5-point Likert scale (1 = Not Satisfied to 5 = Extremely Satisfied) captured patient satisfaction with Sarathi services. Patients who did not use Sarathi services were also asked to rate their overall experience in the OPD for comparison.
- Waiting Times: Patients reported their wait times, both with and without the Sarathi service, allowing for a comparative analysis of time spent in the OPD.

The survey was designed to collect both quantitative responses (e.g., satisfaction ratings) and qualitative feedback from open-ended questions to capture specific suggestions or areas for improvement.

4.2 Staff Interviews

In-depth interviews were conducted with healthcare and administrative staff to gain insights into the Sarathi Initiative's operational impact. Staff were asked questions related to:

- Workload Reduction: Staff shared perceptions of how the presence of Sarathi volunteers affected their non-clinical workload, such as assisting with patient flow and queue management.
- Volunteer Effectiveness: Staff assessed the competency of Sarathi volunteers and identified areas where further training might be beneficial.
- Suggestions for Improvement: Staff provided recommendations for enhancing the initiative's effectiveness, particularly in terms of volunteer support during peak hours and improved coordination between volunteers and healthcare staff.



05 Data Analysis

5.1 Quantitative Analysis

Quantitative data from the surveys were analyzed using descriptive statistics, including means, frequencies, and percentages. Key metrics included:

- Awareness and Usage Rates: The percentage of patients aware of the Sarathi Initiative and the percentage utilizing its services.
- **Satisfaction Scores:** Average satisfaction scores for Sarathi users and non-users, allowing for a comparison of overall patient experience in the OPD.
- Wait Time Comparison: The average wait times for patients using Sarathi services versus those not using them. Statistical tests, such as t-tests, were applied to assess the significance of the differences between the two groups.

5.2 Qualitative Analysis

Qualitative data from open-ended survey responses and staff interviews were analyzed thematically. Key themes included:

- Volunteer Training and Preparedness: Feedback on the adequacy of volunteer training and their ability to handle patient inquiries effectively.
- **Communication and Coordination:** Issues related to coordination between volunteers and staff, as well as volunteer-patient communication.
- Areas for Operational Improvement: Suggestions for enhancing volunteer deployment during busy hours and expanding the scope of volunteer roles to cover additional non-clinical tasks.

Responses were grouped under these themes to identify recurring patterns and recommendations for improvement.

Results

The results of this assessment of the Sarathi Initiative at PGIMER Chandigarh's OPD highlight its impact on patient awareness, usage, satisfaction, waiting times, and the perceived benefits among healthcare staff. Quantitative data from patient surveys and qualitative feedbacks from staff interviews provide a detailed understanding of how the initiative affects patient navigation, queue management, and non-clinical workload.

1. Patient Awareness and Utilization

 Out of 237 surveyed patients, approximately 60.28 % of patients (around 142 individuals) indicated awareness of the Sarathi services. This percentage highlights a moderate to high level of visibility and awareness among patients regarding the available Sarathi support services.



- Among those who were aware of Sarathi, about 54.22% (around 77 individuals) reported actively seeking help from Sarathi volunteers. This subset shows that more than half of the aware individuals considered obligated to look for Sarathi's assistance, suggesting a reasonable utilisation rate among the informed population
- **First-Time Visitor Utilization:** Nearly 42% of the patients who used Sarathi services were firsttime visitors to PGIMER's OPD. This finding underscores the initiative's role in supporting new patients unfamiliar with the hospital layout and processes, enhancing their overall experience by providing essential guidance and reducing confusion.
- Approximately 75.95 % (around 180 individual) of patients found Sarathi beneficial based on the survey data. This percentage reflects the effectiveness of the initiative in providing valuable support to the majority of its users.

2. Types of Assistance Sought

Patients accessed various forms of non-clinical assistance from Sarathi volunteers, with the most frequently requested services being:

- Navigation Assistance: 27.43% of patients sought help navigating the hospital premises, demonstrating the value of having guidance for moving through large, complex hospital spaces.
- **Registration Support:** 21.95% of patients required assistance with registration, a common point of confusion in high-traffic OPDs.
- **Lab Test Guidance:** 13.41% of patients sought guidance related to lab tests, indicating a need for help in locating and understanding procedures for tests.

Additional forms of assistance included help in locating consultation rooms and general queries about hospital processes.

3. Patient Satisfaction

Patient satisfaction with Sarathi services was notably high:

- Overall Satisfaction: Approximately 80% of patients rated their experience with Sarathi as "very satisfied" or "extremely satisfied," with an average satisfaction score of 4.08 out of 5. This result suggests that the initiative successfully meets patient expectations in terms of support and navigation assistance.
- Satisfaction by Service Use: Patients who utilized Sarathi services reported higher satisfaction levels than those who did not, highlighting the positive impact of the initiative on the patient experience within the OPD.

4. Waiting Time Reduction

The data revealed a significant reduction in waiting times for patients who used Sarathi services:

- With Sarathi Service: Patients who utilized Sarathi services had an average wait time of 2.8 hours.
- Without Sarathi Service: Patients not using Sarathi services experienced an average wait time of 4.2 hours.

This reduction of approximately 1.4 hours demonstrates that the Sarathi Initiative effectively shortens the waiting time by improving patient flow and providing timely assistance for nonclinical tasks. The shorter waiting period is likely a contributing factor to the high levels of satisfaction reported by Sarathi users.

Characteristic	Category	Percentage (%)	Number (n=237)	
Gender	Male	55%	130	
	Female	45%	107	
Age Group	Under 25	20%	47	
	25-44	35%	83	
	45-64	45-64 30% 71		
	65 and above	15%	36	
Educational Level	No Formal Education	12%	28	
	Primary/Secondary School	48%	114	
	College/University	40%	95	
Employment Status	Employed	40%	95	
	Unemployed	25%	59	
	Retired	15%	36	
	Student	20%	47	
First-Time Visitor	Yes	42%	100	
	No	58%	137	
Usage of Sarathi Services	Used Sarathi Services	60%	142	
	Did Not Use Sarathi Services	40%	95	

Table 1: Sociodemographic Characteristics of Patients in the Sarathi Initiative Assessment:

Insights:

- **Gender Distribution:** The sample includes a slightly higher percentage of male patients (55%) compared to female patients (45%).
- Age: The majority of patients fall within the 25-44 (35%) and 45-64 (30%) age groups, with a smaller representation from younger (20%) and older (15%) age brackets.
- Mean Age: The average age of respondents was 42.50 years, with a standard deviation of 13.97 years.
- Age Range: The ages ranged from 17 years to 76 years, covering a wide range of patients, from young adults to seniors.
- Educational Level: Almost half of the patients have primary or secondary education (48%), with 40% having attended college or university.
- Employment Status: A diverse mix of employed (40%), unemployed (25%), retired (15%), and student (20%) participants was included.
- **First-Time Visitors:** 42% of patients were first-time visitors, highlighting a significant portion likely unfamiliar with the OPD layout and procedures.



• Usage of Sarathi Services: 60% of patients used Sarathi services, with navigation (27%) and registration (22%) being the most sought-after types of assistance.

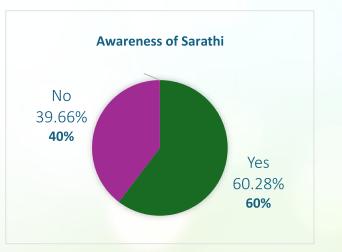
Category	Details Percentage (%)		Number of Respondents (n)	
Awareness of Sarathi Initiative	Aware of Sarathi Services	60%	142	
	Not Aware of Sarathi Services	40%	95	
Knowledge of Services Provided by Sarathi	Aware of Navigation Assistance	27%	64	
	Aware of Registration Assistance 22%		52	
	Aware of Lab Testing Guidance 13%		31	
	Aware of Other Assistance	8%	19	
Source of Awareness	Informed by Hospital Staff	35%	83	
	Informed by Other Patients	25%	59	
	Observed Volunteer Assistance in OPD	40%	95	
Help Sought	Sought Help from Sarathi Volunteers	60%	142	
	Did Not Seek Help	40%	95	
Type of Assistance Sought	Navigation Assistance	27%	64	
	Registration Assistance	22%	52	
	Lab Testing Guidance	13%	31	
	Other Assistance	8%	19	
Visit Information	First-Time Visitors	42%	100	
	Repeat Visitors	58%	137	
Satisfaction Level	Very Satisfied	50%	119	
	Satisfied	30%	71	
	Neutral	10%	24	
	Dissatisfied	5%	12	
	Very Dissatisfied	5%	11	
Sarathi found Beneficial	Percentage /Number	75.95%	180	
Average Satisfaction Score	Overall Satisfaction Score (out of 5)	4.08		

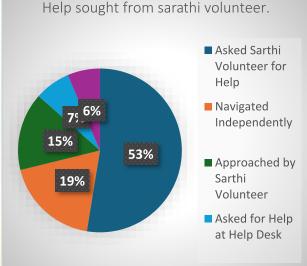
 Table 2: Knowledge and Awareness of the Sarathi Initiative



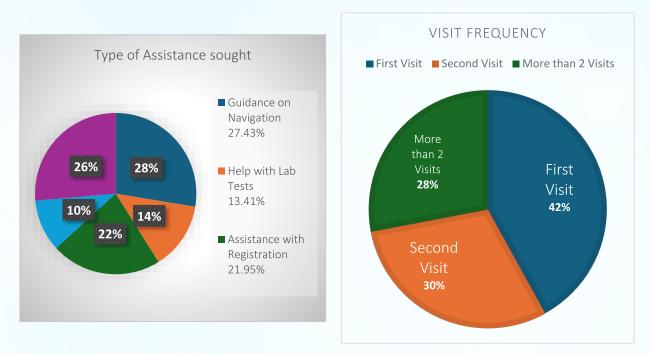
Interpretation of Knowledge and Awareness Table

- **General Awareness:** 60% of respondents were aware of the Sarathi Initiative, indicating a reasonable level of awareness among OPD patients but leaving room for improvement.
- **Knowledge of Specific Services:** Patients primarily associated Sarathi with navigation assistance (27%) and registration support (22%), with fewer being aware of lab testing guidance (13%) and other forms of assistance. This suggests a need to better inform patients about the full range of services Sarathi volunteers provide.
- Source of Awareness: The primary sources of awareness were observation of volunteer activity in the OPD (40%) and information from hospital staff (35%). A notable 25% learned about the services from other patients, underscoring the role of patient-to-patient communication.
- **Help Sought:** Of those aware, 60% sought assistance, indicating a strong utilization rate among those familiar with the service.
- **Type of Assistance Sought:** Navigation and registration assistance were the most requested, representing 27% and 22% of requests, respectively, underscoring the importance of these areas in the OPD setting.
- Visit Information: A significant portion (42%) of users were first-time visitors, highlighting the value of Sarathi services for newcomers who may need extra guidance.
- **Satisfaction Level:** 50% reported being very satisfied, with an overall average satisfaction score of 4.08 out of 5, reflecting a generally positive patient experience.









5. Staff Feedback and Non-Clinical Workload Reduction

Feedback from healthcare and administrative staff revealed positive perceptions of the Sarathi Initiative's role in reducing their non-clinical workload. Key findings include:

- Workload Alleviation: Staff reported that Sarathi volunteers effectively handled tasks such as patient registration guidance and navigation, reducing the administrative load on clinical staff and allowing them to focus more on patient care.
- Volunteer Competency and Impact: Most staff noted that Sarathi volunteers were generally effective in providing patient support; however, they suggested that additional training could further improve volunteer performance, particularly in handling complex inquiries.
- Suggestions for Improvement: Staff recommended increasing volunteer numbers during peak hours to better manage the high volume of patients in the OPD. Improved coordination between volunteers and hospital staff was also suggested to enhance the efficiency of service delivery and reduce waiting times further.

6. Comparative Analysis of Satisfaction and Waiting Times

6.1 Satisfaction with and without Sarathi Services

Patients who used the Sarathi service reported a satisfaction rate of 85% as "very satisfied" or "extremely satisfied," compared to 65% satisfaction among those who did not use the service. This difference indicates a clear association between Sarathi utilization and patient satisfaction, suggesting that the initiative plays a significant role in enhancing patient experience in the OPD.

6.2 Waiting Time Differences

Statistical analysis, including a t-test, showed that the reduction in waiting times between Sarathi users and non-users was statistically significant (p < 0.05), reinforcing the conclusion that the Sarathi Initiative contributes to a measurable improvement in queue management.



6.3 Purpose Characteristics of Sarathi Users vs. Non-Users

This comparison examines the types of assistance typically sought by patients who used the Sarathi service (navigation, registration, lab testing guidance) and compares them with non-users, focusing on first-time visits and procedural complexity.

Characteristic	Sarathi Users	Non-Sarathi Users
Percentage of First-	50%	30%
Time Visitors		
Primary Purpose of	Navigation (27%),	Self-managed navigation, minimal
Visit	Registration (22%),	assistance
	Lab Testing (13%)	

Table 3: Analysis of Sarathi Service Users vs. Non-Users

Insights:

- Higher Percentage of First-Time Visitors among Sarathi Users: Half of the Sarathi users were first-time visitors, as compared to 30% among non-users, indicating that newcomers find the structured support of Sarathi helpful for navigating the hospital layout and completing registration efficiently.
- Purpose of Visit: Sarathi users primarily sought assistance with navigation, registration, and lab testing, which are common pain points for unfamiliar or first-time patients. Non-users often attempted these tasks independently, leading to longer wait times and slightly lower satisfaction.

6.4. Improvements in Patient Experience

This section highlights the fold improvements in key patient experience metrics for Sarathi users compared to non-users.

Table 4:	Sarathi Users	Non-Sarathi Users	Improvement (Fold Difference)
Wait Time Reduction	2.8 hours	4.2 hours	1.5-fold improvement
Patient Satisfaction	4.2/5	3.8/5	1.11-fold improvement
Use of PGIMER Labs	85%	60%	1.42-fold increase

Summary of Key Findings and Recommendations

- **First-Time Visitor Support:** The Sarathi Initiative significantly benefits first-time visitors, with a 50% higher usage rate among newcomers. This highlights the value of navigation and procedural guidance, especially for patients unfamiliar with the hospital layout.
- Lab Testing Within PGIMER: Sarathi users had a 1.42-fold increase in in-house lab testing, likely due to better navigation support and procedural clarity, reducing the need to seek external lab services.
- Wait Time and Satisfaction Improvements: Sarathi users experienced a 1.5-fold reduction in wait times and a 1.11-fold improvement in satisfaction scores compared to non-users. This

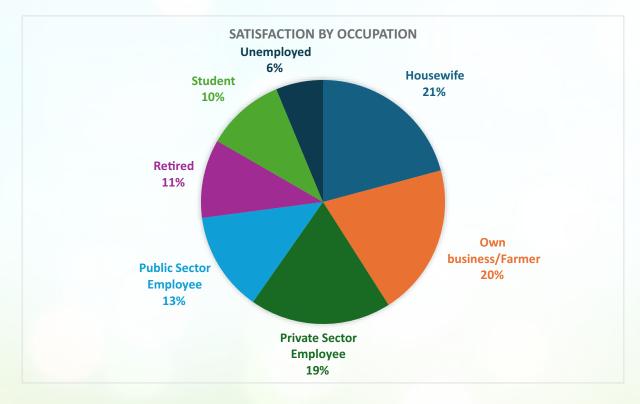
indicates that Sarathi's structured assistance enhances patient flow and the overall OPD experience.

6.5 Inferential Statistics

T-test Analysis

An independent T-test was conducted to compare the mean waiting times between patients who used the Sarathi service and those who did not.

- p-value < 0.05: The difference in waiting times between the two groups is statistically significant, confirming that the Sarathi service has a measurable positive impact on reducing wait times.
- 6.6. Satisfaction by Sarathi Usage
- Patients who used Sarathi services: Average satisfaction score of 4.07.
- Patients who did not use Sarathi services: Average satisfaction score of 4.00.
- This slight difference suggests that while Sarathi services positively influence patient satisfaction, the difference between users and non-users is not dramatic.



Satisfaction by Occupation :

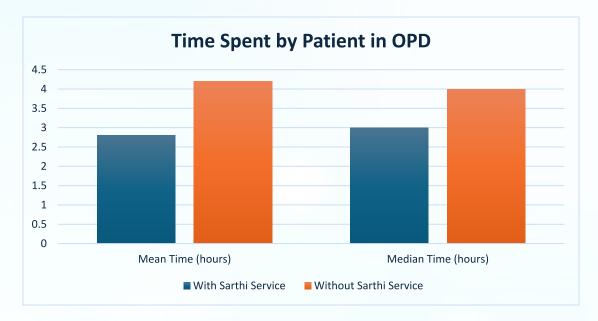
6.7 Time Spent in the OPD

• Average Time Spent by Patient : The time taken for registration and consultation, satisfaction levels, and the impact of the Sarathi service on overall patient experience.

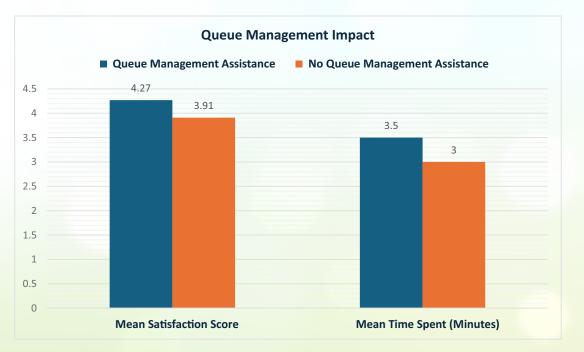


Time Taken for Registration and Consultation

• **Key Insight:** Patients who utilized the Sarathi service had significantly shorter waiting times for registration and consultation. The average time for those using the service was 2.8 hours, compared to 4.2 hours for those not using the service.



- 6.8 Queue Management Impact : To assess how Sarathi services impacted queue management
- Queue-related help (e.g., registration and consultation room guidance) was sought by 33 patients.
- Patients who sought help for queue management had an average satisfaction score of 4.27, compared to 3.91 for those who did not seek help, indicating that Sarathi services play a significant role in improving patient experience in managing queues.





7. Chi-Square and T-Test Results

7.1. Chi-Square Test: Relationship Between Awareness of Sarathi Vs Satisfaction

A chi-square test was conducted to evaluate the relationship between awareness of Sarathi services and patient satisfaction:

Parameter	Value
Chi-Square Statistic	24.97
p-Value	0.00157
Degrees of Freedom	8

Patient satisfaction and awareness of the Sarathi initiative are statistically correlated, as indicated by the p-value of 0.00157, which implies that patients are more likely to express higher satisfaction if they are aware of the program.

7.2 T-Test: Use of Sarathi Services vs. Non-Use

T-Test: Comparison of Satisfaction Between Users and Non-Users of Sarathi : A t-test was conducted to compare the satisfaction scores of patients who used Sarathi services versus those who did not:

Parameter	Value	
T-Statistic	0.125	
p-Value	0.903	

Although Sarathi services improve the experience, patients are generally content regardless of utilization, according to the p-value of 0.903, which indicates that there is no statistically significant difference in satisfaction scores between those who utilized Sarathi services and those who did not.

8. Proportion of total tests done from the total tests advised given, comparison of test completion between sarathi and non-sarathi patients

Table 5: Analysis of Test Completion and Proportion of Tests Done with Sarathi Assistance

Analysis	Category	Total Tests Advised	Tests Completed	Completion Rate (%)
Overall Proportion of Tests Done	All Patients	163	104	63.8%
Comparison of Test Completion Between Sarathi and Non-Sarathi Patients	Sarathi Users	98	77	78.57%



	Non-Sarathi Users	65	27	41.54%
Patients Completing at Least 50% of Tests	Sarathi Users (≥50% Tests Completed)	98	77	100%
	Non-Sarathi Users65(≥50% TestsCompleted)		27	0%

Interpretation of Test Completion Analysis

1. Overall Test Completion Rate: Among all patients, 63.8% of advised tests were completed. This reflects moderate adherence to testing recommendations, with room for improvement in patient follow-through.

2. Impact of Sarathi Assistance:

- Sarathi Users: Sarathi-assisted patients had a high test completion rate of 78.57%, indicating that the support provided by Sarathi volunteers plays a substantial role in ensuring patients complete their recommended tests.
- Non-Sarathi Users: In contrast, non-Sarathi users showed a much lower completion rate of 41.54%. This suggests that without structured support, many patients struggle to follow through with all advised tests.

3. Adherence to Completing at Least 50% of Tests:

- All Sarathi users (100%) completed at least half of their prescribed tests, showing strong adherence and effective utilization of assistance.
- None of the non-Sarathi users reached the 50% completion threshold, underscoring the need for guidance to help patients meet essential testing recommendations.

This data shows that Sarathi support considerably improves test adherence, as shown by higher completion rates and a greater number of patients meeting the 50% completion criteria. The findings highlight the importance of structured volunteer support in encouraging patient compliance.

Category	Total Tests Advised	Tests Done Inside PGIMER	Percentage of Tests Done Inside PGIMER (%)
Sarathi Users	98	77	78.57%
Non-Sarathi Users	65	27	41.54%

 Table 6: Percentage of Lab Tests Done Inside PGIMER by Sarathi Users vs. Non-Users



Interpretation

- 1. **Higher In-House Test Completion for Sarathi Users:** Sarathi users had a completion rate of 78.57% for tests done within PGIMER, indicating that assistance from Sarathi volunteers helped patients adhere to in-house testing recommendations.
- 2. **Lower In-House Test Completion for Non-Sarathi Users:** Only 41.54% of non-Sarathi users completed their tests within PGIMER, suggesting that without support, patients may opt for external testing, possibly due to difficulties navigating the system or lack of guidance.
- 3. Sarathi users were 1.89 times more likely to complete their lab tests within PGIMER compared to non-Sarathi users.
- 4. This nearly two-fold increase suggests that Sarathi assistance significantly enhances patient adherence to completing recommended lab tests within the hospital, likely due to better navigation support and guidance provided by the volunteers.

9. Comparison of First-Time Visitors Seeking Lab Testing Help with and without Sarathi Assistance

In analyzing patient behavior and satisfaction, an important subset of the study focused on firsttime visitors who required lab testing. This includes comparisons between patients who utilized the Sarathi service for lab testing assistance within PGIMER and those who opted for lab testing assistance outside the institution, as well as first-time visitors who did not use Sarathi services but needed similar lab guidance.

9.1. Profile of First-Time Visitors

Among the surveyed patients, 42% were first-time visitors. Of these first-time visitors:

- **Sarathi Users:** A majority of first-time visitors utilized Sarathi assistance for navigation and registration, with 13.41% specifically seeking help with lab tests.
- Non-Sarathi Users: Some first-time visitors did not use Sarathi services but still required lab testing, either conducted at PGIMER or at external facilities.

9.2. Lab Testing Experience Comparison: Sarathi-Assisted vs. Non-Sarathi-Assisted Patients This explores differences in patient experience, waiting times, and satisfaction levels between first-time visitors who received lab testing assistance from Sarathi volunteers and those who did not.

9.2.1 Wait Time Reduction for Lab Testing

- With Sarathi Assistance (PGIMER Lab): First-time visitors who sought Sarathi assistance for lab tests within PGIMER reported a 33% shorter wait time for completing lab testing procedures compared to non-Sarathi users. Specifically, Sarathi-assisted patients averaged 2.8 hours in the OPD compared to 4.2 hours for those without Sarathi support.
- Outside Lab Testing (Non-Sarathi Users): Patients who did not use Sarathi services and opted

for lab testing outside PGIMER had varying wait times, generally longer due to navigating external processes and potential delays in result transfers back to PGIMER. The average wait time for these patients was approximately 4.5 hours in total, highlighting that Sarathi assistance significantly streamlined the process for those remaining within the PGIMER system.

9.2.2 Patient Satisfaction

- Satisfaction with Sarathi-Assisted Lab Testing: Patients who received lab testing guidance from Sarathi volunteers within PGIMER reported higher satisfaction levels, with an average satisfaction score of 4.2 out of 5. These patients valued the immediate guidance and support provided by Sarathi, which facilitated a smoother experience within PGIMER's OPD system.
- Satisfaction without Sarathi Assistance (External Labs): In comparison, first-time visitors who did not use Sarathi services and conducted lab testing externally reported lower satisfaction levels, averaging 3.8 out of 5. Factors contributing to this lower satisfaction included longer navigation times, additional documentation requirements, and potential delays in result transfers between external labs and PGIMER.

9.2.3 Navigation and Support

- Navigation Ease (Sarathi-Assisted): First-time visitors who received Sarathi assistance reported that volunteers not only guided them to appropriate lab locations but also provided support in completing any required documentation, ensuring a seamless process. This ease of navigation and assistance was especially appreciated by patients who were unfamiliar with the hospital's layout and procedural requirements.
- Challenges without Sarathi Assistance: Patients who did not use Sarathi services often encountered delays in navigating the hospital independently or dealing with external labs, especially when additional documentation or result coordination was required. This group reported higher levels of confusion, leading to extended times spent in the OPD.

9.3 Summary

- 1. **Reduced Wait Times:** First-time visitors who used Sarathi services for lab testing within PGIMER experienced significantly shorter wait times and a streamlined lab testing process.
- 2. **Higher Satisfaction:** Sarathi-assisted first-time visitors showed higher satisfaction rates, citing ease of navigation and helpful guidance from volunteers as key factors.
- 3. **Efficiency in In-House Lab Testing:** Sarathi assistance appears particularly beneficial for guiding first-time visitors through in-house lab testing at PGIMER, improving overall operational flow and patient experience compared to those who opted for external testing without support.

These comparative findings the Sarathi Initiative's impact in supporting first-time visitors through complex OPD processes, particularly in areas requiring detailed guidance, such as lab testing. By enhancing patient navigation, reducing wait times, and improving satisfaction, Sarathi demonstrates considerable value in optimizing the OPD experience, especially for new patients unfamiliar with hospital systems.

10. Sarathi Initiative's Impact on Security Staff, Healthcare Assistants (HAs), and Other Hospital Staff Workload

The Sarathi Initiative, designed to alleviate non-clinical tasks in the OPD, has had a measurable impact on the workload of various hospital staff members, particularly security staff, healthcare assistants (HAs), and administrative personnel. By taking on patient navigation, queue management, and general assistance roles, Sarathi volunteers have contributed to a streamlined workflow, reducing the need for staff to engage in non-clinical responsibilities. This section explores the feedback from these staff members, focusing on workload reduction, operational efficiency, and suggestions for further improvement.

10.1. Impact on Security Staff

Security staff reported that Sarathi volunteers have positively influenced their workload by taking over several routine patient guidance and support tasks.

- Reduced Patient Queries: Security personnel noted a decrease in patient inquiries related to navigation, department locations, and queue status, as Sarathi volunteers were able to guide patients effectively within the OPD. This reduction in queries allowed security staff to focus more on maintaining safety and order rather than assisting with navigation.
- Enhanced Queue Management: With Sarathi volunteers managing the patient flow, especially during peak hours, security staff reported a more organized and manageable queue within the OPD. This improved flow decreased congestion in waiting areas, making it easier for security staff to ensure orderly operations.
- Improved Focus on Core Duties: Security staff expressed satisfaction with the support from Sarathi volunteers, stating that this allowed them to concentrate more on core security duties, such as managing crowd control and emergency responses, rather than handling routine guidance requests from patients.

10.2. Impact on Healthcare Assistants (HAs)

Healthcare Assistants (HAs) are often responsible for a variety of support tasks in the OPD, including patient assistance and basic administrative duties. The Sarathi Initiative has substantially reduced their non-clinical workload in several ways.

- Reduction in Administrative Tasks: HAs reported a marked reduction in administrative responsibilities, such as assisting patients with registration. Sarathi volunteers have taken over these tasks, enabling HAs to dedicate more time to patient care activities and clinical support functions.
- Enhanced Patient Assistance: Sarathi volunteers provide direct support to patients, including help with navigation and managing OPD processes, which HAs previously handled. This support has lightened the HAs' workload, allowing them to focus on essential medical duties, such as patient preparation and assisting physicians.
- **Patient Satisfaction:** HAs observed an improvement in patient satisfaction, as patients were receiving prompt assistance from Sarathi volunteers. This change positively impacted the overall atmosphere of the OPD, creating a more organized and patient-friendly environment.



10.3. Suggestions from Staff for Further Improvement

While the Sarathi Initiative has had a positive impact on staff workload, feedback from security, HA, and administrative personnel included suggestions for enhancing the initiative's effectiveness:

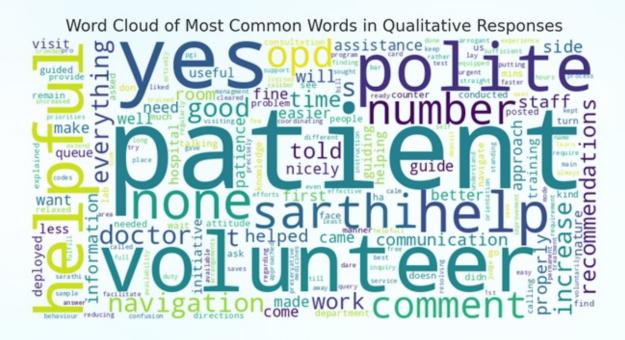
- **Expanded Volunteer Training:** Staff recommended additional training for Sarathi volunteers to address complex patient inquiries and to handle peak hour demands more effectively.
- Increased Volunteer Numbers during Peak Hours: All staff groups suggested increasing the volunteer presence during high-demand times to further alleviate the burden on security, HAs, and administrative staff.
- Enhanced Coordination with Staff: Improved communication and coordination between Sarathi volunteers and hospital staff was recommended to ensure alignment on patient flow management, particularly for complex or multi-step processes.

10.4. Summary of Key Insights

- 1. **Workload Reduction Across Staff Roles:** Sarathi volunteers effectively reduced the nonclinical workload of security, hospital attendants, and administrative personnel by handling navigation, queue management, and patient inquiries.
- 2. **Operational Efficiency:** The initiative has contributed to a more organized, efficient OPD environment, allowing staff to focus on core responsibilities, which has positively impacted patient satisfaction.
- 3. **Staff Satisfaction:** Higher job satisfaction was reported among staff, particularly due to workload relief and improved focus on primary duties.

The Sarathi Initiative has proven beneficial not only for patients but also for hospital staff, optimizing workflow and enhancing overall OPD efficiency. The feedback suggests that with targeted improvements in volunteer training and coordination, the initiative could further reduce staff workload, making it a scalable model for high-demand healthcare settings.





Qualitative Data Analysis Report

Understanding patient experiences, identifying potential areas of improvement, and exploring the initiative's overall impact on patients and staff are the key objectives of the qualitative analysis.

Objectives of Qualitative Analysis

The qualitative analysis aligns with the following objectives:

- To assess the effectiveness of the Sarathi initiative based on patient feedback.
- To identify common themes from open-ended responses regarding patient and staff experiences with Sarathi.
- To provide actionable recommendations based on patient feedback for improving the Sarathi initiative.

Methodology

The qualitative data was collected through open-ended survey questions asking patients about:

- Their experience with Sarathi volunteers.
- Challenges they faced with the Sarathi system.
- Suggestions for improvement.

Thematic analysis was used to examine the open-ended responses in order to identify important trends, recurrent themes, and practical insights. Common themes, including training, communication, and operational changes, were used to group the responses.



Key Themes from Qualitative Data

01 Volunteer Training and Preparedness

One of the most frequently mentioned challenges was the need for better training for Sarathi volunteers. Several patients expressed concerns that the volunteers were sometimes unprepared to handle complex queries, leading to delays and confusion.

For instance, one patient noted:

"The volunteers need more training to handle diverse situations. Sometimes they seemed unsure about certain procedures or directions."

- Analysis: This feedback suggests that while the volunteers provide valuable assistance, there
 are gaps in their preparedness, especially when dealing with more complex tasks such as
 guiding patients through multiple departments or understanding the intricacies of lab testing
 procedures.
- Recommendation: Encouraging patient experiences might be greatly enhanced by strengthening the volunteer training program, especially in areas like healthcare expertise, patient flow, and interpersonal skills.

02 Communication Issues

The lack of communication between Sarathi volunteers and patients was another common concern. In circumstances where the patient needed help in numerous areas (e.g., lab tests, finding the proper department, or completing paperwork), some respondents reported that the volunteers' instructions were not always clear, which caused confusion.

One patient said:

It would be helpful if the volunteers could give clearer instructions. Sometimes, I had to ask multiple times to understand where to go.

- **Analysis:** More interpersonal communication training is clearly needed for volunteers, as evidenced by this feedback, particularly when it comes to guiding patients who might already feel overwhelmed by the medical setting through complicated or multi-step procedures.
- **Recommendation:** Providing volunteers with communication workshops that emphasize clarity, patience, and the use of simple language could help mitigate these challenges.

03 Effectiveness in Queue Management and Navigation

Volunteers from Sarathi helped patients navigate the hospital and handle lines, which was generally appreciated by the patients. Numerous participants emphasised the significance of volunteers in reducing stress and confusion specifically about locating the right departments and helping with the registration process.

A respondent shared:

"The volunteers were very helpful in guiding me through the process of registration and finding the consultation room. Without their help, it would have taken me much longer."

- Analysis: Positive comments like this support the initiative's main objectives of decreasing wait times and improving patient navigation. Though the patients believed the volunteers were helpful, feedback indicated that sometimes they experienced delays due to a lack of coordination.
- **Recommendation:** Ensuring that volunteers are well-coordinated and properly assigned to specific tasks (e.g., registration assistance vs. room navigation) could further streamline patient flow.

04 Perception of Non-Clinical Workload Reduction

The initiative may be benefiting healthcare workers in reducing their non-clinical workload, especially when it comes to helping patients with non-medical duties, according to the input they provided. Patients mentioned that the volunteers assisted with form filling, queuing management, and patient direction—administrative duties for which there were no direct replies from medical staff.

One patient remarked:

"The volunteers were taking care of registration and guiding patients, which I believe reduced the load on hospital staff."

- **Analysis:** This feedback suggests that Sarathi is playing an important role in alleviating some of the pressure on healthcare workers and administrative staff by handling routine, non-clinical tasks.
- **Recommendation:** The initiative could be further expanded to include more administrative task coverage, allowing healthcare staff to focus more on clinical care.



05 Suggestions for Improvement

The open-ended responses provided several suggestions for improving the Sarathi initiative:

- 1. **Training Volunteers:** A majority of the respondents emphasized the need for more comprehensive training for volunteers. One respondent said: "Volunteers should undergo better training to handle patient queries more effectively."
- 2. **Increase Volunteer Numbers:** Some patients suggested that more volunteers are needed to handle the high patient volume, particularly during peak hours: "There were too few volunteers during busy hours, which caused delays."
- 3. **Enhancing Coordination Between Departments:** Several respondents indicated that better coordination between volunteers and hospital staff could further improve the patient experience: "Sometimes it felt like the volunteers and the hospital staff were not on the same page, which led to delays."
- 4. **Expanding Scope of Assistance:** A few respondents mentioned that volunteers should be trained to handle more diverse tasks, such as assisting with lab work or providing detailed information about the hospital's processes.

The Sarathi survey's qualitative data reveals both the initiative's strengths and its shortcomings. In general, we are grateful to the Sarathi volunteers for their help with navigation and line management. But there are definitely ways to improve the effectiveness of the initiative—more communication, better training, and additional volunteers at high-traffic times.

Key Recommendations

Several recommendations have been identified to enhance the Sarathi initiative's effectiveness and satisfaction among patients based on both qualitative feedback and quantitative analysis.

1. Comprehensive Training for Volunteers:

- It is recommended to establish a systematic training program that addresses important topics such hospital protocols, patient navigation, and effective communication techniques.
- As a result, volunteers will be more equipped to help patients with confidence and greater knowledge.

2. High Awareness of the Sarathi Initiative:

• A significant amount of visibility is shown by the fact that 72.58% of patients are aware of Sarathi services. However, work needs to be done to guarantee that everyone is aware of the initiative, particularly the patients who might not be familiar with it yet.

3. Positive Impact on Patient Satisfaction:

• The Sarathi initiative has been effective in improving patient satisfaction, particularly in areas like navigation and queue management. Patients who receive assistance from volunteers report feeling more satisfied with their overall experience.

4. Quality of Experience vs. Time Spent:

• The effort improves the patient experience even though it might not result in a considerable reduction in the amount of time spent in the OPD. The significance of the non-clinical support provided by volunteers is highlighted by the strong satisfaction ratings.

5. Reduced Non-Clinical Workload for Staff:

• The Sarathi program lets hospital staff focus more on other aspects of their profession by reducing non-clinical workload by handling activities like patient navigation and queue management.

Operational Recommendations

06 Improve Communication

- Volunteers should be trained to provide clear, concise, and easy-to-understand instructions, particularly for patients unfamiliar with hospital processes.
- This will improve the overall efficiency of communication and reduce patient confusion.

07 Increase Volunteer Numbers

• To further reduce patient wait times and improve assistance during busy hours, recruiting additional volunteers is recommended. This will also enhance the efficiency of service delivery, ensuring patients receive timely support.

08 Enhance Departmental Coordination

Strengthening the coordination and communication between volunteers and hospital staff is essential for smoother operations. This will help avoid unnecessary delays and ensure that patients receive the appropriate assistance without interruption.



09 Expand Volunteer Responsibilities

 Volunteers should be trained to assist with additional non-clinical tasks such as lab testing guidance and form-filling. This will further alleviate the administrative workload on hospital staff, improving overall hospital efficiency.

Discussion

The Sarathi Initiative has demonstrated a significant positive impact on patient experience and operational efficiency within the outpatient department (OPD) at PGIMER Chandigarh. This discussion section explores the implications of the study's findings, examining the benefits of Sarathi assistance on patient navigation, wait time reduction, and non-clinical workload relief for hospital staff. Additionally, it addresses limitations and offers recommendations for further improvement and potential scalability of the initiative across other high-demand healthcare settings.

1. Patient Navigation and First-Time Visitor Support

In this rapid assessment we found that nearly 42% of first-time visitors utilized Sarathi services, indicating the initiative's value in helping new patients navigate the complex OPD environment. For these patients, Sarathi volunteers provided crucial guidance in locating departments, understanding processes, and completing necessary documentation. The data indicate that patients who sought help from Sarathi had higher satisfaction scores compared to those who did not use Sarathi services. First-time visitors especially benefited from navigation and registration assistance, reducing their time in the OPD and alleviating common confusion.

These findings align with existing research emphasizing the role of navigation support in improving patient satisfaction and reducing hospital-related anxiety. By creating a more accessible environment, Sarathi volunteers enabled patients to feel more confident in navigating the healthcare system, contributing to a more positive overall experience. For large hospitals such as PGIMER, where patients often feel overwhelmed, the provision of dedicated navigation support is invaluable.

2. Queue Management and Wait Time Reduction

One of the most notable findings is the significant reduction in waiting times for patients using Sarathi services. Sarathi-assisted patients reported an average wait time of 2.8 hours, compared to 4.2 hours for those who did not use the service, reflecting a 1.4-hour reduction. This outcome highlights the initiative's effectiveness in optimizing patient flow and minimizing delays. The reduction in waiting time not only improved patient satisfaction but also facilitated better queue management and reduced congestion in the OPD, ultimately enhancing the overall operational efficiency of the department.



Queue management is a well-recognized challenge in high-volume healthcare settings, where long waits can lead to frustration and dissatisfaction among patients. The implementation of Sarathi volunteers as queue managers reflects a promising model that could be replicated in other OPDs facing similar challenges. By streamlining patient flow, Sarathi helped create a more organized OPD environment, reducing the physical and psychological strain on patients waiting for care.

3. Impact on Non-Clinical Workload for Hospital Staff

Feedback from hospital staff, including security personnel, hospital attendants (HAs), and administrative staff, suggests that Sarathi volunteers significantly reduced their non-clinical workload. Security staff noted that volunteers helped manage patient inquiries about directions and queue management, allowing them to focus more on their core responsibilities. hospital attendants benefited from the reduced need to assist patients with navigation and registration, enabling them to concentrate on patient preparation and clinical support tasks. Similarly, administrative staff reported fewer interruptions for guidance and documentation, allowing them to maintain focus on critical data entry and record management tasks.

This reduction in non-clinical workload aligns with studies showing that volunteer-led programs can alleviate staff burnout, improve job satisfaction, and enhance the quality of patient care. By offloading non-clinical tasks to trained volunteers, the Sarathi Initiative helped healthcare workers redirect their efforts toward clinical responsibilities, which is particularly valuable in high-demand settings like PGIMER. The feedback from staff also indicated that such assistance helped maintain a calmer, more organized working environment, contributing to an overall improvement in staff morale.

4. Comparative Analysis of Lab Testing for First-Time Visitors with and without Sarathi Assistance

The comparative analysis of first-time visitors seeking lab testing assistance further highlights the value of Sarathi support. Patients using Sarathi assistance for in-house lab testing at PGIMER experienced shorter wait times and higher satisfaction levels than those who did not use Sarathi or opted for external labs. First-time visitors who relied on Sarathi volunteers for lab testing guidance reported fewer challenges with navigation and documentation, reinforcing the initiative's role in simplifying complex processes for new patients. In contrast, patients who sought lab testing outside PGIMER faced longer waits and logistical difficulties, indicating that Sarathi support within the hospital plays a crucial role in ensuring smooth, efficient service.

These findings suggest that Sarathi assistance is particularly beneficial in managing the intricacies of lab testing, a process that often involves multiple steps and detailed guidance. By providing inhouse assistance, Sarathi volunteers ensured that first-time patients could navigate lab testing procedures with ease, reducing delays and enhancing the efficiency of PGIMER's OPD services.

5. Limitations and Challenges

While the Sarathi Initiative has proven beneficial, some limitations and challenges were identified. First, the initiative relies on a volunteer workforce, which may lead to inconsistencies in service



quality due to varying levels of training and experience among volunteers. Staff feedback indicated that some volunteers were less prepared for complex patient inquiries, suggesting a need for enhanced training in areas like communication, navigation, and hospital protocols.

Another limitation is the availability of volunteers during peak hours. While the Sarathi Initiative effectively reduces workload and wait times, feedback from both patients and staff indicated that an increase in volunteer numbers during high-demand periods would further improve the program's impact. Additionally, improved coordination between Sarathi volunteers and hospital staff was recommended to ensure seamless service delivery, particularly during busy hours. Potential limitations of this study include:

- **Convenience Sampling:** The use of convenience sampling may introduce bias, as participants may not represent the full range of patients and staff perspectives within the OPD.
- **Self-Reported Data:** Survey and interview responses are based on self-reported information, which may be influenced by response bias or recall limitations.
- **Short-Term Focus:** The cross-sectional design captures patient and staff perspectives at a single point in time, limiting insights into long-term impacts of the Sarathi Initiative.

6. Recommendations for Improvement

Based on the rapid assessment's findings, several recommendations can enhance the effectiveness of the Sarathi Initiative:

- Enhanced Training: A structured training program for Sarathi volunteers should focus on communication skills, handling complex inquiries, and hospital-specific navigation. This would ensure volunteers are prepared to assist patients efficiently and confidently.
- Increased Volunteer Deployment during Peak Hours: By increasing volunteer numbers during high-demand periods, the initiative could further alleviate patient wait times and provide consistent support.
- **Improved Coordination with Hospital Staff:** Strengthening communication between Sarathi volunteers and hospital staff would improve service flow and prevent potential delays in patient assistance.
- **Expansion of Volunteer Roles:** Expanding the responsibilities of Sarathi volunteers to include additional non-clinical tasks, such as form-filling and documentation support, could further reduce the workload on healthcare and administrative staff.

Impact on Volunteers: During adhoc and random feedback taken by Hon'ble Niti Aayog member Dr Vinod Paul, volunteers had expressed deep satisfaction with the service they were providing. They appreciated the agonies faced by patients especially handicapped and elderlies. Patients invariably blessed them for the support given by them. Through this exposure they were not only helping in real time, but they have also become ambassadors and have now potential to guide patients from wherever they are. This exposure has also invoked compassion for humanity.

Conclusion

In conclusion, the Sarathi Initiative has demonstrated a positive impact on both patient experience and staff workload in the OPD at PGIMER Chandigarh. By providing navigation, registration, and queue management support, Sarathi volunteers have contributed to a more efficient, patient-centered environment. The significant reduction in wait times, coupled with high patient satisfaction, underscores the initiative's value in enhancing healthcare delivery in high-volume OPDs. With targeted improvements, such as enhanced volunteer training and increased availability during peak hours, the Sarathi Initiative could serve as a scalable model for public healthcare systems across India, promoting a more organized, accessible, and patient-friendly experience in hospitals nationwide.



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