GAIL (India) Limited

Impact Assessment Report on Project Arogya - Health Care facilities through operation of 50 MMUs in various states (FY 2020-21)

Disclaimer and Notice to Reader

1. This report has been prepared by KPMG Assurance and Consulting Services LLP ("KPMG" or "we") exclusively for GAIL (India) Limited ("Client") in accordance with the terms of the Request for Quotation dated 18.08.2022 issued by GAIL (India) Limited , our quotation for services dated 07.09.2022, the Fax of Acceptance issued by GAIL (India) Limited on 20.09.2022, KPMG's acknowledgement of Fax of Acceptance on 23.09.2022, the Letter of Acceptance issued to KPMG dated 27.09.2022 , and KPMG's Letter of Acceptance dated 11.10.2022 . The performance of KPMG's services and the report issued to the Client are based on and subject to the terms of the Contract

2. This report is for the use of management only and not for use by any other party, in whole or in part, without our prior written consent.

3. This report sets forth our views based on the completeness and accuracy of the facts stated to KPMG and any assumptions that were included. If any of the facts and assumptions is not complete or accurate, it is imperative that we be informed accordingly, as the inaccuracy or incompleteness thereof could have a material effect on our conclusions.

4. While performing the work, we have assumed the authenticity of all documents or information referred or provided. We have not independently verified the correctness or authenticity of the same.

5. We have not performed an audit and do not express an opinion or any other form of assurance. Further, comments in our report are not intended, nor should they be interpreted to be legal advice or opinion.

6. In accordance with its policy, KPMG advises that neither it nor any partner, director or employee undertakes any responsibility arising in any way whatsoever, to any person other than GAIL (India) Limited in respect of the matters dealt with in this report, including any errors or omissions therein, arising through negligence or otherwise, howsoever caused.

7. In connection with our report or any part thereof, KPMG does not owe duty of care (whether in contract or in tort or under statute or otherwise) to any person or party to whom the report is circulated to and KPMG shall not be liable to any party who uses or relies on this report. KPMG thus disclaims all responsibility or liability for any costs, damages, losses, liabilities, expenses incurred by such third party arising out of or in connection with the report or any part thereof.

8. While information obtained from the public domain or external sources has not been verified for authenticity, accuracy, or completeness, we have obtained information, as far as possible, from sources generally considered to be reliable. We assume no responsibility for such information.

9. Our report may make reference to 'KPMG Analysis'; this indicates only that we have (where specified) undertaken certain analytical activities on the underlying data to arrive at the information presented; we do not accept responsibility for the veracity of the underlying data.

10. By reading our report the reader of the report shall be deemed to have accepted the terms mentioned hereinabove.

Contents

1.1 Executive Summary

Over the last few decades, India has expedited its journey to being a global leader in both thought and action. Being the most populous country in the world, India has the ability to offer the pivotal traction required to achieve the 2030 Sustainable Development Goals (SDGs). India's alignment with the international development agenda, as exemplified by the motto "Sabka Saath Sabka Vikas" (collective efforts, inclusive growth), underlines the country's commitment to the SDGs.

With over 1.4 billion people from diverse social, economic, and cultural backgrounds, India faces an arduous challenge in meeting their aspirations. Nonetheless, the story of India since 1947 reflects an impressive growth. The country has effectively lifted more than 271 million people out of multidimensional poverty through economic growth and empowerment.[1] Inequalities in housing, nutrition, child health, education, sanitation, drinking water, and electricity have decreased as a result of enhanced access and reduction in poverty.

Nonetheless, at the national level, there is still a substantial amount of work to be done in multiple sectors.

Access to healthcare institutions is a significant aspect in reaching the SDGs for health and universal health coverage. It helps to achieve other goals in addition to the health goal (SDG3), such as poverty, hunger, education, gender equality, clean water and sanitation, work, and economic growth, decreasing inequality, and climate action.

GAIL (India) Limited, being a socially responsible public sector unit, recognizes the necessity of addressing the above- mentioned issue and contributed towards providing access to affordable and timely healthcare through the implementation of Project Arogya. The project's goal was to deploy 50 Mobile Medical Units (MMUs) in FY 2020-2021 to remote communities in 11 locations across the country to provide basic healthcare services and other facilities related to awareness, medications, and remedies.

For those who cannot conveniently get to a hospital or clinic, mobile medical units (MMUs) offer access to medical care. In disadvantaged rural, suburban, and urban communities without access to healthcare, MMUs open temporary facilities. MMUs generally have a doctor, a nurse practitioner, a nurse on staff and a driver and they offer a range of medical services, such as vaccinations, preventative care and diagnosis, and treatment for acute and chronic illnesses. They can reduce the pressure on already-established health care systems and are a cost-effective approach to providing care.

Thereby, in alignment with the thematic areas as mentioned in the Schedule VII of the Companies Act, 2013, GAIL collaborated with Wockhardt Foundation for providing 50 MMUs to the remote communities in 11 locations across the country.

To evaluate the impact of the project and understand the perception of the stakeholders, GAIL (India) Limited empaneled KPMG to conduct an impact assessment study. Along with stakeholder consultations, review of documents and data provided by the team was undertaken to understand the objective and coverage of the project. Subsequent to the desk review, key performance indicators were identified and finalised, in consultation with the programme team. For the purpose of this study, OECD- DAC (Organisation for

[1] Sashakt Bharat- Sabal Bharat (Empowered and Resilient India)- Voluntary National Review: 2020

Economic Co-operation and Development- Development Assistance Committee) framework was used for developing the research tools (questionnaires for qualitative surveys) and evaluating the impact created.

As per the impact assessment, all respondents reported increased access to basic healthcare facilities and other medical services, as offered by the MMUs. All of the surveyed students highlighted that the doctors were competent in solving their healthcare concerns and provided accurate diagnoses and treatments for them. They also stated that the medical staff was very supportive and assisted the beneficiaries in receiving the appropriate medical care for their health concerns. According to almost 100% of the respondents, there was an improvement in their overall health and well-being due to the intervention.

100% reported an increase in their access to free medicines and 100% of the total respondents stated that the MMU have helped in saving a lot of their time, earlier spent in travelling long distances to the local PHCs/CHCs or the private hospital. More than 90% of the respondents across all surveyed states reported a significant increase in their knowledge and awareness regarding various prevalent healthcare issues in the communities, which also resulted in an improvement in their health and medical well-being.

In addition to providing much-needed medical care to rural communities, these units also help to reduce health disparities. By providing access to medical care in rural areas, mobile medical units can help to reduce the gap between rural and urban healthcare, ensuring that everyone has access to the same level of care. Mobile medical units also help to reduce the burden on existing healthcare facilities, freeing up resources and personnel to be used elsewhere.

Lastly, the GAIL project implemented in various states scored an average of 94% which is highly impactful.

1.2 Introduction

1.2.1 CSR at GAIL

GAIL (India) Limited, conferred with the status of Maharatna in 2013, is India's leading natural gas company with diversified interests across the natural gas value chain of trading, transmission, LPG production, LNG- regasification, petrochemicals, city gas, etc. It owns and operates a network of around 14617 km of natural gas pipelines spread across the length and breadth of country. GAIL firmly believes that meeting people's needs, enhancing communities, and safeguarding the environment will ultimately determine how long progress can be sustained.

Pursuant to the provisions of the Companies Act, 2013 and rules made thereunder including the statutory modifications/ amendments from time to time as notified by the Government of India, GAIL (India) Limited earmarks two percent of its average net profit of the preceding three financial years towards achieving its CSR objectives through implementation of meaningful and sustainable CSR programmes.

1.2.2 GAIL CSR Vision

GAIL, through its CSR initiatives, will continue to enhance value creation in the society and in the community in which it operates, through its services, conduct & initiatives, so as to promote sustained growth for the society and community, in fulfillment its role as a Socially Responsible Corporate, with environmental concern.

1.2.3 GAIL CSR Objectives

- Ensure an increased commitment at all levels in the organization, to operate its business in an economically, socially & environmentally sustainable manner, while recognizing the interests of all its stakeholders.

- To directly or indirectly take up programmes that benefit the communities in & around its work centres and results, over a period of time, in enhancing the quality of life & economic well-being of the local populace.

- To generate, through its CSR initiatives, goodwill, and pride for GAIL among stakeholders and help reinforce a positive & socially responsible image of GAIL as a corporate entity.

1.2.4 About the project/programme

The right to health is a fundamental human right as well as a universal socioeconomic goal. It is essential for meeting fundamental human requirements and enhancing one's wellbeing.[2] The health of a population is an issue that affects all, whether they are lawmakers, organizations, communities, or individuals. Thus, maintaining good health is prerequisite to achieving all other optimal development results. In particular, the Global Sustainable Development Agenda places a high priority on health.

[2] https://www.oxfamindia.org/blog/15-healthcare-schemes-india-you-must-know-about

One of the biggest issues the world is currently experiencing is access to healthcare. Health care is either inadequate or overly expensive in some parts of the world. Inadequate access to healthcare can result in a variety of health issues, including communicable diseases, chronic illnesses, and even death.

Accessibility of healthcare institutions is a critical factor for achieving the health-related SDGs and universal health coverage[3]. It contributes to the attainment of other goals beyond the health goal (SDG3), including those on poverty, hunger, education, gender equality, clean water and sanitation, work and economic growth, reducing inequality, and climate action[4].

With about 1.415 billion people, or around 17.7% of the world's population, India is the most populous nation in the world. Access to healthcare in the country is considered a fundamental human right, and all citizens should be able to obtain services that are "physically and financially accessible, affordable, and acceptable for all." But given the size and population of the nation, access to healthcare in India is a significant challenge. The Human Development Index Report 2021–2022 published by the UNDP places India 132 out of 189 nations, which illustrates the level of inadequacy in India's health sector.

Health is also a major determinant of a country's overall economic growth rate.[5] For Indians, poor health has also been a key contributor to poverty and financial exclusion, pushing millions of families and people into ever-deeper levels of indigence and crippling debt. The burden of disease and disability continues to be significant in India despite significant advancements and breakthroughs in the health of the country's populace over the years.[6]

Approximately 35% of India's population lives in metropolitan regions, with the remainder concentrated in rural areas.[7] Since the bulk of the population lives in rural areas, access to healthcare is limited due to a paucity of healthcare facilities in these locations. Research also points to an asymmetric access to healthcare between urban and rural India[8]. This makes the current situation of healthcare precarious due to a shortage of both human and physical resources, particularly in rural areas. In remote communities, critical illnesses frequently go undiagnosed since there are no nearby medical services. According to a study, while only 3% of serious illnesses go untreated in urban areas, the rate rises to 13% in rural areas, particularly in less developed villages.[9]. Additionally, the predicament becomes worse in rural settings for a number of reasons, including the ones listed below:

- A significant issue is an inadequacy of funds. There is often a lack of resources required to offer high-quality healthcare, and healthcare providers might not be able to afford the staff, supplies, and equipment required to deliver effective care.

- The unavailability of healthcare facilities in some parts of the country is another issue. Roads, hospitals, and clinics—essential components of an infrastructure required to

[3] Primary health care in India (who.int)
[4] Primary health care in India (who.int)
[5] https://www.oxfamindia.org/blog/15-healthcare-schemes-india-you-must-know-about
[6] (2022) *Report on evolution of Ayushman Bharat Pradhan Mantri Jan Arogya Yojana, India.* World Health Organization.
[7] https://www.worldometers.info/world-population/india-population/
[8] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4621381/
[9] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4621381/

deliver high-quality healthcare—are missing. This makes access to healthcare challenging, even if the necessary facilities are available.

- Only a small percentage of the population in India has access to the public healthcare system, which has been mainly privatized. This indicates that a large number of people are unable to afford private treatment.

- People may also be unable to receive the healthcare they require due to cultural and social barriers. Some might not recognize the advantages of medical care or be dependent on traditional healers, while certain communities may be hesitant to seek medical assistance.

In the backdrop of National Health Mission, India has observed substantial increase in the health institutions, especially in the rural areas. Between 2005-2022, 24935 new PHCs, 5480 CHCs, 157935 Subcenters were established in rural areas[10].

It must be noted that basis the government health policy, there must be one health sub centre per a population of 3000 to 5000, at least one public health centre for a population between 20,000 and 30,000 and at least one community health centre per a population between 80,000 and 120,000. According to the National Health Mission Rural Health Statistics 2021-2022, following table highlights the GAIL covered state wise presence of rural Sub – Centres, Primary Health Centres and Community Health Centres as of 2022.

S.no.	Name of state	No. of Sub - Centres	No. of Primary Health Centres	No. of Community Health Centres
1.	Andhra Pradesh	11,073	1,142	139
2.	Assam	4,667	920	172
3.	Bihar	9,375	1,492	269
4.	Jharkhand	3,848	291	171
5.	Madhya Pradesh	10,287	1,266	332
6.	Odisha	6,688	1,288	377
7.	Punjab	2,951	422	150
8.	Uttar Pradesh	20,781	2,919	829

[10] https://main.mohfw.gov.in/sites/default/files/RHS%202021%2022.pdf

9.	Uttarakhand	1,785	531	52
10.	West Bengal	10,357	915	348

Table 1: Number of health centres in target states

Further, Rural Health Statistics 2021-22 released by the Health Ministry showed that across rural and urban areas, there is a 3% shortfall of doctors at Primary Health Centres and a 17.8% shortfall of pharmacists at Primary and Community Health Centres.[11]

In a step towards improving access to affordable and timely healthcare, GAIL (India) Limited, in alignment with its CSR ambitions, collaborated with Wockhardt Foundation in 2019 to develop and implement Project Arogya. The project's goal was to deploy Mobile Medical Units (MMUs) to remote communities across 11 districts in India to provide basic healthcare services and other facilities related to awareness, medications, and remedies.

For those who cannot conveniently get to a hospital or clinic, mobile medical units (MMUs) offer access to medical care. In disadvantaged rural, suburban, and urban communities without access to healthcare, MMUs open temporary facilities. MMUs generally have a doctor, a nurse practitioner, a nurse on staff and a driver and they offer a range of medical services, such as vaccinations, preventative care and diagnosis, and treatment for acute and chronic illnesses. They can reduce the pressure on already-established health care systems and are a cost-effective approach to providing care.

The project was implemented in the time period of April 1, 2020, to March 31, 2021. The MMUs follow a weekly roster that is mutually agreed upon by the GAIL CSR team and the work centres. The agenda of the MMUs can be broadly classified into two major components, shown as follows:

1. ADC Formula

Awareness (A)	Diagnosis (D)	Cure (C)
• Hygienic sanitation • Hygienic water consumption • Mother and child healthcare • Immunization • Anemia • De-worming • Vector-borne diseases • Hepatitis • Typhoid • Common cardiac problem • HIV • Diabetes • Snake bites • Tuberculosis	• Blood Pressure • Hemoglobin levels • Oxygen saturation • Malaria • Hepatitis • Dengue • Typhoid • Diabetes	• Medicines • Nutritional supplements • De-worming

[11] https://main.mohfw.gov.in/sites/default/files/RHS%202021%2022.pdf

Table 2: The ADC Formula followed by the GAIL MMUs

2. **Sanitary napkin distribution:** GAIL contributed financially to the provision of Moksha (low-cost sanitary napkins without wings) to menstruation women and girls visiting MMUs during their travels to their respective villages. An annual distribution of 4975 packs of sanitary napkins per MMU was settled upon, with no explicit constraints in place if the numbers exceeded the set value.

1.3 About the Implementing Agency

Wockhardt Foundation is a not-for-profit organization that is focused on creating a lasting social impact in India. Founded in 2008, the foundation works to provide health care, education, and nutrition support to underprivileged communities across the country.

The Wockhardt Foundation works in partnership with local communities, public and private sector organizations, and non-governmental organizations to identify and implement sustainable solutions to social issues. The foundation works towards its mission through a holistic approach that combines community-based initiatives with advocacy and policy reform at the state and national levels.

The Wockhardt Foundation offers a range of healthcare services in India, including primary healthcare, emergency services, and health education. They also provide free vaccinations and health screenings, as well as access to specialist care. Wockhardt Foundation works to ensure that all people, regardless of socio-economic status, have access to quality healthcare. The Foundation has a strong focus on preventive healthcare and preventive hygiene measures. They have set up a number of health camps in rural areas, where they provide basic health check-ups and educational programs to the local community. Wockhardt Foundation also works with local governments, communities, and other organizations to ensure that the healthcare needs of the poor are met.

In addition to providing healthcare, the Wockhardt Foundation also focuses on improving the quality of life for those that are underserved. They work to address poverty and inequality through a range of initiatives, such as education, vocational training, and employment opportunities.

Through their efforts, the Wockhardt Foundation has managed to make a significant impact on the health and wellbeing of the people of India. They have helped to reduce the incidence of diseases such as malaria, tuberculosis, and HIV/AIDS, and have improved the living conditions of many people in rural areas.

The Wockhardt Foundation strives to create a positive, lasting impact in India by providing access to essential services and resources. Through its efforts, the foundation is helping to create a healthier, more prosperous India.[12]

[12] wockhardtfoundation.org

1.4 Methodology and Approach

GAIL has been implementing successful CSR initiatives based on community needs. A third-party evaluation of the results attained is essential given the dynamic nature of the social development programmes deployed. This impact assessment aims to explain what has been done well and what can be done moving forward. It will not only assist in determining the significance of the project, including the efficiency of project design and interventions, sustainability of results, and impact of the intervention on the target community, but it will also provide guidance for expanding or replicating the successful initiatives while redesigning or ending the projects/initiatives that were unable to have the intended impact.

The impact assessment is intended to provide key insights on the following questions:

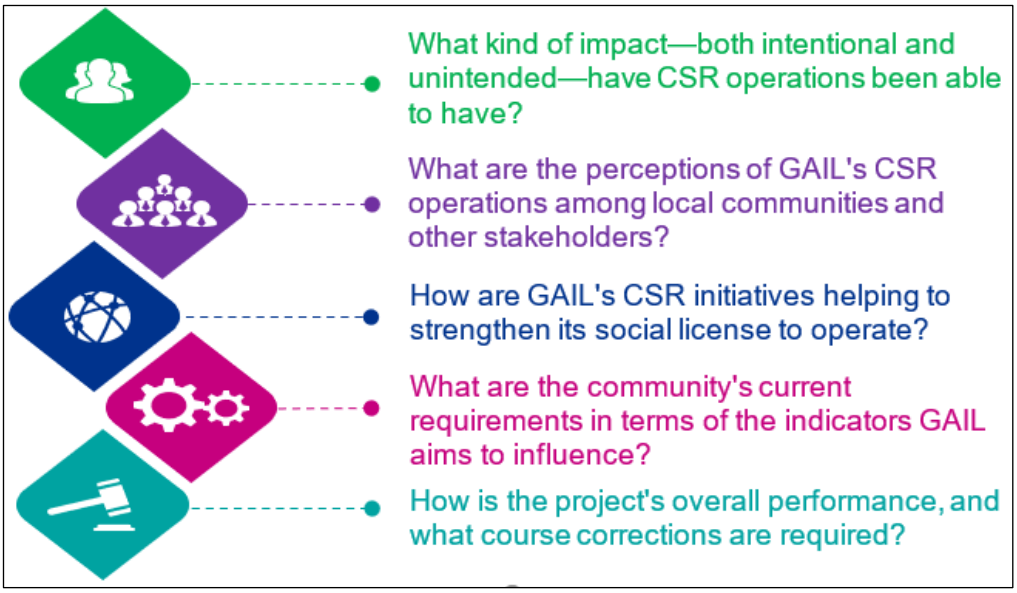


Figure 1: Research questions

The study was conducted through a combination of qualitative and quantitative data collection techniques. These include in-depth interviews and focus group discussions with beneficiaries and key stakeholders, as well as secondary research in the relevant thematic areas for a baseline perspective.

1.4.1 OECD DAC: Evaluation Criteria

Given the fundamental approach for conducting an impact study, the OECD-DAC (Development Assistance Committee) Evaluation Network's framework is well regarded for assessing the efficacy of development programmes. In response to the need for a method through which bilateral development agencies could monitor the financing supplied to multilateral organisations for various development initiatives, the DAC Evaluation Network developed a set of evaluation criteria for measuring the performance of any development project (UNICEF, 2012).

In 1991, the OECD Development Assistance Committee (DAC) devised the criteria for assessing international development cooperation. They are now widely used beyond the DAC and have established themselves as a cornerstone of evaluation methodology.

These standards have routinely been used for international donors, including UN agencies (OECD, 2020).

The OECD DAC Network has identified six evaluation criteria and two principles for their application: relevance, coherence, effectiveness, efficiency, impact, and sustainability. These criteria are meant to help facilitate evaluations. They were revised in 2019 to improve the accuracy and utility of assessment and to strengthen evaluation's contribution to sustainable development (OECD, 2020).

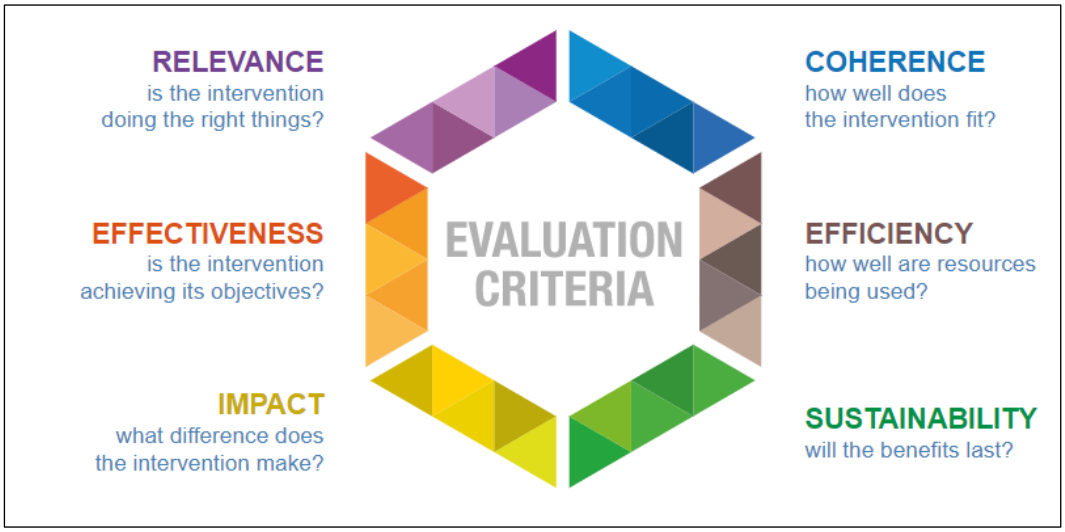


Figure 2: OECD DAC Evaluation Criteria

1.4.2 Geographical Scope

The impact assessment for this project covered 7 states and 7 districts (on a sample basis).

	State	Districts
Under GAIL CSR's initiative	Uttar Pradesh	Auraiya
	Andhra Pradesh	Nagaram
	Uttarakhand	Haridwar
	Jharkhand	Bokaro
	Assam	Barpeta
	Madhya Pradesh	Jhabua
	Bihar	Purnia

Table 3: Geographical Scope

1.4.3 Sampling Strategy

The sample size for this study has been calculated using purposive sampling methodology. Out of the total population, a sample size of 100 was chosen for the study. This was done keeping in mind the beneficiary spread as well as collecting data from diverse stakeholders. The sample size covered for the study was 98, due to the unavailability of beneficiaries at the time of the field visit. Duplication of responses were also avoided to ensure opinion of all stakeholders is covered adequately.

1.4.4 Sample Coverage

An actual sample of 98 was covered across the seven locations. The sample is divided among beneficiaries (patients from the communities) and doctors and other medical staff of the MMUs.

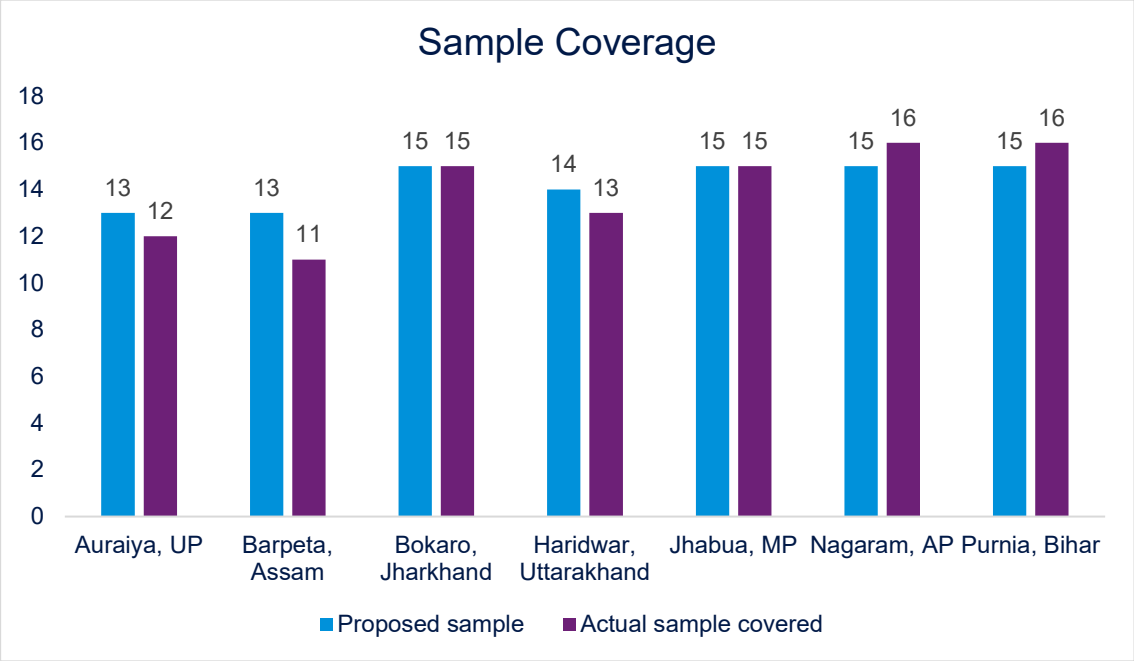


Figure 3: Sample covered: Proposed and actual

1.4.5 Data Collection and Analysis

KPMG carried out the data collection exercise on - field with assistance from GAIL CSR SPOCS and implementing agency in the seven locations.

In-depth interviews were conducted with the relevant stakeholders, with the help of pre-designed questionnaires, through field visit to the MMU Vans in the sample locations. The data was later updated and translated into excel sheets. Following data collection and cleaning, the data was analysed, and the outcomes were utilised to assess the project's impact.

1.4.6 Stakeholder Map

Stakeholders play an imperative role in project implementation on the ground. Stakeholder involvement can offer insightful information that aids in making critical decisions for the organisation. They can aid in designing improved guidelines, processes, and systems, as well as future communications and plans. Institutions and stakeholders taking part in the exercise include:

Project	Type of Stakeholder	Number of stakeholders
Project Arogya - Health Care facilities through operation of 50 MMUs in various states (FY 20-21)	Doctors of the MMU Van	6
	Pharmacist/Nurse of the MMU Van	5
	GAIL CSR Project SPoC	1
	Beneficiaries	86

Table 4: Stakeholders involved in the sampling

1.4.7 Impact Map

Thematic Area	Location	Project Name	Implementing Agency	Overall Objective	Key Activities	Key Outputs	Key Outcomes	Impact
Promoting preventive healthcare and sanitation [Item no. (i), Schedule VII of Companies Act, 2013] (FCSR 1.1 Schedule I)	Auraiya, (U.P) Barpeta, (Assam) Jhabua, (M.P) Purnia, (Bihar) (Bokaro, (Jharkhand), Haridwar, (Uttarakhand) Nagaram, (Andhra Pradesh)	Project Arogya - Health Care facilities through operation of 50 MMUs in various states (FY 2020-2021)	Wockhardt Foundation	Provision of basic free healthcare services to under privileged segment with limited access to the established public Health Care system through Mobile Medical Units	The MMU shall provide basic healthcare services and offer the following services based on ADC formula: **1. Awareness:** Hygienic Sanitation, Hygienic Water Consumption, Mother & Child Health Care, Immunization, Anemia, De-Worming, Vector Borne Diseases, Hepatitis, Typhoid, Common Cardiac Problems, HIV, Diabetes, Snake Bite. . Tuberculosis **2. Diagnosis:** BP, Hb, Oxygen, other basic diseases **3. Cure:** Medicines, nutritional supplements, de- worming Additionally, sanitary napkins (Moksha) will be distributed.	• Number of health volunteers • Number of awareness sessions conducted • Number of patients diagnosed with various diseases • Number of patients provided with medicines/ nutritional supplements • Number of patients provided with medical consultations • Number of women who received sanitary napkins	• Percentage beneficiaries reporting increased/ improved access to basic healthcare services • Percentage beneficiaries reporting improved awareness around hygienic and healthy practices • Percentage beneficiaries reporting reduction in medical expenditure • Percentage women reporting improved access to sanitary napkins	Increased and improved access to free and basic healthcare services by under-privileged and under-served segments of the society.

Table 5: Impact map from the project

1.5 Scoring Matrix

A scoring guideline was designed where OECD DAC parameters were scored and bundled basis our understanding of the project and availability of information. Weights were assigned to the bundled OECD DAC parameters. Also, a parameter on branding was included to understand the community's awareness on the project. Various components within the parameters have been assigned scores. Weights and scores have been used to compute the overall score for each district.

The following scoring matrix was developed to rate the performance of the projects across districts:

OECD Parameters	Indicators	Weightage	Combined Weightage
Relevance	Needs Assessment Report	20%	W1: 40%
	Relevance to target beneficiaries	50%	
	Alignment to SDGs	30%	
Coherence	Alignment with national policy	50%	
	Alignment with GAIL CSR policy	50%	
Efficiency	Timeline Adherence: Project Completion	40%	W2: 40%
	Duplication	20%	
	Adherence: Budget	40%	
Effectiveness	Identification of problem	25%	
	Process driven implementation strategy	25%	
	Qualified implementation team	25%	
	Targeted beneficiaries	25%	
Impact	Improvement in their health and illness post-intervention	25%	
	Reduction in expenditure on health post-intervention	25%	
	Increase in their awareness regarding the topics covered in the awareness sessions conducted by the MMUs	25%	
	Relevance of the project in providing them with free medicines and timely treatment	25%	
Branding	Visibility (visible/word of mouth)	100%	W3: 10%
Sustainability	Sustainability Mechanism, Convergence	100%	W4: 10%
Score= W1*Average (Relevance, Coherence) + W2*Average (Efficiency, Effectiveness, Impact) + W3* (Branding) + W4* (Sustainability)			

Table 6: Scoring Matrix

1.6 Impact Assessment

1.6.1 Relevance of Intervention

Relevance is a measure of how much the intervention objectives and design respond to the needs, beliefs, and priorities of the beneficiaries and continue to do so even if circumstances change.

Relevance measures how effectively a programme is aligned with the goals and policies of the Government in which it is implemented. It also aims to know if the programme is relevant to the needs of the beneficiaries. The program's relevance is understood in this context in terms of community needs as well as linkages to existing Government operations.

Due to the vast population residing in the rural areas as well as due to inadequacy of healthcare facilities in such areas, people often do not have access to affordable and timely healthcare services. According to the World Health Organization's Global Health Expenditure database, India's out-of-pocket expenditure as a percentage of total health expenditure was 54.78% in 2019.[13] This reduces the quality of life for people living in rural areas. Such remote communities also lack the infrastructure to support the availability of healthcare in their villages, as well as medicines.

Furthermore, people in such disadvantaged communities are often unaware of a variety of common illnesses such as diabetes, hypertension, fungal infections, water-borne diseases, etc. These challenges place a significant burden on the country's existing healthcare system, necessitating an increase in both initiative and investment to improve healthcare outreach to the most remote parts of the country.

The aim of the project was to deploy Mobile Medical Units (MMUs) to deliver basic free healthcare services to underprivileged groups with little to no access to the existing public health care system. The priorities of the MMUs are to provide basic healthcare services as well as other services related to awareness, medicines, and cures. This project's implementation aided in covering the gaps created in the community due to the lack of availability of a profound healthcare system as well as reducing the pressure on already-established health-care systems and providing a cost-effective approach to healthcare. All the respondents interviewed across locations deemed this project as relevant to the needs of the community and reported that the intervention was successful in providing necessary, convenient and affordable healthcare facilities to their local vicinity.

1.6.2 Coherence of Intervention

Coherence refers to the compatibility of the intervention with other interventions in a country, sector, or institution.

It measures the extent to which other interventions (particularly policies) support or undermine the intervention, and vice versa.

[13] https://data.worldbank.org/indicator/SH.XPD.OOPC.CH.ZS

I. Alignment of the programme with National Priorities - Sustainable Development Goals (SDGs)

The Sustainable Development Goals (SDGs), commonly recognized as the global goals, were established in 2015 by all United Nations members with the purpose of eradicating poverty, protecting the environment, and ensuring that everyone lives in peace and prosperity by 2030. India was a significant contributor to the development of the SDGs and is committed to achieving them by 2030.

SDG Goal	Target	Sub-targets[14]	Relevance
GOAL 3	***Good Health and Well-Being***	*3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all*	The programme aimed to improve access to healthcare service and generate awareness on key health issues in the community.
GOAL 10	***Reduced Inequalities***	*10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status*	The programme aimed at improving access to healthcare facilities for disadvantaged and remote communities. It also aimed at generating awareness among the communities related to various healthcare issues.

Table 7: Coherence with SDGs

II. Coherence with national priorities:

The project is further aligned with the national and state government goals, policies, and initiatives, as listed below:

[14] https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals

Project	Description	Coherence
Ayushman Bharat Yojana	Ayushman Bharat Yojana is a Government of India initiative launched by Prime Minister Narendra Modi in 2018. The scheme is aimed at providing health insurance cover of up to Rs. 5 lakh per family per year to over 10 crore poor families belonging to the Economically Weaker Sections and the vulnerable sections of the society. It is the world's largest health insurance scheme and is expected to benefit over 500 million people. The scheme was launched with an aim to reduce the financial burden on the poor and vulnerable due to high cost of medical treatment. It is expected that the scheme will provide much needed relief to the poor and vulnerable sections of the society and will help them access quality health care services.[15]	Project Arogya was implemented to reduce the challenge of expenditure on healthcare by remote communities in the target states. This was achieved by providing basic healthcare facilities and medicines free of cost to the beneficiaries to improve their overall health and well-being.

[15] https://www.mohfw.gov.in/

Pradhan Mantri Bhartiya Janaushadhi Pariyojana	Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) is a Government of India program launched in 2015 to provide quality medicines at affordable prices to the citizens of India. The program is aimed at making generic drugs available to all at affordable prices. The program also offers free health camps and awareness programs to educate people about generic drugs and their potential benefits. Additionally, the program is helping to reduce the cost of medicines for millions of people in India. The program has been very successful since its inception and has so far established over 5,000 Jan Aushadhi Stores across the country. The program is also being expanded to include other health care services such as diagnostic services, vaccinations, and blood tests.[16]	The project was implemented to provide quality free healthcare services and medicines to the beneficiaries to improve their access to healthcare. Medicines are provided free of cost to the beneficiaries for their ailments and reduces the issue of access to pharmaceuticals in remote communities. Awareness sessions were also conducted during the implementation of the project to improve the knowledge and awareness of the beneficiaries regarding various prevalent healthcare issues and diseases in their communities.

Table 8: Coherence with national priorities

1.6.3 Effectiveness of Intervention

Effectiveness is defined as an assessment of the factors influencing progress toward outcomes for each stakeholder as well as validation of the robustness of systems and processes.

It aids in ensuring that the implementation and monitoring processes are sturdy in order to achieve the greatest possible social impact. The efficacy of the programme is established by examining how well the program's activities were carried out as well as the efficiency with which the program's systems and processes were implemented.

The project's goal was to provide financial and supervisory aid towards the deployment of MMU vans for the provision of basic healthcare facilities and awareness creation in the disadvantaged and remote communities in districts across 11 states. Therefore, to successfully attain these outcomes, the project adopted the following measures:

I. **Identification of the problem**: The primary goal of the project was to provide MMUs in remote communities to provide access to basic healthcare, awareness, diagnosis, and treatment of the health concerns of the beneficiaries. To be able

[16] https://www.mohfw.gov.in/

to deliver the best results identified for the communities and stakeholders involved, the issue was identified by GAIL, and the project was effectively developed accordingly. GAIL local work centers play an important role in proposing the geographies to be covered since they have better understanding of the local issues.

II. **Process driven implementation strategy**: The project employed a process-driven implementation strategy that includes fundamental market research to ensure a context-specific initiative, standardised activities with a set timeframe to assure quality, and pre-determined KPIs to ensure consistency.

III. **Qualified implementation team**- GAIL along with the implementing partner, i.e., the Wockhardt Foundation team were instrumental in providing a qualified team with previous expertise to overlook the execution of the project. This contributed to the preservation of implementation quality and provided prompt assistance to the intended beneficiaries. During our interaction with the MMU staff, it was found that all the professionals were well qualified as per government norms and standards for their respective roles.

IV. **Targeted beneficiaries**- The aim of the project was to provide people living in isolated communities with access to basic healthcare facilities. The MMUs deployed fulfill the goal of delivering healthcare to those who do not have convenient access to healthcare institutions for a variety of reasons such as distance, financial support, awareness, etc. The project was successful in achieving its objectives because it was able to provide the necessary outreach of healthcare services to the intended beneficiaries, i.e., remote and disadvantaged communities, and it was also successful in raising awareness about healthcare issues, diagnosing and curing various illnesses, and distributing sanitary napkins at low cost to menstruating women.

1.6.4 Efficiency of Intervention

The efficiency criterion seeks to determine whether the project was completed in a cost-effective and timely way.

The purpose is to establish whether the inputs—funds, knowledge, time, etc.—were effectively employed to create the intervention outcomes. This evaluation criterion attempts to determine whether the programme was completed on schedule and within budget.

The project has been efficiently implemented in various districts of across 11 states with the support of key stakeholders.

I. ***Timeliness of delivery or implementation of project interventions***
The programme was implemented within the given time period by GAIL with implementation support from the Wockhardt Foundation team in the target district. Wockhardt Foundation submitted regular programme progress reports along with fund utilization statements, highlighting the activities undertaken during the month, expenses incurred under each head and reasons for deviation from the same (if any).

II. ***Cost efficiency of project activities***
Interaction with the GAIL CSR team members also revealed that there was no budget overflow and that all the activities were successfully carried out within the allotted budget. Payment milestones were clearly defined as such, and interventions were implemented in the districts in consultation with the key stakeholders.

III. ***Duplication/ overlap of project activities***
Duplication of effort arises when similar interventions are needlessly undertaken within the same community/ location due to poor knowledge management and inadequate coordination of projects, thereby resulting in fund and resource inefficiency. In this case, the target communities did not have any prior affordable and timely access to healthcare facilities. Furthermore, they lacked the necessary infrastructure, like as roads, clinics, and so on, to facilitate the availability of healthcare in their villages. As a result, the MMUs provided by GAIL under this project were necessary for the intended beneficiaries and there was no overlap or duplication of project activities in the area.

1.6.5 Sustainability of Intervention

Sustainability assesses how well the programme secures the long-term viability of its outcomes and influence.

The continuation of a positive effect after development or aid has stopped is referred to as sustainability. This evaluation criterion contains key elements concerning the likelihood of continuous long-term benefits and risk tolerance. To achieve sustainability, a governing framework, financial model, and operating system must be established.

The project was successfully completed by the implementing agency, i.e., Wockhardt Foundation in a timely and cost-effective manner. Other than providing the MMU vehicle, GAIL has also provided financial assistance for medical equipment, medicines and sanitary napkins for distribution in the community. Further, the implementing agency has also looked after the regular maintenance of the vehicles, with financial aid from GAIL, to ensure the continued positive impact of the intervention in the target communities.

1.6.6 Branding

The MMU vans showcase adequate branding and visibility of GAIL (India) Limited. The vans have a stamp of the GAIL brand on the sides of the vehicles. Additional GAIL branding has been provided in the name of the MMUs they are called the GAIL-MMUs to emphasize that the project is being provided for by GAIL (India) Limited.

Figure 4: GAIL branding on MMU van in Nagaram, Andhra Pradesh

Figure 5: GAIL branding on MMU van in Jhabua, Madhya Pradesh

Figure 6: GAIL branding on MMU van in Barpeta, Assam

Figure 7: GAIL branding on MMU van in Purnia, Bihar

1.6.7 Impact of Intervention

Impact has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project.

The goal of measuring the impact is to determine the project's primary or secondary long-term impacts. This could be direct or indirect, intentional, or unintentional. The unintended consequences of an intervention can be favourable or harmful.

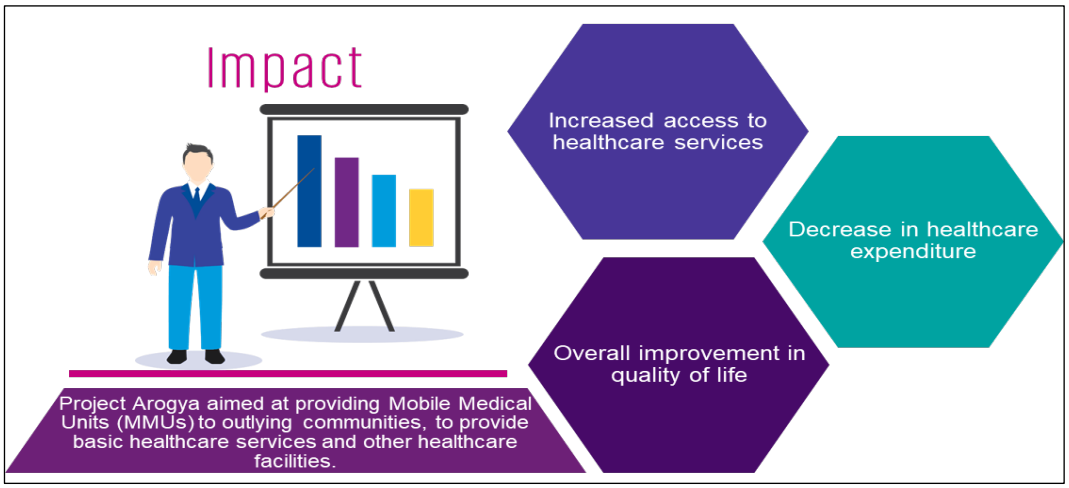


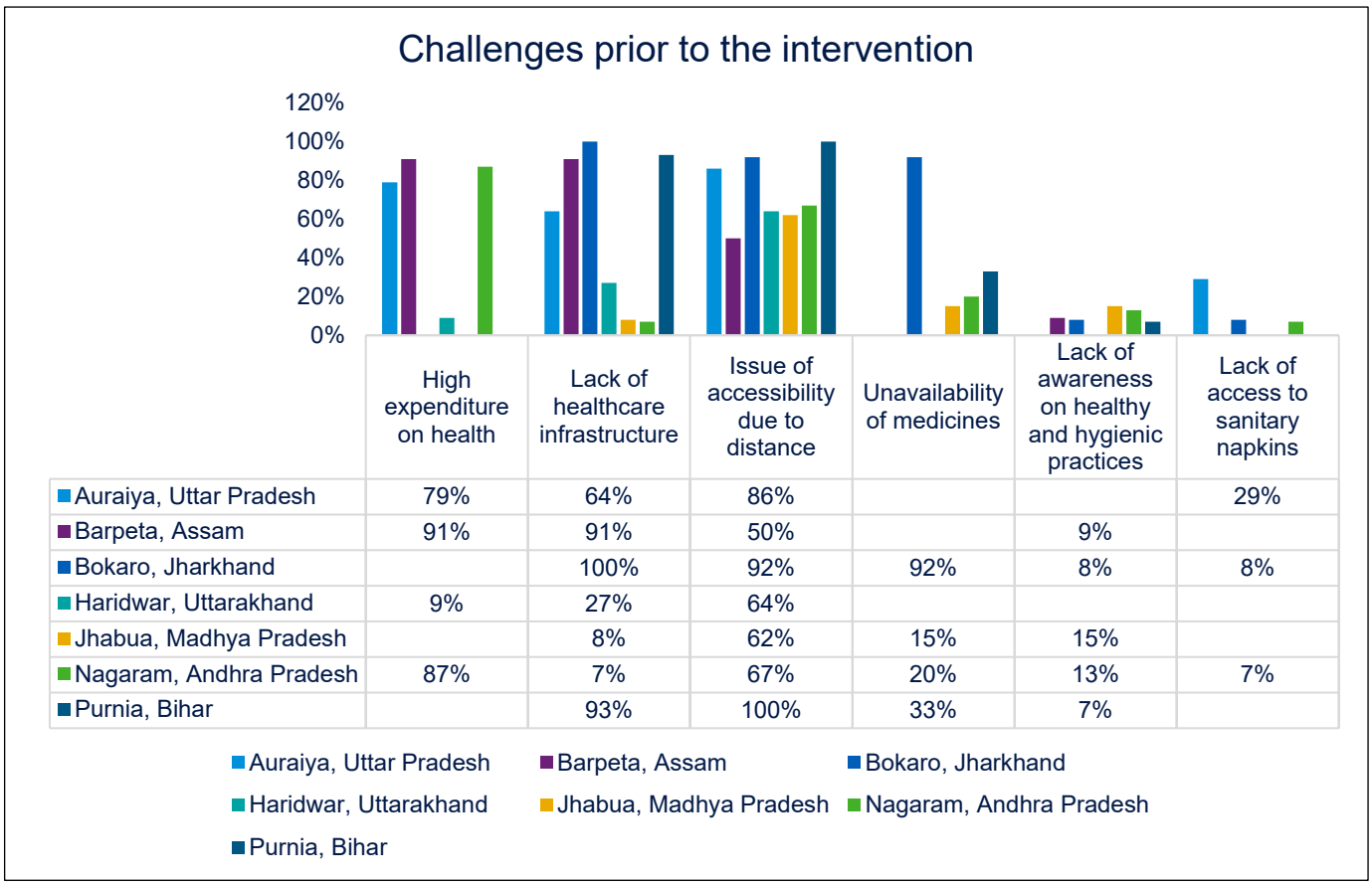
Figure 8: Categories of impact of the intervention

1.6.7.1 Increased access to healthcare services

Access to health care institutions and facilities impacts every aspect of a human being. Access to health care institutions and facilities leads to better health outcome of a communities, yet rural communities face various challenges in accessing the facilities. Accessibility of healthcare institutions is a critical factor for achieving the health-related SDGs and also universal health coverage[17]. It contributes to the attainment of other goals beyond the health goal (SDG3), including those on poverty, hunger, education, gender equality, clean water and sanitation, work and economic growth, reducing inequality, and climate action[18].

[17] Primary health care in India (who.int)
[18] Primary health care in India (who.int)

Prior to the intervention, the remote communities from the target districts and states faced a number of issues that kept them out of reach of healthcare facilities.



	High expenditure on health	Lack of healthcare infrastructure	Issue of accessibility due to distance	Unavailability of medicines	Lack of awareness on healthy and hygienic practices	Lack of access to sanitary napkins
Auraiya, Uttar Pradesh	79%	64%	86%			29%
Barpeta, Assam	91%	91%	50%		9%	
Bokaro, Jharkhand		100%	92%	92%	8%	8%
Haridwar, Uttarakhand	9%	27%	64%			
Jhabua, Madhya Pradesh		8%	62%	15%	15%	
Nagaram, Andhra Pradesh	87%	7%	67%	20%	13%	7%
Purnia, Bihar		93%	100%	33%	7%	

Figure 9: Challenges faced by the community prior to the intervention

When asked about the challenges faced prior to the MMU intervention, the two most chosen responses were the lack of healthcare infrastructure and lack of accessibility due to distance. These two factors were vetted in all the states as the most challenging aspects when it came to access to healthcare institutions and facilities. Other aspects contributing to the overall challenge of access to healthcare institutions were high expenditure on health, unavailability of medicines, lack of awareness on healthy and hygienic practices and lack of access to sanitary napkins. These factors contributed majorly to the lack of access to healthcare and related services in the target districts and states.

Prior to the availability of MMUs in the target districts, the respondents stated that they either visited a healthcare institution like the local PHC/CHC and private hospitals/clinics or they preferred self-medication or visiting the village quack when they required quick medication. The frequency of visits to these institutions differed from state to state, as it changed as per the accessibility of these institutions as well as the type of illnesses that they wanted catered. In Barpeta, Assam, all respondents stated that they used to visit the local PHC or CHC for their medical and healthcare requirements and did not have access to either village quacks or private hospitals. The respondents from Auraiya Uttar Pradesh and Purnia, Bihar visited all four mentioned healthcare institutions, the frequency depending on the type of medical assistance they required at any given point of time. In Haridwar, Uttarakhand, the respondents stated that they visited the local PHC/CHC or the village quack for medical support but also resorted to self-medication, if available. Respondents from Bokaro, Jharkhand, Jhabua, Madhya Pradesh and Nagaram, Andhra Pradesh mentioned that they visited either the village quacks or private hospitals, depending in the type of assistance required but also preferred self-medication if they had access to any kind of medicines for their healthcare issues. This demonstrates that people in these states primarily visited hospitals or village quacks to acquire medicines more than seeking healthcare consultation or assistance.

Figures 10&11: Beneficiaries at the MMU vans in various states

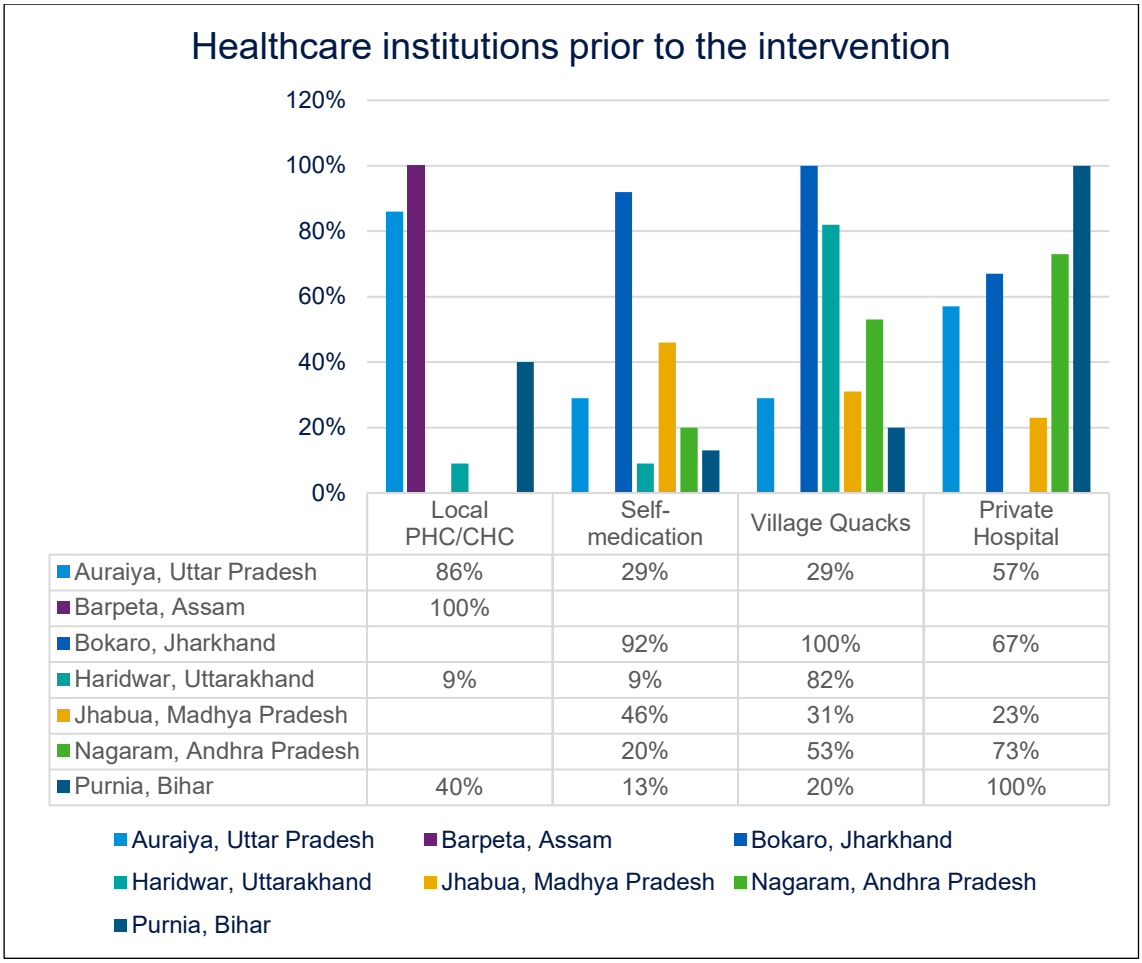


Figure 12: Healthcare institutions visited by respondents prior to the intervention

Prior to the intervention, the respondents from all states stated that they used to travel in ranges of 2 to 7 kilometers to a range of 200-250 kilometers, depending on the state and the accessibility distance from the target districts. Therefore, the respondents mentioned that the distance they had to travel to reach the closest formal healthcare institution, like a PHC, CHC or a private hospital, was a problem for them.

S.No.	Districts/States	Range of distance prior to the intervention (in KMs)	Range of distance after the intervention (in KMs)
1.	*Auraiya, Uttar Pradesh*	28 to 50 KMs	0 to 200 meters
2.	*Barpeta, Assam*	40 to 250 KMs	10 to 15 KMs
3.	*Bokaro, Jharkhand*	12 to 13 KMs	0 to 200 meters
4.	*Haridwar, Uttarakhand*	2 to 7 KMs	0 to 200 meters

5.	*Jhabua, Madhya Pradesh*	15 to 30 KMs	0 to 200 meters
6.	*Nagaram, Andhra Pradesh*	15 to 20 KMs	0 to 200 meters
7.	*Purnia, Bihar*	15 to 30 KMs	0 to 200 meters

Table 9: Range of distance covered by beneficiaries prior to and after the intervention in the sample districts and states

By deploying MMUs to the target communities, Project Arogya intended to provide the necessary access in order to address these pertinent issues in the community. The MMUs were useful in giving the people of the communities a way to receive needed essential healthcare. The deployed MMUs helped in curbing the problem of distance as well, as the MMU travelled to the villages in the target districts of all the target states and provided the needed medical care to rural populations in the target communities that are otherwise deprived of quality healthcare. In Barpeta, Haridwar, Jhabua, Nagaram and Purnia, 100% of respondents interviewed agreed, stating that MMU have helped in saving a lot of their time, earlier spent in travelling long distances to the local PHCs/CHCs or the private hospital. This intervention has made access to healthcare much easier and more convenient by bringing healthcare facilities to the doorstep of their villages. In Auraiya and Bokaro, 86% and 58% respondents, respectively, stated that the intervention helped in reducing the distance travelled and time spent to access healthcare institutions and facilities. The remaining respondents from both the states stated that they did not need to visit a medical institution that often before or after the intervention.

Figure 14: Awareness session conducted by MMU staff in Jhabua, Madhya Pradesh

Figure 15: Beneficiaries at the MMU van in Auraiya, Uttar Pradesh

The respondents also expressed the challenge of the lack of healthcare infrastructure in the local vicinity of their districts. This posed a challenge because this pushed them to either travel long distances to get access to PHCs/CHCs and private hospitals or turn to self-medication or the village quack. To curb this challenge, the intervention helped in bringing healthcare facilities and services to the villages themselves, hence solving the issue of access to infrastructure and formal medical facilities. The MMU vans are fully equipped to provide the required medical care to the people of the target communities and districts. These vans are typically outfitted with the necessary equipment, such as examination tables, bedside cabinets, computers, and other medical devices.

Figures 16&17: MMU staff conducting BP and blood tests in Jhabua, Madhya Pradesh

Figure 18: Beneficiaries at the MMU van in Barpeta, Assam

Figure 19: RO water system in MMU van

100% of the respondents from Barpeta, Bokaro, Haridwar, Jhabua, Nagaram and Purnia say they considered the intervention was pertinent to the needs of the community and was able to fill the healthcare gap in their villages. In Auraiya, 86% of the respondents found the programme relevant to the needs of the community. The remaining respondents stated that they thought the project was relevant, but they expressed the need for the MMU to be available on a more frequent basis. They also called for more assistance in terms of the availability of medications (aside from the already-available tablets, ointments, and oils) for a variety of other diseases and illnesses that are not currently available from the MMU. In terms of the number of diseases that the MMUs should treat and supply medications for, they likewise stressed the need for greater coverage.

Figure 20: Medical equipment in the MMU

After the intervention, the respondents also reported that the intervention has been impactful in improving timely access to healthcare services by visiting the disadvantaged remote communities who otherwise lacked access to such facilities at the time of requirement due to issues related to distance to be travelled, costs involved or unavailability of cooperative medical personnel. 100% of the respondents from all of the states reported that every time the MMUs visited their villages, the doctor and other medical personnel were always available and offered prompt diagnoses, treatments, and medications. They were able to acquire free medicines for their ailments and receive follow-up health checks to guarantee a healthy recovery owing to the weekly visits to the villages.

The respondents also reported that the doctors were competent in solving their healthcare concerns and provided accurate diagnoses and treatments for them. The respondents also did not report any negative experience during their treatments at the MMUs. They also stated that the medical staff was very supportive and assisted the beneficiaries in receiving the appropriate medical care for their health concerns. It was also noted that none of the respondents reported any adverse reactions or effects due to the medicines prescribed and provided to them by the MMU staff.

Figure 21: The interior of the MMU van

100% of the respondents reported that the MMUs were successful in providing proper availability of medicines for the communities. According to them, the most common ailments for which they have sought medication from the MMUs are cold and cough, viral fever, accident, abdominal pain, blisters, eye infections, muscle pains, kidney stone, fungal infections, stomach worm, gastric problems, diabetes, routine checkups, and deficiencies. These medications have been made available to the beneficiaries free of cost, which has helped them in reducing their expenditure on healthcare.

The doctors and pharmacists interviewed in these districts stated that on an average, they treat and diagnose about 70 to 80 patients in a day and the MMUs follow a route plan that covers all the villages of the target districts over 6 days in a week. They also mentioned that they have experienced an increase in the number of patients visiting the MMUs since the inception of the project.

The MMUs also held awareness sessions on a variety of diseases and illnesses commonly prevalent in the target districts and states.

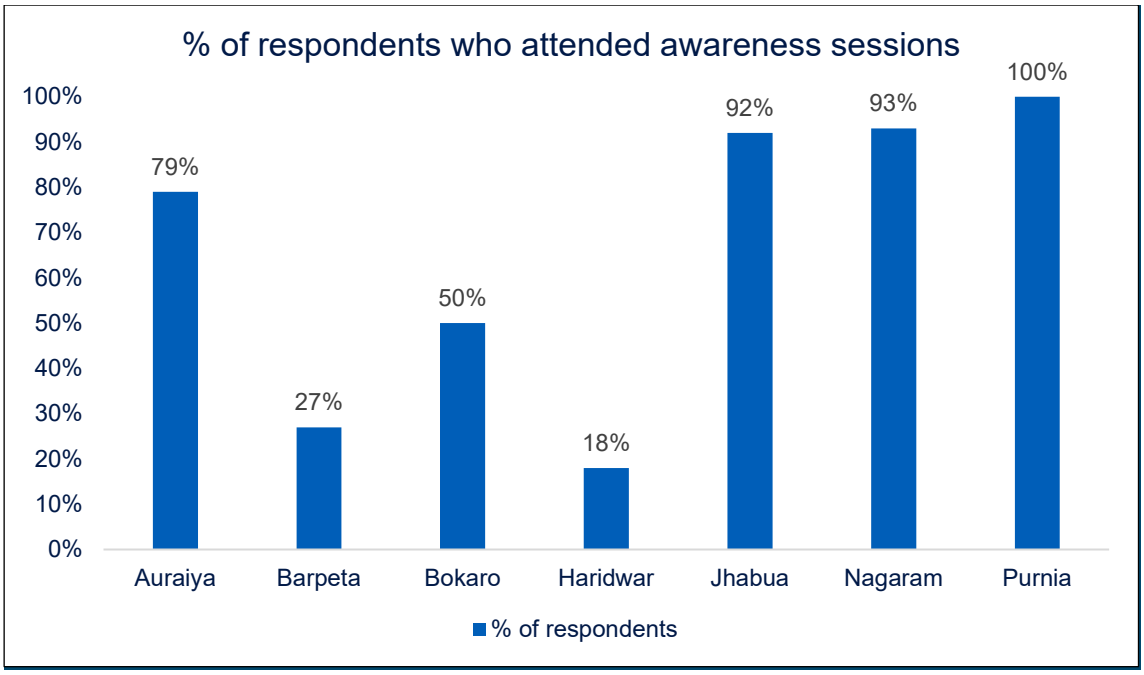


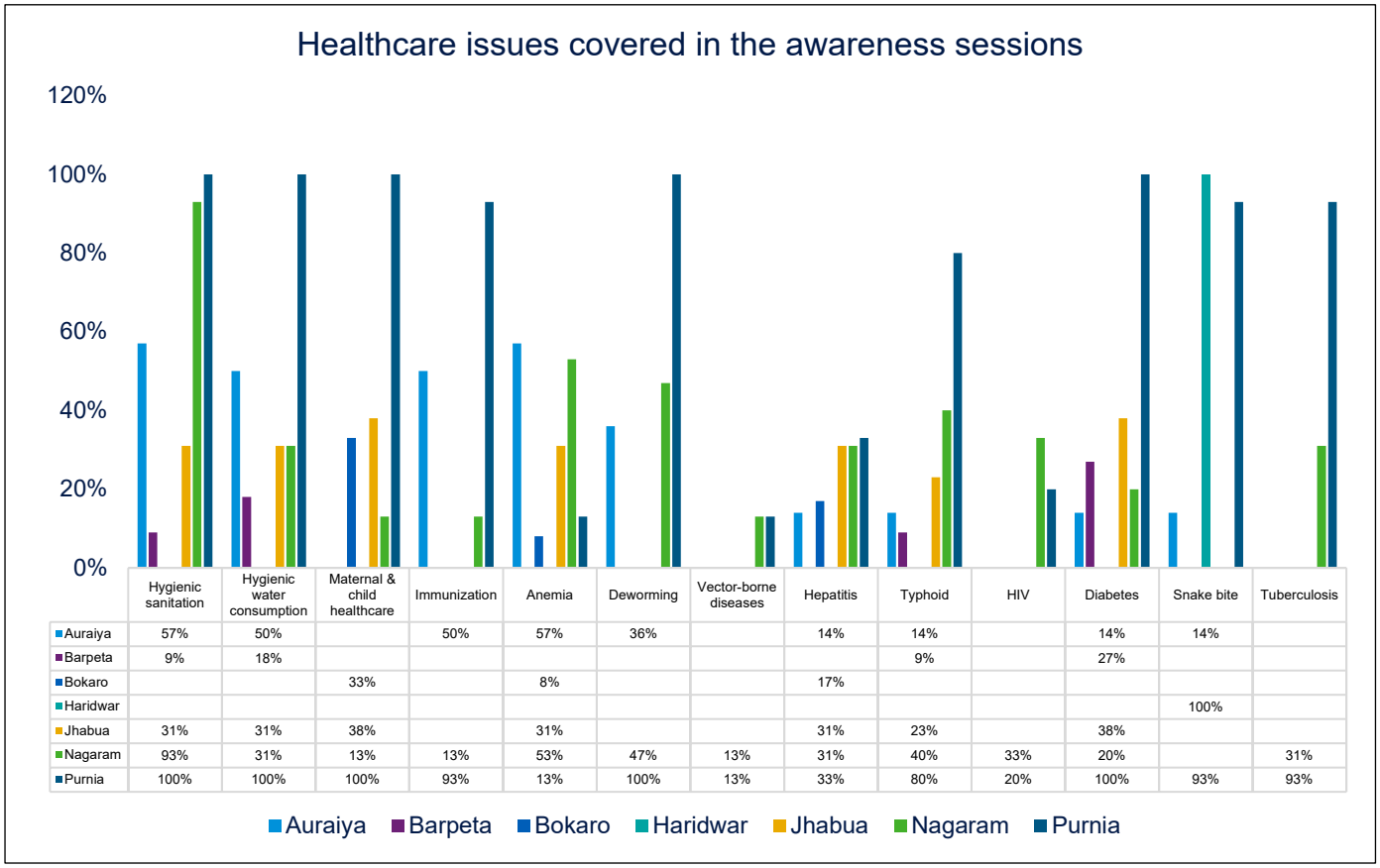
Figure 22: Respondents who attended awareness sessions

The highest percentage of respondents who attended the awareness sessions conducted during the MMU visits to their villages/districts are from the districts of Jhabua, Nagaram and Purnia, with 92%, 93% and 100% respondents each. From Auraiya, 79% and from Bokaro, 50% of the respondents attended the awareness sessions while from Barpeta and Haridwar, a low percentage of 27% and 18% each was reported. This is because the respondents interviewed were not able to attend those sessions due to time issues and expressed their interest in availing these sessions to increase their knowledge and awareness related to healthcare in the future.

The issues covered during these awareness sessions are as follows:

- Hygienic sanitation
- Hygienic water consumption
- Maternal and & child healthcare
- Immunization
- Anemia
- Deworming
- Vector-borne diseases
- Hepatitis
- Typhoid
- HIV
- Diabetes
- Snake bite

- Tuberculosis



	Hygienic sanitation	Hygienic water consumption	Maternal & child healthcare	Immunization	Anemia	Deworming	Vector-borne diseases	Hepatitis	Typhoid	HIV	Diabetes	Snake bite	Tuberculosis
Auraiya	57%	50%		50%	57%	36%		14%	14%		14%	14%	
Barpeta	9%	18%							9%		27%		
Bokaro			33%		8%			17%					
Haridwar												100%	
Jhabua	31%	31%	38%		31%			31%	23%		38%		
Nagaram	93%	31%	13%	13%	53%	47%	13%	31%	40%	33%	20%		31%
Purnia	100%	100%	100%	93%	13%	100%	13%	33%	80%	20%	100%	93%	93%

Figure 23: Issues covered by the awareness sessions

The project has been successful in providing access to quality care for many health issues that are common in rural areas, including infectious diseases, malnutrition, hypertension and diabetes. In addition, the intervention has provided access to specialized services such as vaccinations, antenatal care, and family planning. The availability of the MMUs has been crucial in helping to bridge the gap in access to healthcare services in remote and rural areas. These mobile medical units can provide medical care to individuals who may not be able to access a traditional healthcare facility. In addition, they can also serve as a bridge between existing healthcare facilities and remote communities, providing individuals with a convenient way to access the care they need.

1.6.7.2 Decrease in healthcare expenditure

Out-of-pocket expenditures are expenditures directly made by households at the point of receiving healthcare. This indicates the extent of financial protection available for households towards healthcare payments[19]. In India, the average out-of-pocket spending is projected to be INR 2097[20].

[19] Financial protection (who.int)

[20] Source: NFHS 5

Prior to the intervention, the most challenging aspect of access to healthcare for the respondents was high expenditure on healthcare, with about 80% of the respondents across all the locations stating that the high expenditure of healthcare prevented them from accessing it and thus, hindered their overall well-being. The expenditure, as reported by the respondents across locations, ranged from INR 100 to 10,000, depending on the type of illnesses and the medicines required for their treatment. This was one of the major factors that hampered the access to the required healthcare services. The use of MMUs in Project Arogya has also been instrumental in reducing healthcare costs of the beneficiaries. These mobile units are equipped with the latest medical equipment, which helps reduce the cost of providing healthcare services. Furthermore, they are staffed with qualified healthcare professionals, who are able to provide services for free to the community. This significantly reduces the overall cost of providing healthcare services, which in turn helps to reduce healthcare expenditure.

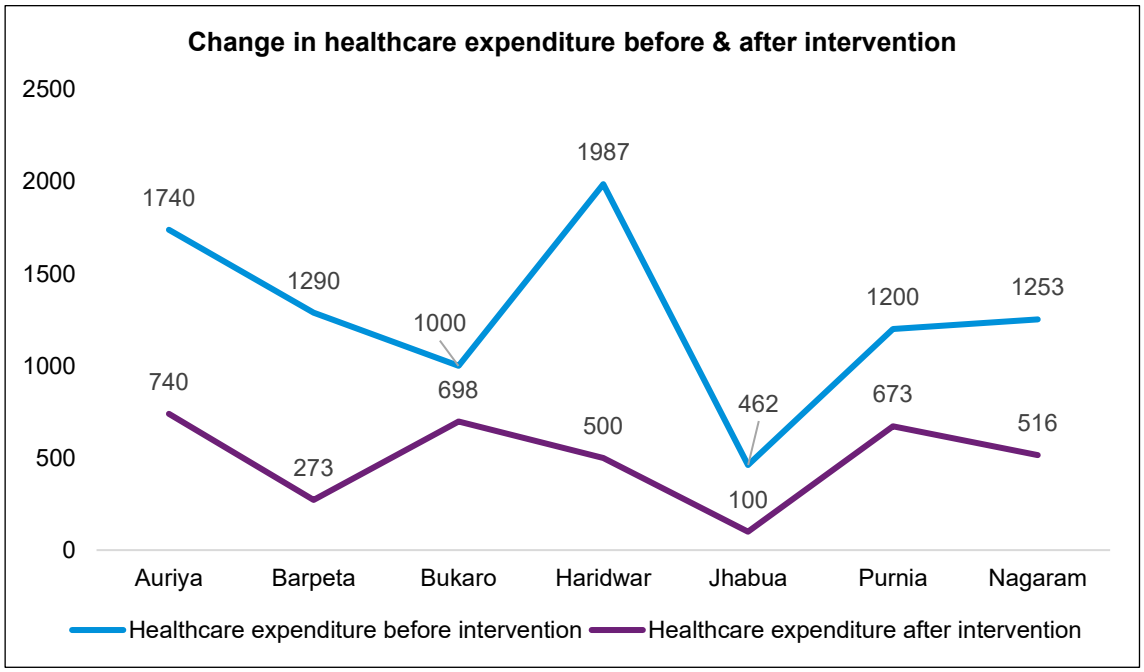


Figure 24: Change in healthcare expenditure

By providing medical care to these targeted areas, the intervention has been able to reduce the number of people who have to travel long distances for medical care. This has also resulted in savings in terms of healthcare expenditure.

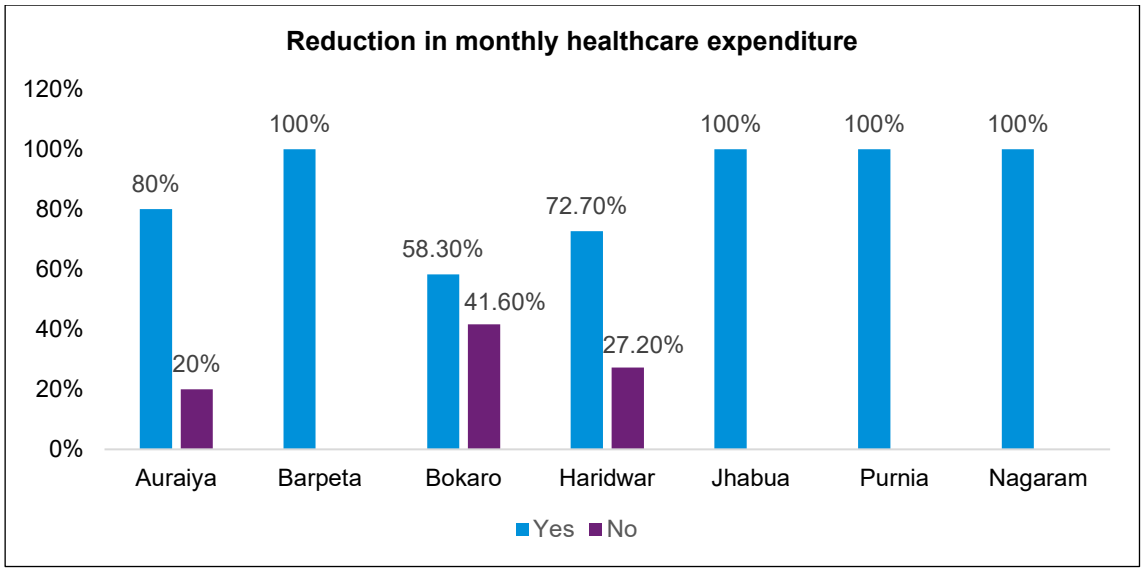


Figure 25: Reduction in monthly healthcare expenditure

Post the intervention, majority of the respondents across the locations reported a considerable reduction in expenditure on healthcare. For example, 100% of the respondents in Auraiya, Barpeta, Jhabua, Purnia and Nagaram reported a reduction in their monthly healthcare expenditure. According to them, now they were spending around INR 100 to 500 on their medical treatments, which is a substantial decrease from the spending range before the intervention. 58.3% of the respondents in Bokaro did not report a substantial decrease in their overall expenditure because they were either not spending a considerable amount on medical treatments prior to the intervention or they were not able to access the services of the MMUs due to a mismatch between the visiting days of the MMUs and their own availability.

70% of the total respondents stated that due to the intervention, they have seen a reduction in their expenditure on medical bills and other healthcare facilities.

1.6.7.3 Overall improvement in quality of life

Mobile medical units have had a significant positive impact on the quality of life of rural people. These units are designed to bring much-needed medical care to rural areas where access to traditional healthcare services is limited or non-existent. Through the use of mobile medical units, rural communities are able to receive medical care on their own terms, without having to travel long distances or wait for an appointment. With mobile medical units, doctors can travel from village to village and provide a variety of services, including basic medical screenings, vaccinations, laboratory tests, and other primary care services on a defined Journey Cycle Plan.

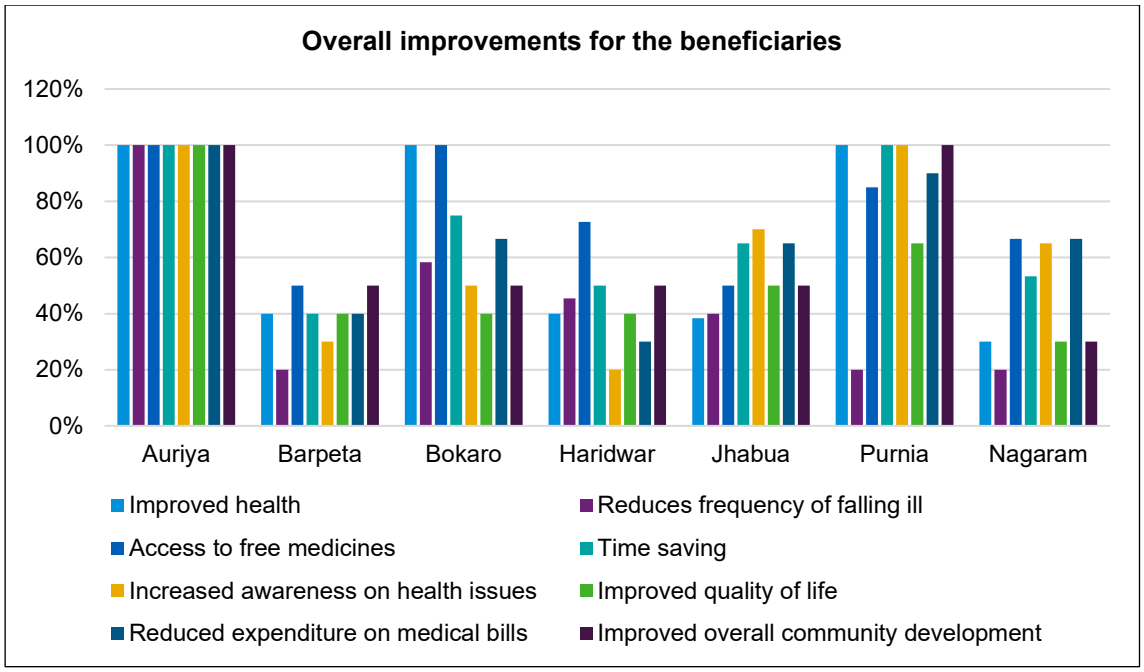


Figure 26: Post intervention improvements for beneficiaries

According to 100% of the respondents in Auraiya, Bokaro and Purnia, there was an improvement in their overall health and well-being due to the intervention. Furthermore, 58% respondents in Bokaro and 90% respondents in Purnia agreed that the intervention was instrumental in reducing the frequency of falling sick in their communities and 100% respondents in Auraiya stated that the intervention has helped in a saving a lot of time required to access healthcare.

All of the respondents stated that the intervention was successful in providing them with free medicines but only 30% respondents in Barpeta and 20% respondents in Haridwar reported an increase in their knowledge and awareness pertaining to healthcare issues prevalent in the community.

Majority of the respondents across locations agreed that they have seen an improvement in the overall quality of life of the people of their communities and stated that the intervention was instrumental in aiding and improving the overall development of the communities.

By providing access to quality healthcare services, people in underserved areas are able to receive the medical care they need, resulting in better health outcomes and improved quality of life. Additionally, the presence of the MMUs in underserved areas provides an incentive for medical professionals to provide quality healthcare in these areas, which helps to ensure that people in these areas have access to the best medical care possible.

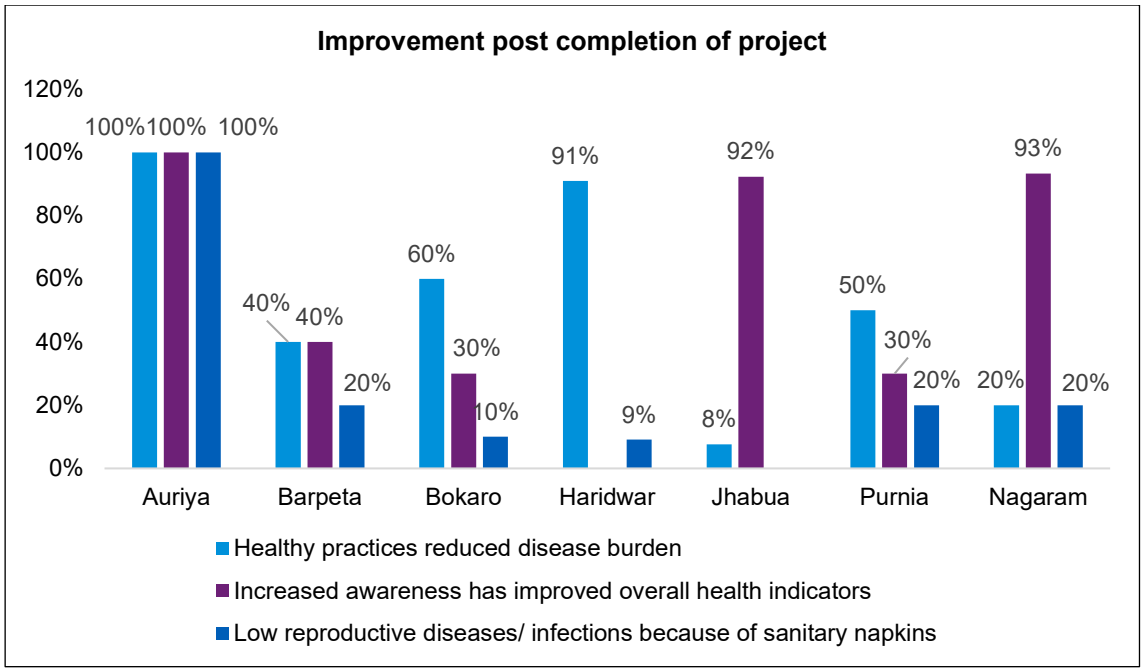


Figure 27: Improvement post-completion of the project

Post the completion of the project, 100% of the respondents from Auraiya, 91% of the respondents from Haridwar and 60% of the respondents from Bokaro have stated that the intervention has helped in inculcating healthy practices among the people of the communities, which has reduced the disease burden prevalent in the areas.

Figure 28: Medicines and packets of sanitary napkin distributed by the MMU

40% of the total respondents in Barpeta stated that the intervention had a significant impact in increasing awareness, which in turn, improved overall health indicators of the community.

20% of the respondents in Barpeta and Purnia pointed out the menstruating women of the communities have a reduced tendency of reproductive diseases/infections due to the provision of Moksha sanitary napkins by the MMU. This has helped in improving the overall condition of reproductive health and safety of the women and girls of these communities.

In addition to providing much-needed medical care to rural communities, these units also help to reduce health disparities. By providing access to medical care in rural areas, mobile medical units can help to reduce the gap between rural and urban healthcare, ensuring that everyone has access to the same level of care. Mobile medical units also

help to reduce the burden on existing healthcare facilities, freeing up resources and personnel to be used elsewhere.

1.7 Overall rating of the project

The scoring matrix was used to evaluate and score performance of the Project Arogya. The following table provides the overall rating across the defined parameters:

Location	Relevance	Coherence	Efficiency	Effectiveness	Impact	Branding	Sustainability	Total Score
Auraiya	80%	100%	100%	100%	95%	100%	100%	**95%**
Barpeta	80%	100%	100%	100%	65%	100%	100%	**91%**
Bokaro	80%	100%	100%	100%	85%	100%	100%	**94%**
Haridwar	80%	100%	100%	100%	65%	100%	100%	**91%**
Jhabua	80%	100%	100%	100%	90%	100%	100%	**95%**
Purnia	80%	100%	100%	100%	100%	100%	100%	**96%**
Nagaram	80%	100%	100%	100%	90%	100%	100%	**95%**
Total overall scoring								**94%**

Table 10: Overall scoring of project

Project Arogya in various states scored an average of **94%**. The project was aligned to GAIL's CSR policy and SDGs and were relevant to the needs of the community. The project was efficiently executed across the selected district within the allocated budget and timelines. The completion rate was 100% for the project and 100% of the beneficiaries surveyed were satisfied with the support being provided. The project's goal was to deploy a Mobile Medical Unit (MMU) to remote communities in the target districts of 11 states, to provide basic healthcare services and other facilities linked to awareness, medicines, and remedies for those who couldn't conveniently gain access to a hospital or clinic in their local vicinity.

For Auraiya, Bokaro, Jhabua, Purnia and Nagaram, the impact was significantly high whereas for Barpeta and Haridwar, it was comparatively low as per the impact report by the respondents across different indicators such as improvement in their health and illness post-intervention, reduction in expenditure on health post-intervention, relevance of the project in providing them with free medicines and timely treatment and increase in their awareness regarding the topics covered in the awareness sessions conducted by the MMUs.

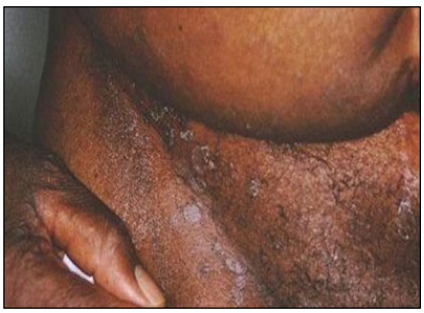
Since the overall score of the Project Arogya came to **94%**, this project can be rated as **"Highly Impactful"** in nature.

1.8 Case Studies

I. Krishnakant, Ghadanpur village, Auraiya

One of the MMU service provided by GAIL is in the villages of Auraiya, Uttar Pradesh. Krishnakant, a 63-year-old adult, resides in the village Ghadanpur of Auraiya district of Uttar Pradesh. Krishnakant was facing skin irritation due to multiple hyperpigmented and brownish patches on abdomen and right arm. He visited several private hospitals and took all types of Ayurvedic, Allopathic and Homeopathic medications but the problem was not resolved as the treatment did not work.

The situation was getting worse day by day, then on 4th November 2022 he visited the MMU VAN, on that day his BP was 140/90 mmHg and pulse was 72 b/m. as per the Lab examination his RBS was 110 mg/dl and Hb was 11.5 gm/dl. Dr. Ajit, who has been appointed at the GAIL MMU provided the treatment of Tablet Itraconazole 200mg and Tab levocet 5 mg HS along with an ointment ketopher cream LA. He was advised to avoid using soap and avoid fish, oily, junk food, alcohol & cigarette. On the Next Visit on 18th November 2022, the health condition of Krishnakant was little better but the skin was still pigmented and not fully cured. The treatment was continued until the next visit.



On the third visit on 9th December there was much improvement in the affected area. As per Doctor Ajit, Mr. Krishnakant was suffering from fungal infection and ring worm. He was given treatment for more than a month and by following the treatment and advice his situation is getting better day by day. Ringworm of body (tinea corporis) is a rash caused by a fungal infection. It's usually an itchy, circular rash. Ringworm often spreads by direct skin-to-skin contact with an infected person or animal. This kind of fungal infection rarely spreads below the surface of the skin to cause serious illness. But people with weak immune systems, such as those with HIV/AIDS, may find it difficult to get rid of the infection. With poor awareness in the community about basic prevention measures, the infection peaks, especially in villages. As patients do not get themselves treated in time, relapse of infection is common. These infections are contagious, so Dr. Ajit through the MMU has not only provided relief to the patient but also to the people of the village.

II. Mohsina, Zaurasi village, Haridwar

Mohsina was suffering from loss of bladder control problem since a long time. Over the course of time, her problem had increased and was making it difficult for Mohsina to continue her active lifestyle. She was experiencing urine leakage throughout the night due to severe loss of bladder control. This led

to a sense of embarrassment and reduced interaction with the community members. She avoided stepping out of her house.

Incontinence is a common condition in adult women and men in which they lose the control on their bladder and have an urge to urinate that's so sudden and strong that they face leaking. It affects their daily activities. The people who suffer from this disease find it difficult to empty the bladder.

One day, Mohsina decided to consult the doctor at MMU. The doctor made her comfortable so she could share the issue without any fear and he could diagnose the issue. The MMU did not have the medicine for this disease, so the doctor explained her the disease and how common it was and then referred her to a doctor who specialized in Urology at the district hospital.

On referral, Mohsina went to the doctor referred by the Van Doctor, who is specialized in female urology and urinary incontinence. As per the diagnosis of the Van doctor, the Urologist started the treatment. She was prescribed medication to relax bladder muscles. The treatment started to work gradually. Medication which relaxes bladder muscles is the best option for people who have overactive bladder, a condition characterized by frequent urination, feeling an urgent need to urinate, leaking urine, and nighttime urination.

Mohsina took the treatment in the hospital till August and continued the treatment suggested. The Urologist gave high marks to Van doctor for timely detection of the issue and referring to the hospital otherwise Mohsina could have gone into depression. Mohsina came back to the MMU, she said thanks to the MMU team which helped her to come out of her disease.

Mohsina said: *"I was facing the problem and could not take the proper treatment due to lack of information. The MMU Van health team and GAIL has helped a lot. The MMU team is doing a great job for the village people and specially for me, now I can again get back to my normal life without hesitation".*

III. Dilip Dangra, Kalyanpura village, Jhabua

Dilip Dangra, a 13-year-old boy, resides in the village Kalyanpura of Jhabua district of Madhya Pradesh. Dilip Dangra was facing itching and burning in the scalp, but his father Mangilal Dangra thought the same is not a serious issue and did not avail any treatment. Gradually, the itching and burning increased and the hair started falling from the affected area. He visited some private hospitals in the village, but they could not diagnose the actual issue and the treatment did not work.

The situation was getting worse day by day, then one day Mangilal got to know about the van visiting their village through one of his friends, he took his son to the MMU van. The Doctor checked Dilip and conducted some blood tests and diagnosed that Dilip was suffering from psoriasis fungal infection.

Psoriasis is an immune-mediated condition that affects the skin. It causes red, flaky, crusty patches of skin covered with silvery scales. The condition is not infectious, and most people are affected only in small patches on their body. Psoriasis occurs when the immune system mistakes a normal skin cell for a pathogen and sends out faulty signals that cause overproduction of new skin cells Psoriasis is not “just” a skin condition. It is said to be a complex disease with multiple impacts for patients’ lives.

In India, skin infections are the most prevalent disease and majority of such infections are found in villages of all the states of India. People belonging to economically weaker sections of the society are unable to get it diagnosed and even if diagnosed the treatment is so expensive that they are unable to afford the same.

Medicines were provided to Dilip free of cost and some awareness and hygiene policy was also suggested to him. Dilip started taking the precautions and the treatment. His condition has improved over time. His infection got cured and certain precautions and general care was suggested to him. Now in the affected area hair growth could be seen. This treatment received from the MMU has given relief to Dilip and his family.

IV. K. Satyanarayana, Turpulanka, Amalapuram, Andhra Pradesh

K. Satyanarayana, 62 years old, resident of Turpulanka, Amalapuram, Andhra Pradesh, met with a road accident which has transformed his life drastically. He was always a confident and independent person who loved living life in his own way but after this accident he suffered with Hemiplegic (partial or one-sided paralysis of body due to brain or spinal cord injuries). He lost his independence and confidence and became a burden on his caretakers. He was unable to live his life the way he used to. He became depressed and lost motivation to live his life. In his village there was lack of availability of medical facility which could help him recover and become independent. He lacked the financial resources required to travel to the city to get medical treatment.

Then one day he heard about the GAIL medical van which visited his village on a regular basis. With the help of GAIL, Wockhardt Foundation has provided MMU in his village Turpulanka, Amalapuram of Nagaram, Andhra Pradesh. These MMUs provide essential services and have aided in the mobilization of free of cost healthcare to conduct screenings, basic diagnosis, and occasionally complex medical treatments closer to people's homes."

He visited the MMU, where the doctor diagnosed the issue and provided the treatment. Post the treatment for a continuous period of 3-4 months, his paralysed limbs improved. Now he can walk without support. Most importantly, he has gained his confidence which was lost after the accident. now he does not need a full-time support to live his life, he can do things independently and is able to live his life his way once again.

V. Durga Prasad, Bokaro, Jharkhand

Durga Prasad, 27 years old, male; experienced from head to toe, itchy, raised scales. He was horrified seeing the red/brown patches of dry, raised skin all over his body. He had been suffering from this issue since the past few months and had visited many nearby private and government hospitals, but the actual disease could not be diagnosed, and the treatment given was not providing any relief.

When he heard about the MMU van, on enquiry he got to know that GAIL has provided the Mobile Medical Unit through the services of Wockhardt Foundation. Inaccessibility to proper health care and absence of medical facilities, poorly connected villages and limited mode of transport was a huge problem where he came from. Lack of health facilities, awareness and finances has always been a key reason in deteriorating the health of innocent villagers.

The MMU provides medical services for rural, underserved people suffering from medical issues, who have no access to medical facilities in the village, near to their homes.

As part of the treatment process, the doctor at the MMU took a blood sample and conducted some other diagnoses and concluded that he was suffering from Psoriasis. He felt a sense of relief to finally understand the issue with his skin. The doctor diagnosed and provided him medicines for treatment which he followed continuously for around 6 months. This in turn led to the Psoriasis patches on his body to subside.

The MMU service has helped him gain back the love for his body and helped him save thousands of rupees towards the treatment. This service has worked like a blessing from heaven for him.

1.9 Conclusion and Way Forward

India is a signatory to Article 25 of the Universal Declaration of Human Rights (1948) that grants the right to a standard of living adequate for good health and well-being of humans including food, clothing, housing and medical care and necessary social services. On the same line, Article 21 of the Indian constitution guarantees Right to Health as a fundamental right to life.

However, the Indian health sector faces several challenges like inadequate access to medical services, lack of preventive care, shortage of professionals, and paucity of resources. Social deprivation, especially in the areas of health and education, trumps economic progress and, ultimately, quality of life. The disadvantaged groups in society require special attention because they not only have less access and suffer inequality, but they also have the worst health results nationwide.

The project's aim was to mobilize a Mobile Medical Unit (MMU) to provide basic free healthcare services to poor groups who did not have access to the existing public health care system. The MMUs prioritised providing essential healthcare services as well as other services connected to awareness, drugs, and cures. The execution of this initiative contributed to reducing the pressure on already-established health-care systems and giving a cost-effective approach to healthcare.

The project has been successful in providing access to quality care for many rural health conditions, including as infectious diseases, malnutrition, hypertension, and diabetes. Furthermore, in some instances, the MMUs have made specialist treatments such as immunisations, prenatal care, and family planning available. The availability of the MMUs have been critical in bridging the access gap to healthcare services in remote and rural locations.

Overall, the project has had a significant positive impact on rural people's quality of life. These units have enhanced the quality of life in countless rural areas by increasing access to medical care and reducing healthcare inequities.

However, to further maximize the impact and enhance the project outcomes, the following recommendations are suggested:

1. **Increased coverage of diseases and illnesses:** The MMUs have been impactful in covering a number of diseases like vector-borne diseases, hepatitis, typhoid, common cardiac problems, HIV, diabetes, etc. According to the respondents, there is a need to increase the scope of coverage of the number of diseases being covered by the MMUs in terms of awareness, diagnosis, and treatment. Respondents stated that if MMUs covered more illnesses, particularly chronic ailments, it would benefit the entire community and reduce the cost of healthcare per household significantly. This would also help to improve the quality of life for patients suffering from chronic illnesses that MMUs are yet to address.

2. **Frequent availability of the MMU:** The respondents, though satisfied with the improvements in the community due to the intervention, highlighted the need for a medical unit to be available in the district on a more frequent basis. This would aid them in availing medical care as and when required and they would not have to wait for the weekly MMU visit to resolve their medical issues. Respondents stated that the MMUs can also act as a pharmacy for the communities because they do not have access to a pharmacy to meet their medicinal needs, and that if the MMUs are

available more frequently, it may be able to offer medicines on a much more regular basis.

3. **Digital Infrastructure to Expand Scale of Quality Healthcare Access:** Accessing MMU facilities is often a challenge for people residing in the interiors. The concept of telemedicine has grown in the last few years, especially due to the physical-distancing measures that were put into place due to the pandemic. Fast exchange of patient information, timely advice, and last-mile connectivity with patients are some of the reasons for its growing demand[21]. Telemedicine can tackle inequity and lack of healthcare access. Where required, teleconsultation can ensure availing telemedicine services on-the-go and enhance healthcare[22].

4. **Increased access to medicines for various diseases:** During interaction with the beneficiaries in some locations, it was noted that the stock of medicines available at the van was limited due to which there was lack of availability of sufficient medicines at times to be distributed to all the beneficiaries that visited the vans on a regular basis. To curb this issue, the MMUs can be stocked in advance with the medicines that are in demand in a specific area, which would ensure regular access of medicines to the beneficiaries and reduce the wait time to procure medicines.

5. **Increase in the frequency of awareness sessions:** In majority of the locations visited, it was observed that the villages where awareness sessions had been conducted and where the beneficiaries had attended the sessions, there was considerable increase in their knowledge and understanding of ensuring proper healthcare. Their overall health had also improved. Keeping this in mind, the implementing agency may ensure more frequent awareness sessions and mobilization, especially in villages where beneficiaries are reluctant to attend the sessions so that there is an increase in coverage and outreach in terms of greater sensitization of the villagers.

21 Telemedicine in India: Healthcare System With Telemedicine: Knowledge Hub: Social Innovation: Hitachi (social-innovation.hitachi)

22 Telemedicine in India: Healthcare System With Telemedicine: Knowledge Hub: Social Innovation: Hitachi (social-innovation.hitachi)

Thank you

kpmg.com/socialmedia