LUPIN Human Welfare & Research FOUNDATION

IMPACT ASSESSMENT REPORT

LIVES NCD PROGRAMME (DESH BANDHU JAN AAROGYA PARIYOJANA)

IMPLEMENTATION YEAR: 2023-24

ASSESSMENT YEAR: FY 2025-26

SoulAce
Path to Sustainability
SOULACE CONSULTING PVT. LTD.

IMPLEMENTED BY

Lupin Human Welfare & Research Foundation (LHWRF)

CONTENTS

ABBREVIATIONS

ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
BP	Blood Pressure
CBC	Complete Blood Count
CHO	Community Health Officer
CHC	Community Health Centre
CSR	Corporate Social Responsibility
DAC	Development Assistance Committee
ECG	Electrocardiogram
FGD	Focus Group Discussion
HSS	Health System Strengthening
HWC	Health and Wellness Centre
IHCI	India Hypertension Control Initiative
LASI	Longitudinal Ageing Study in India
LHWRF	Lupin Human Welfare & Research Foundation
MMV	Mobile Medical Van
MO	Medical Officer
NCD	Noncommunicable Disease
NHM	National Health Mission

NPCDCS	National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke
OECD	Organisation for Economic Co-operation and Development
PHC	Primary Health Centre
PM-JAY	Pradhan Mantri Jan Arogya Yojana
PRI	Panchayati Raj Institution
SBCC	Social Behaviour Change Communication
SDG	Sustainable Development Goal

EXECUTIVE SUMMARY

PROJECT BACKGROUND

The LIVES NCD Programme, also known as the Desh Bandhu Jan Aarogya Pariyojana, was implemented by Lupin Human Welfare & Research Foundation during FY 2023–24 in Alwar district, Rajasthan, and Palghar district, Maharashtra, to strengthen the early detection, prevention, and management of noncommunicable diseases. The programme adopted an integrated three-component model comprising Social Behaviour Change Communication, Community Screening and Mobile Health Van Services, and Health System Strengthening to address critical gaps in awareness, access to diagnostics, treatment linkage, and continuity of care among underserved rural and peri-urban populations.

The impact assessment was conducted during FY 2025–26 using a descriptive, comparative design that covered both intervention and control groups. A total of 680 intervention beneficiaries were surveyed across both districts, along with a control group of 179 respondents from Alwar district and 121 respondents from Palghar district. The assessment examined programme performance across behavioural, clinical, service delivery, and system-level outcomes, with a specific focus on early detection, treatment initiation, follow-up practices, financial protection, service quality, and health system readiness. The evaluation provides evidence on programme effectiveness, attribution of outcomes, and learning for sustainability and scale-up of community-to-facility NCD care models.

PROJECT DETAILS

Implementation year
FY 2023-24

Assessment year
FY 2025-26

Total Beneficiaries
26,790

Location (Districts)
- Alwar District, Rajasthan
- Palghar District, Maharashtra

Location (Blocks Covered)
- Alwar: Reni, Kherli, Laxmangarh, Rajgarh (4 Blocks)
- Palghar: Palghar, Dahanu (2 Blocks)

Total Budget
₹7,32,33,569 (Alwar: INR 3,88,64,159; Palghar: INR 3,43,69,410)

Implementing Partner
Lupin Human Welfare & Research Foundation (LHWRF)

Assessment Sample
- Intervention Group: **680 beneficiaries**
- Control Group: **300 beneficiaries**

PROJECT ACTIVITIES

Conducted community-based screening of adults aged 30 years and above for early identification of NCD risk.

Deployed Mobile Medical Vans for diagnostic services and specialist consultation at PHCs and CHCs.

Organised diagnostic and specialist camps for confirmation and clinical management of NCD conditions.

Provided free doctor consultations, essential medicines, and lifestyle counselling to diagnosed beneficiaries.

Implemented Social Behaviour Change Communication activities through wall paintings, street plays, and installation of open gyms.

Strengthened public health facilities and NCD corners through infrastructure, equipment, and staffing support.

Conducted training and capacity building of healthcare staff for NCD screening, diagnosis, and follow-up.

Established referral linkage and follow-up mechanisms to ensure continuity of NCD care.

ALIGNMENT WITH SUSTAINABLE DEVELOPMENT GOALS

ALIGNMENT WITH GOVERNMENT INITIATIVES

- National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS)
- Ayushman Bharat – Health and Wellness Centres (HWCs)
- National Health Mission (NHM)
- India Hypertension Control Initiative (IHCI)
- National NCD Portal and Population-Based Screening Programme
- Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (PM-JAY)

KEY FINDINGS AND IMPACT

COMPONENT 1: SOCIAL BEHAVIOUR CHANGE COMMUNICATION (SBCC)

KEY FINDINGS

97.1%
were aware of wall painting messages, 95.2% witnessed street plays, and 95.2% were aware of the open gym facility.

82.4%
learned the importance of early screening after SBCC exposure.

81.4%
discussed health issues with family members, and 79.5% shared SBCC messages within their social networks.

97.5%
reported a clear understanding of the wall paintings.

97.0%
of street plays related to real-life NCD risks, and 93.5% reported motivation toward preventive action

95.8%
reported improved access through the open gym, and 93.8% acknowledged reinforcement from multiple SBCC activities.

KEY IMPACTS

96.2%
reported confidence in managing their personal health after SBCC exposure.

96.2%
expressed responsibility to promote healthy habits in the community.

81.4%
started regular exercise or walking following SBCC activities.

72.4%
got BP or sugar levels checked after SBCC exposure.

71.4%
reported a very positive impact on their lifestyle after participating in SBCC.

61.9%
reported regular physical activity (daily or 3–4 times per week).

BENEFICIARY INTERACTION AT PALGHAR DURING FIELD VISIT

COMPONENT 2: COMMUNITY-BASED SCREENING AND MOBILE MEDICAL VAN SERVICES

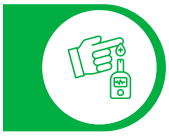
KEY FINDINGS

100.0%
of respondents visited the mobile health van following community screening.

98.3%
of respondents received household screening visits through community mobilisation.

97.7%
were advised to start or continue medicines after diagnosis.

95.0%
underwent blood pressure testing, and 93.7% blood sugar testing during home visits.



95.3%
received blood pressure testing, and 90.7% blood sugar testing at the mobile health van.

90.0%
of respondents were formally referred to the mobile health van after screening.

91.7%
reported the mobile health van location as very easy to access.

89.0%
reported a clear understanding of their health condition after counselling.

87.7%
received a clear explanation for referral before visiting the mobile health van.

86.0%
rated registration and flow as very good, and 84.3% rated staff behaviour as very good.

99.3%
of respondents expressed willingness to recommend the programme to others.

KEY IMPACTS

98.0%
of beneficiaries started or continued medicines following programme exposure.

97.3%
of beneficiaries reported being very satisfied with programme services.

67.3%
identified early detection of health risks as the most important benefit received from the programme.

62.0%
increased physical activity or used the open gym after programme participation.

The "test-to-treatment" cycle was drastically shortened by MMV-supported sample collection and digital reporting, preventing patient drop-outs common with delayed results.

COMPONENT 3: HEALTH SYSTEM STRENGTHENING

KEY FINDINGS

80.0%
of respondents rated the government facility as "better than private," successfully positioning PHCs and CHCs as the primary point of care for NCDs.

The provision of digital tools (glucometers, tablets) enabled faster assessments and increased capacity to handle patient load.

Beneficiaries reported high satisfaction with the integrated service model, in which BP checks, diagnostics, and consultations occur during a single visit, eliminating the need for multiple trips.

KEY IMPACTS

99.4%
of patients reported physical comfort during examinations, attributing it to professional equipment like examination tables.

98.8%
were satisfied with seating availability, reducing fatigue for elderly patients.

98.2%
praised the cleanliness and privacy of the facilities, fostering a sense of safety and dignity.

96.5%
of respondents avoided 1–6 annual trips to distant district headquarters or private labs.

This decentralisation saved beneficiaries significant travel costs and daily wages, removing financial hurdles to testing.

Despite some connectivity challenges, the digitisation of patient records improved data accuracy and continuity of care, enabling staff to monitor treatment adherence and patient history better.

SOCIAL RETURN ON INVESTMENT (SROI)

KEY IMPACTS (VALUE FOR MONEY)

1.77: 1
is the Year 1 SROI ratio, indicating that for every INR 1 invested, INR 1.77 of social value was generated within the implementation year itself.

5.31: 1
is the five-year cumulative SROI ratio, reflecting the compounding value of early detection, disease prevention, and avoided future hospitalisations.

INR 16.49 Crore
was the total Gross Value generated in Year 1 against an investment of INR 7.32 Crore.

INR 9.29 Crore
was the estimated value of avoided hospitalisation costs for high-risk patients identified early by the programme.

BENEFICIARY INTERACTION DURING FIELD VISIT

CHAPTER 1
INTRODUCTION

Data collection with the Beneficiaries at the Bordi Camp, Palghar

BACKGROUND AND NEED OF THE PROJECT

Noncommunicable diseases (NCDs), including cardiovascular disease, diabetes, chronic respiratory disease and cancers, represent the leading cause of morbidity and mortality in India and constitute a major public health challenge, particularly among older adults and underserved populations. The rising prevalence of NCDs, coupled with delayed diagnosis and treatment, contributes to avoidable disability, increasing household out-of-pocket expenditure and growing pressure on secondary and tertiary healthcare services[1].

Rural and peri-urban districts face additional systemic barriers, including limited diagnostic capacity at the local level, long travel distances to specialised facilities, irregular availability of essential medicines, and weak continuity of care.

National policy guidance emphasises the importance of decentralising screening and basic diagnostics, and of strengthening NCD clinics at primary and community health facilities, to enable early detection and long-term management of chronic conditions[2].

The LIVES programme, implemented by Lupin Human Welfare and Research Foundation in Alwar district of Rajasthan and Palghar district of Maharashtra during FY 2023–24, has been designed to address these service gaps through an integrated model of community outreach, mobile diagnostics, behaviour change communication, and facility strengthening.

The programme combines household screening by community mobilisers, deployment of Mobile Medical Vans for on-site diagnostics and specialist camps, establishment of NCD corners at PHC and CHC level, and behaviour change interventions through wall paintings, street plays and open gyms to promote prevention and follow-up[3]. Early programme experience demonstrates high outreach, diagnostic utilisation and community acceptance, consistent with evidence from community and mobile screening initiatives in comparable Indian settings.

In the context of the national NCD burden, the policy priority for decentralised care, and the structural constraints faced by rural populations, the LIVES approach is well positioned to reduce diagnostic delays, strengthen treatment linkage, and limit catastrophic household health expenditure. By integrating early detection through community and mobile platforms with strengthened facility readiness and sustained behaviour change communication, the programme establishes a continuous pathway from awareness to long-term care that directly addresses the principal access, quality and continuity gaps observed in districts such as Alwar and Palghar.

Programme Coverage and System Footprint

INDICATOR	ALWAR DISTRICT	PALGHAR DISTRICT	TOTAL
Blocks Covered	4	2	6
Villages Covered	160	120	280
Mobile Medical Vans	1	1	2
Public Facilities Strengthened	9	9	18
Staff Deployed	84	59	143

Sources:

- *WHO — Noncommunicable diseases (global fact sheet).*
- *Government of India — NP-NCD / NPCDCS operational guidance on community screening and NCD clinics.*
- *Lupin Human Welfare & Research Foundation — LIVES programme summary/press release (programme scope, MMVs, FY2023–24 Alwar & Palghar).*

OBJECTIVES OF THE PROJECT

To improve access to quality NCD screening, diagnostic and treatment services for adults in selected blocks of Alwar and Palghar districts.

To support early detection and effective management of Noncommunicable Diseases through community-based screening and mobile diagnostic platforms.

To promote preventive health behaviour and lifestyle modification through structured Social Behaviour Change Communication interventions.

To strengthen public health facilities and NCD service delivery systems through infrastructure support, equipment provision and service readiness.

To build the capacity of healthcare staff for improved screening, diagnosis, counselling and long-term management of NCDs.

To reduce disease complications and long-term NCD burden through timely intervention, continuous monitoring and sustained follow-up care.

CHAPTER 2
RESEARCH METHODOLOGY

SoulAce & Lupin team members in Palghar during field visit

RESEARCH METHODOLOGY

This chapter outlines the research methodology adopted for the impact assessment of the LIVES Program. The assessment examined programme outcomes across three intervention components: Social Behaviour Change Communication, Community Screening and Mobile Health Van Services, and Health System Strengthening.

The study covered two respondent groups: an intervention group comprising beneficiaries who received programme services in both districts, and a control group drawn from comparable populations in Alwar district not exposed to the programme. This design enabled systematic assessment of programme outcomes and attribution of observed changes to the intervention.

OBJECTIVES OF THE STUDY

The impact assessment was undertaken with the following core objectives:

- To assess the effectiveness of the programme in improving early detection of noncommunicable diseases through community screening and mobile diagnostic services.
- To evaluate changes in health behaviour, treatment initiation, and follow-up practices among programme beneficiaries.
- To assess the contribution of SBCC interventions in improving awareness, preventive orientation, and lifestyle modification.

To examine improvements in access, quality, and efficiency of NCD service delivery at community and facility levels.

To assess the role of the programme in strengthening public health systems through infrastructure, equipment, and service readiness.

To generate evidence-based recommendations for strengthening the sustainability and scalability of community-to-facility NCD care models.

RESEARCH DESIGN

The study adopted a descriptive-comparative research design using a mixed-methods approach. Quantitative surveys were conducted among intervention and control beneficiaries to measure programme outcomes related to detection, behaviour change, service utilisation, and patient experience. Qualitative methods were applied to capture in-depth perspectives on service delivery, counselling quality, behavioural change processes, and health system strengthening.

The inclusion of both intervention and control groups enabled systematic comparison of outcomes and strengthened attribution of observed effects to programme interventions.

APPLICATION OF QUANTITATIVE TECHNIQUES

Quantitative techniques were applied to assess programme performance across screening coverage, disease detection, treatment initiation, behaviour change, service experience, and financial protection outcomes. Structured questionnaires were administered to intervention beneficiaries in both districts and to control beneficiaries in Alwar district. Data analysis focused on percentage distributions, thematic grouping of indicators, and comparative interpretation between intervention and control groups to assess differential programme effects and outcome patterns.

APPLICATION OF QUALITATIVE TECHNIQUES

Qualitative techniques were applied to complement quantitative findings and to capture contextual, experiential, and system-level insights. In-depth interviews, focus group discussions, case studies, and beneficiary testimonials were conducted with beneficiaries, healthcare providers, programme staff, and community stakeholders. Qualitative inquiry explored counselling quality, care pathways, behaviour change processes, service readiness, continuity of care, and community trust, thereby providing explanatory depth to quantitative outcomes.

ENSURING TRIANGULATION

Triangulation was achieved through systematic integration of quantitative and qualitative evidence and by comparing beneficiary responses with the perspectives of service providers and programme teams. Findings across components, districts, respondent categories, and data collection methods were cross-validated to ensure consistency, reduce bias, and strengthen the assessment's credibility. This approach enabled robust interpretation of outcomes and improved confidence in programme attribution.

STANDARDISED FRAMEWORK FOR EVALUATION

The assessment applied the OECD–DAC evaluation framework to guide analysis across relevance, effectiveness, efficiency, impact, and sustainability dimensions. The framework provided a structured basis for interpreting programme outcomes, assessing performance across components, and generating policy-relevant conclusions and recommendations.

DESIGN SNAPSHOT

Name of the project
LIVES NCD Programme (Desh Bandhu Jan Aarogya Pariyojana)

Implementing organisation
Lupin Human Welfare & Research Foundation (LHWRF)

Research design
Descriptive and Comparative Research Design

Sampling technique
Purposive Sampling

Sample size
680 intervention beneficiaries and 300 control beneficiaries from Alwar, Rajasthan and Palghar, Maharashtra

Quantitative Methods
Structured beneficiary surveys

Qualitative Methods
In-depth interviews, FGDs, case studies, testimonials

KEY STAKEHOLDERS COVERED

- AUXILIARY NURSE MIDWIVES (ANMS)
- COMMUNITY HEALTH OFFICERS (CHOS)
- MEDICAL OFFICERS
- DATA OPERATORS
- PROGRAMME TEAM MEMBERS
- MMV TEAM MEMBERS
- PRI MEMBERS
- PRI MEMBERS
- VILLAGE LEADERS AND OPINION LEADERS
- ASHA WORKERS

SAMPLING FRAMEWORK

A purposive sampling strategy was adopted to select beneficiaries and stakeholders across districts and components.

Sampling Framework:

STATE	DISTRICT	COMPONENT	SAMPLE GROUP	SAMPLE SIZE
Rajasthan	Alwar	Component 1 – SBCC	Intervention	104
Rajasthan	Alwar	Component 2 – Screening & MMV	Intervention	124
Rajasthan	Alwar	Component 3 – HSS	Intervention	103
Rajasthan	Alwar	All Components	Control	150
Maharashtra	Palghar	Component 1 – SBCC	Intervention	106
Maharashtra	Palghar	Component 2 – Screening & MMV	Intervention	176
Maharashtra	Palghar	Component 3 – HSS	Intervention	67
Maharashtra	Palghar	All Components	Control	150
Total				**980**

INTERACTION WITH BENEFICIARIES DURING FIELD VISIT, PALGHAR

UPHOLDING RESEARCH ETHICS

INFORMED CONSENT
Prior informed consent was obtained from all participants before data collection.

VOLUNTARY PARTICIPATION
Participation was entirely voluntary, with the right to withdraw at any stage without consequence.

CONFIDENTIALITY
Personal identifiers were removed, and respondent anonymity was maintained in all datasets and reports.

PRIVACY
Interviews and discussions were conducted in settings that ensured participants' privacy and comfort.

NON-MALEFICENCE
No physical, psychological, or social harm was caused to any respondent during the study.

DATA SECURITY
All data were stored securely and used solely for research and reporting purposes.

TRANSPARENCY
Findings are presented objectively without misrepresentation or selective reporting.

INTERACTION WITH CONTROL GROUP AT PALGHAR

03. KEY FINDINGS AND IMPACT

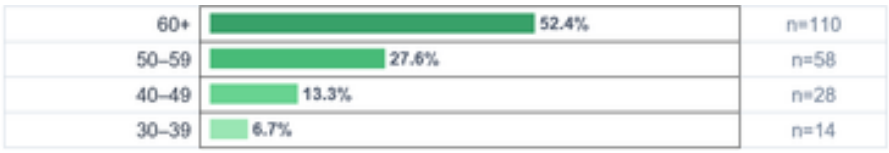
This chapter presents the key findings and impact of the LIVES NCD Programme across its three intervention components: Social Behaviour Change Communication, Community Screening and Mobile Health Van Services, and Health System Strengthening. Drawing on quantitative and qualitative evidence, the analysis assesses outcomes related to behaviour change, early detection, service utilisation, patient experience, financial protection, and health system readiness. Findings are presented component-wise to reflect the progression from awareness and prevention to diagnosis, treatment, and continuity of care, and to examine differential outcomes between intervention and control groups.

COMPONENT 1: SOCIAL AND BEHAVIOUR CHANGE COMMUNICATION (SBCC) – EXPOSURE AND EARLY BEHAVIOURAL OUTCOMES

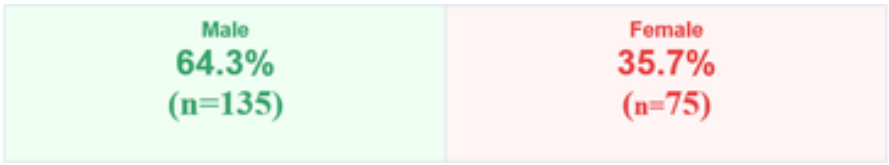
This component assesses the effectiveness of SBCC interventions in initiating awareness, shaping health perceptions, and triggering early preventive behaviour related to NCD risks. It examines the pathway from community reach and message exposure to behaviour initiation, habit formation, spillover effects, channel effectiveness, and empowerment outcomes. The analysis draws on participant responses and selective comparison with a control group to evaluate how SBCC activities contributed to individual behaviour change, community diffusion, and overall lifestyle improvement.

DEMOGRAPHIC PROFILE OF RESPONDENTS

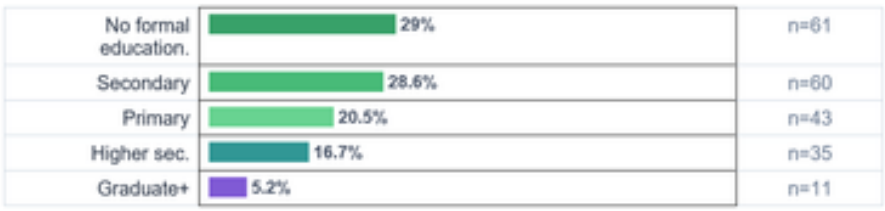
AGE GROUP DISTRIBUTION



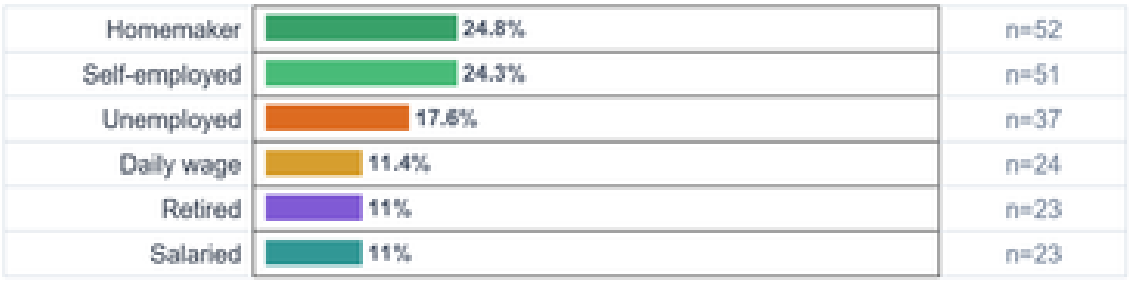
GENDER DISTRIBUTION



EDUCATION LEVEL



OCCUPATION



MONTHLY HOUSEHOLD INCOME

INCOME BRACKET	PERCENTAGE	
Less than Rs. 5,000	12.9%	27
Rs. 5.001 - Rs. 10,000	9.5%	20
Rs. 10,001 - Rs. 15,000	27.1%	57
Rs. 15,001 - Rs. 25,000	21.0%	44
Rs. 25,001 - Rs. 40,000	2.9%	6
More than Rs. 40,000	0.5%	1
Prefer not to say	26.2%	55

The Community LUPIN component surveyed 300 beneficiaries accessing mobile health van services. The age distribution indicated a high concentration of older adults, with 61.3% aged 60 and above and an additional 25.3% aged 50-59. This demographic concentration aligned with epidemiological findings from the Longitudinal Ageing Study in India (LASI), which established a steep increase in NCD prevalence (particularly hypertension and cardiovascular diseases) among older adults. Consequently, the mobile screening intervention successfully targeted the primary at-risk demographic for chronic conditions.

The cohort comprised 52.3% males and 47.7% females, representing a relatively balanced gender parity for community-based health outreach. Income data revealed that 48.0% of beneficiaries earned between INR 300 and INR 500 per day, while 42.0% reported daily earnings below INR 300. In total, 90.0% of the surveyed population had a daily income of INR 500 or less. This income profile clearly situated the vast majority of beneficiaries within low-income brackets. Extensive health economics research indicates that populations within this economic stratum are highly vulnerable to catastrophic health expenditure (CHE) when seeking chronic disease diagnosis and treatment in the private sector. The provision of free, point-of-care screening via mobile health vans therefore functioned as a critical intervention to bypass initial financial and geographical barriers to early NCD detection.

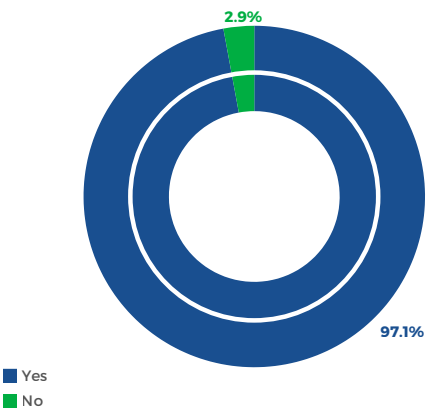
REACH AND EXPOSURE TO SBCC CHANNELS AND BEHAVIOUR-ENABLING FACILITIES

This theme presents the extent of community reach achieved through key SBCC channels and associated facilities. It highlights early exposure levels that form the foundation for awareness generation and behaviour initiation.

KEY FINDINGS

REACH AND VISIBILITY OF WALL PAINTING–BASED SBCC ACTIVITIES

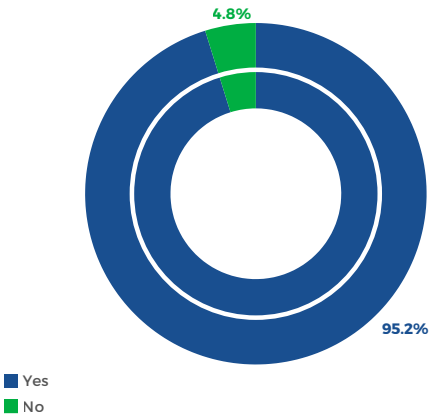
CHART 1: AWARENESS OF HEALTH AND LIFESTYLE WALL PAINTINGS UNDER LIVES



Awareness of wall-painting–based SBCC activities is exceptionally high, with 97.1% of respondents reporting having seen health and lifestyle messages displayed in public spaces. This widespread visual recall indicates that the messages have successfully penetrated community environments and, at a minimum, registered at a subconscious level. Such constant, passive exposure enhances message retention, normalises conversations about communicable diseases, and increases community members' readiness to adopt preventive behaviours.

COMMUNITY REACH THROUGH STREET PLAY–BASED SBCC ACTIVITIES

CHART 2: EXPOSURE TO STREET PLAYS UNDER LIVES

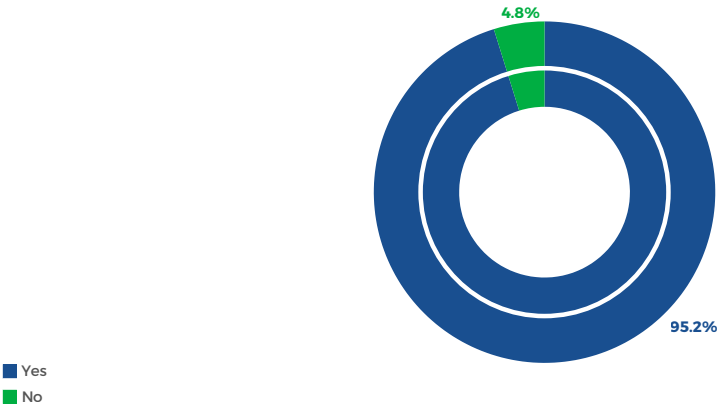


A high recall rate of 95.2% for street-play–based SBCC activities reflects not only extensive exposure but also the way these performances connected with people in their everyday lives. Many respondents shared that the plays felt "close to real situations" and made health issues easier to understand. Their accounts suggest that seeing familiar characters and scenarios helped the messages stay with them, strengthening awareness of health risks and encouraging a more thoughtful, preventive outlook in their daily routines.

INTERACTION WITH THE PATIENTS WHO VISITED CAMPS AT PALGHAR

AWARENESS OF BEHAVIOUR-ENABLING INFRASTRUCTURE UNDER SBCC

CHART 3: AWARENESS OF OPEN GYM INSTALLED UNDER LIVES



With **95.2% of respondents** reporting awareness of the open gym facility set up under the programme, it is clear that the infrastructure has strong visibility within the community. Many respondents mentioned that they "see it while passing by" or have noticed others regularly using the equipment, indicating that the facility has become a familiar part of their surroundings. This widespread awareness suggests that the SBCC messages promoting physical activity are well-supported by a tangible, easily accessible space—helping community members connect health advice with real opportunities to stay active.

AWARENESS AND KNOWLEDGE IMPROVEMENT FOLLOWING SBCC EXPOSURE

This theme examines improvements in health knowledge and perceptions following exposure to SBCC. It highlights early cognitive shifts that support preventive behaviour. The high awareness levels can be attributed to regular follow-ups and sustained exposure to programme-led awareness activities since FY 2024–25, given that this is an ongoing intervention.

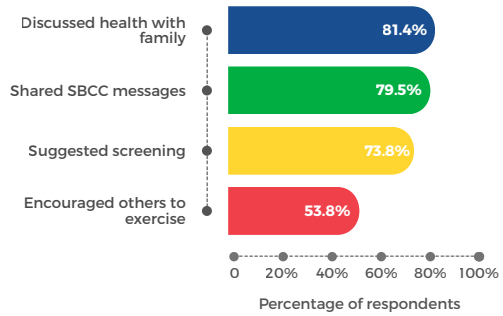
LEARNING OUTCOMES AFTER SBCC EXPOSURE

LEARNING OUTCOME	% OF RESPONDENTS	WHAT BENEFICIARIES SHARED	INTERPRETATION
Awareness of the importance of early screening	82.4%	"We came to know that checking early can prevent bigger problems later. Earlier, we used to ignore symptoms; now we understand we should get screened."	Indicates a strong cognitive shift toward recognising screening as a preventive action rather than just a treatment step.
Improved understanding of NCD risk factors	72.9%	"Now we know things like oily food, no exercise, and stress can cause BP and sugar. Before this, we didn't connect our habits to disease."	Shows that people are beginning to link daily lifestyle choices with long-term health risks.
Better knowledge of prevention methods	60.5%	"We learned that simple habits—walking, reducing salt—can help avoid disease. After the sessions, we started thinking about changing our food and routines."	Reflects movement from awareness toward actionable understanding of prevention.
Basic understanding of NCDs	58.6%	"We didn't know what NCDs meant earlier; now we understand they are long-term diseases. Now we can identify what BP, sugar, and heart problems come under."	Suggests foundational knowledge-building that strengthens the base for deeper behaviour change.

COMMUNITY SPILLOVER

COMMUNITY-LEVEL SHARING AND PROMOTION OF PREVENTIVE BEHAVIOURS

CHART 4: COMMUNITY SPILLOVER ACTIONS FOLLOWING SBCC EXPOSURE



1.Discussing Health Issues with Family (81.4%)

Most respondents said they now talk about health more openly at home—for example, reminding spouses or elders to reduce salt intake, check BP, or avoid late-night eating.

2. Sharing SBCC Messages with Others (79.5%)

Many reported passing on key messages to neighbours and friends, often describing scenes from the street plays or explaining posters they had seen.

3. Suggesting Health Screening (73.8%)

Respondents said they encouraged relatives or co-workers to get BP or blood sugar tests, especially after learning that early detection can prevent complications.

4. Encouraging Physical Activity (53.8%)

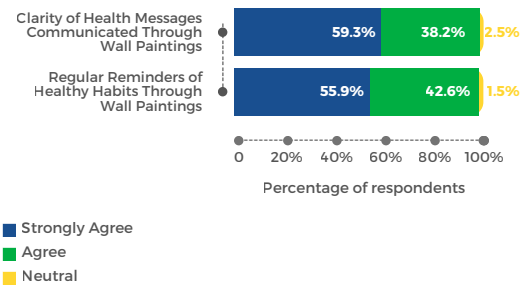
Over half motivated others to adopt small daily habits—such as taking evening walks, reducing sitting time, or doing simple exercises.

> After attending the programme activities, I started talking to my family about health and encouraged them to get their tests done and walk regularly. Now we discuss these issues openly at home.
>
> **- Bharti Prakash, Palghar, Maharashtra**

CHANNEL EFFECTIVENESS

EFFECTIVENESS OF WALL PAINTINGS IN MESSAGE DELIVERY AND REINFORCEMENT

CHART 5: MESSAGE CLARITY AND REMINDER EFFECT OF WALL PAINTINGS



1.Clarity of Health Messages (97.5%)

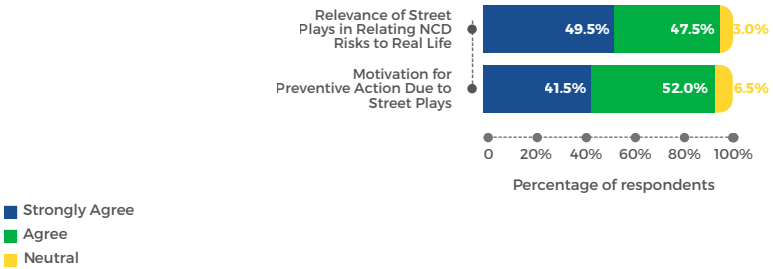
Most respondents agreed that the wall paintings conveyed health messages clearly, showing that this medium is highly effective and trusted for communicating preventive information.

2.Regular Reminders for Healthy Habits (98.5%)

Nearly all respondents said the wall paintings acted as constant reminders—helping reinforce healthy behaviours because the messages stay visible in daily community spaces.

EFFECTIVENESS OF STREET PLAYS IN ENGAGEMENT AND BEHAVIOUR MOTIVATION

CHART 6: RELEVANCE AND MOTIVATIONAL EFFECT OF STREET PLAYS



Among those who watched the street plays, 97% reported that they were able to relate the content to real-life non-communicable disease (NCD) risks, and 93.5% stated that the plays motivated them to adopt preventive actions such as screening and dietary modification.

INTERVIEW WITH MS RIDDHI SANKHE, MEDICAL OFFICER

Dr Riddhi Sankhe, posted at the PHC since March 2024 and serving a population of nearly 46,800, oversees NCD screening, diagnosis, treatment, medicine dispensing, record maintenance, and follow-up coordination. She noted that before the LIVES programme, screening coverage and awareness were limited, follow-up was irregular, and access to medicines and diagnostics was inadequate, despite a high burden of hypertension and diabetes.

With LHWRF support, the facility received essential diagnostic equipment and digital tools, improving measurement accuracy, patient flow, staff efficiency, and service quality. Diagnostic access strengthened through MMV-supported sample collection, lab partnerships, faster reporting, and digital communication. NCD screening increased significantly due to better equipment, CHO training, ASHA mobilisation, and regular screening camps, enabling earlier identification of elderly and high-risk patients.

She highlighted improved staff competencies, stronger data systems for follow-up planning, and effective MMV integration that reduced facility load, expanded outreach to remote areas, and improved continuity of care. Community awareness and health-seeking behaviour improved through SBCC activities, while facility workflows became more systematised and aligned with NPCDCS and HWC goals. Ms Riddhi identified remaining gaps in medicine supply, diagnostics, staffing, and connectivity. She recommended maintaining regular drug availability, expanding diagnostics, providing refresher training, strengthening MMV linkages, and improving data systems to sustain and scale NCD services across PHCs.

KEY IMPACTS

BEHAVIOUR INITIATION AND EARLY HABIT FORMATION

This theme examines early adoption of preventive behaviours and their transition into regular habits following SBCC exposure.

COMPARISON OF BEHAVIOUR CHANGES: EXPERIMENTAL VS CONTROL GROUP

BEHAVIOUR INDICATOR	EXPERIMENTAL GROUP (SBCC EXPOSURE)	CONTROL GROUP
Increased physical activity /started exercising	81.4% – SBCC messages strongly motivated regular physical activity, a key preventive behaviour. This reflects a major shift towards healthier routines.	37.7% – Fewer adopted exercise without SBCC cues, showing limited motivation for lifestyle change in the absence of targeted awareness.
Got BP/sugar checked	72.4% – Awareness campaigns encouraged early detection, prompting many to undergo screening. Regular checks help identify risks early.	37.7%- The control group showed treatment-focused behaviour rather that preventive screening.
Improved diet	65.7% – Many reduced salt, oil, and sugar after SBCC exposure, reflecting strong message internalisation. Diet change directly reduces NCD risks.	35.7% – Far fewer adopted healthier diets, indicating that without SBCC reinforcement, dietary improvement is less likely.
Reduced tobacco/alcohol use	51.4% – The intervention helped many reduce their use of harmful substances, supporting long-term NCD prevention.	37.7% – Moderate, mainly self-driven changes; absence of SBCC messaging led to lower impact.
Used open gym / physical activity infrastructure	42.4% – SBCC, combined with accessible infrastructure, encouraged sustained exercise, especially valuable in rural areas with limited gym access.	(Not applicable) – No comparable facility or behaviour reported in the control group.

Relative to programme participants, responses from the control group reflected markedly weaker empowerment and lifestyle orientation. Survey interactions indicated lower confidence in managing personal health, a limited sense of responsibility toward promoting healthy habits, and more restrained perceptions of lifestyle improvement. Satisfaction with access to NCD care also remained comparatively modest, suggesting that in the absence of SBCC exposure, psychological empowerment, community ownership, and perceived lifestyle change were less pronounced. This contrast reinforces the contribution of SBCC activities in strengthening self-efficacy, social responsibility, and overall preventive orientation among programme participants.

COMPONENT 2: COMMUNITY-BASED SCREENING

This component assesses the role of community-based screening and mobile health van services in improving access to diagnostics, enabling early detection, and strengthening clinical linkage and care continuity. The analysis follows the pathway from household screening and referral to detection, counselling, treatment initiation, and service experience, supported by selective comparison with a control group to establish attribution and evaluate the programme's contribution to timely care and financial protection.

The programme conducted extensive village-level screening across both intervention districts, enabling large-scale early identification of NCD risk within communities. The table below summarises district-wise screening coverage, high-risk detection, and geographic reach achieved during the assessment period.

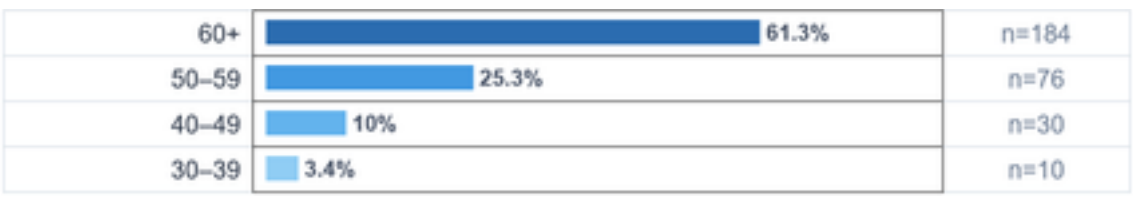
COMMUNITY SCREENING AND HIGH-RISK IDENTIFICATION

INDICATOR	ALWAR DISTRICT	PALGHAR DISTRICT	TOTAL
Individuals Screened	19,360	7,429	26,789
High-Risk Individuals Identified	3,055	692	3,747
Villages Covered	160	120	280

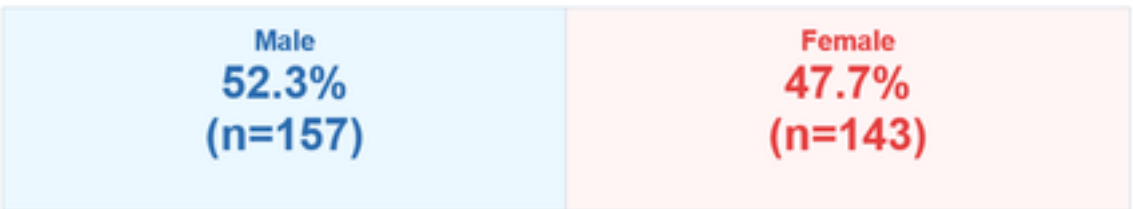
(Source: Project Documents)

DEMOGRAPHIC PROFILE OF BENEFICIARIES

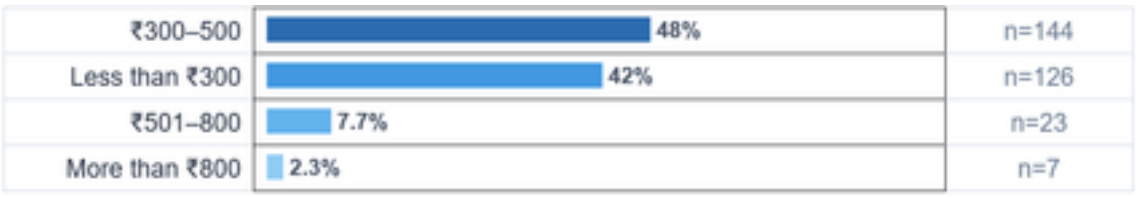
AGE GROUP DISTRIBUTION



GENDER DISTRIBUTION



DAILY INCOME LEVEL



The Social and Behaviour Change Communication (SBCC) component surveyed 210 respondents. The age distribution showed a heavy concentration of older adults, with 52.4% aged 60 and above and 27.6% aged 50-59. Similar to component 1, this demographic concentration aligned with epidemiological findings from the LASI, which established a steep increase in NCD prevalence among older adults. The cohort exhibited a skewed gender distribution, comprising 64.3% males and 35.7% females. Educational attainment within the group was limited; 29.0% reported no formal education, 20.5% completed only primary schooling, and 28.6% attained secondary education. Because limited health literacy is a primary barrier to modifying lifestyle risk factors, the deployment of targeted SBCC interventions was highly appropriate for this demographic. Evidence indicates that tailored, low-literacy communication strategies are essential for translating health knowledge into sustained behaviour change and improved clinical outcomes.

Occupational profiles were predominantly composed of homemakers (24.8%), self-employed individuals (24.3%), and the unemployed (17.6%). Regarding monthly household income, 27.1% fell within the INR 10,001 to INR 15,000 bracket, while 21.0% reported earnings between INR 15,001 and INR 25,000 (with 26.2% preferring not to disclose). This socioeconomic profile positioned the majority of the cohort in low- to middle-income brackets, a segment highly vulnerable to the economic shocks of chronic disease management. Preventive SBCC interventions in such populations are recognised as highly cost-effective strategies to mitigate the risk of disease progression, thereby averting catastrophic health expenditures associated with advanced NCD care.

KEY FINDINGS

OUTREACH AND MOBILISATION EFFECTIVENESS IN COMMUNITY-BASED SCREENING

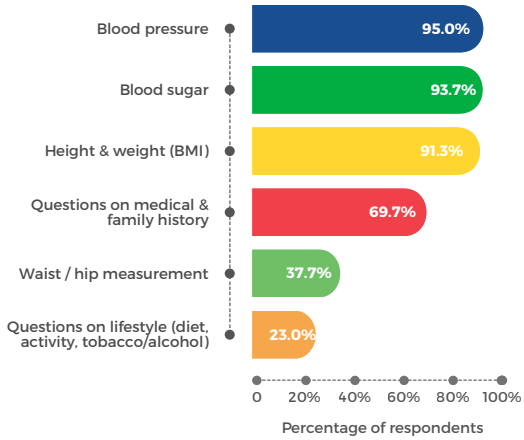
The community mobiliser from LUPIN visited our home and explained the health programme clearly. Because of that visit, I agreed to get screened and later informed my family members as well. Without the home visit, I would not have known about these services.

HEALTH SCREENING AT THE COMMUNITY LEVEL

Community screening in FY 2023–24 was conducted in two stages. In Phase 1, approximately half of the screened population was identified as non-risk and was therefore not provided basic facilitation for blood pressure and blood sugar testing. The assessment sample was drawn from individuals identified as at risk in Phase 1 and subsequently referred after initial screening. The control group comprised community members who were screened but did not attend the camp, as they were not referred for further testing.

INTERACTION WITH CONTROL GROUP, PALGHAR

CHART 7: TYPES OF HEALTH SCREENING CONDUCTED DURING HOME VISIT



1.Blood Pressure Measurement (95.0%)

BP checks were the most common screening activity during the home visit. Many respondents said they usually don't get their BP checked unless they feel unwell, so this quick home test helped them know where they stand.

2.Blood Sugar Testing (93.7%)

Most beneficiaries received a doorstep blood sugar test. Several people mentioned that they had never checked their sugar levels before, and the visit made them aware of whether they might need to follow up.

3.Height & Weight / BMI Assessment (91.3%)

BMI measurements were widely included in the screening. Respondents said the visit helped them understand whether their weight was within a healthy range, something they usually don't monitor.

4.Questions on Medical & Family History (69.7%)

Many were asked about previous illnesses and family health patterns. Beneficiaries shared that the questions prompted them to think about issues like BP or diabetes in their families that they hadn't considered before.

As the assessment sample was drawn from referred, at-risk cohort, the outcomes reflect a relatively higher proportion.

5. Waist / Hip Measurement (37.7%)

A smaller proportion reported receiving waist–hip measurements. Those who did said the worker explained why abdominal fat is important to monitor, which they found useful.

6. Questions on Lifestyle (23.0%)

Fewer respondents were asked about their diet, activity, and tobacco/alcohol habits. People who were asked said it made them reflect on their daily routines and where they might need to cut back or improve.

> The mobiliser explained my health risks in very simple words, and I could easily understand what the problem was. She told me why the tests were important and what I should take care of. After that, I felt more confident to go for a further check-up.
>
> **- Ram Bai, Community Beneficiary, Alwar, Rajasthan**

Complete Utilisation of Mobile Health Van

100% VISITED THE MOBILE HEALTH VAN

All respondents who were screened went on to visit the mobile health van, indicating a full shift from community outreach to facility-level diagnostic services. 90.0% visited mobile health van following community screening and 10% walked in.

Quick Service Experience

73.0% COMPLETED THEIR VISIT WITHIN 30 MINUTES

Most users reported a fast, smooth experience, indicating efficient service delivery and minimal waiting time.

High Geographic Accessibility

91.7% FOUND THE LOCATION VERY EASY TO REACH

The vast majority reported that the mobile health van was conveniently located, indicating strong physical accessibility and low travel barriers.

INTERACTION WITH BENEFICIARIES AT PALGHAR CAMP

INTERVIEW WITH RAVINDRA VASANT BHUJAL, SARPANCH, GHOLWAD VILLAGE

Mr Ravindra Vasant Bhujal, Sarpanch of Gholwad village serving a population of nearly 5,000, described the LIVES programme as a major improvement in community access to NCD care. He learned about the programme through the Panchayat, PHC staff, and SHG meetings when MMV visits began regularly about a year ago. He explained that community screening has helped identify hypertension, diabetes, and lifestyle risks early, thereby improving awareness, encouraging timely treatment, and promoting healthier habits.

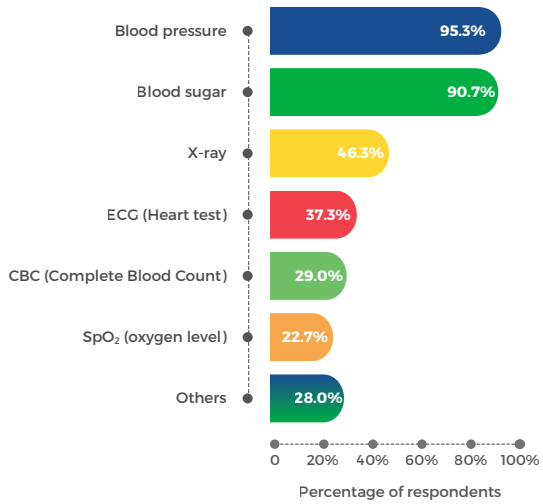
He observed that MMV services are highly valued for doorstep doctor access, on-the-spot screening, medicines, and referrals, particularly benefiting elderly persons, women, chronically ill patients, and residents of remote hamlets. He noted improved health-seeking behaviour, higher screening compliance, and gradual lifestyle changes, although misconceptions about lifelong medicines, costs, and the need for screening among "healthy" individuals persist.

As a community leader, he actively supports mobilisation by informing households, arranging venues, coordinating with ASHAs and facilitators, and encouraging vulnerable groups to attend camps. He reported increased trust in government health services, more organised functioning of PHCs, and better follow-up of chronic patients. Remaining gaps include irregular doctor availability, limited diagnostic services, medicine shortages, and access barriers in remote hamlets. He recommended increasing MMV frequency, strengthening awareness in distant areas, improving follow-up, ensuring consistent medicines, and expanding health education, and expressed strong willingness to support future health initiatives.

EXPERIENCE AT MOBILE HEALTH VAN (SCREENING & DIAGNOSTICS)

DIAGNOSTIC SERVICE INTENSITY AT THE MOBILE HEALTH VAN

CHART 8: SERVICES AND TESTS RECEIVED AT THE MOBILE HEALTH VAN



RESPONDENT PERCEPTIONS OF THE LIVES MMV SERVICES

SERVICE RECEIVED AT MMV	HOW RESPONDENTS LIKELY PERCEIVED THE BENEFIT (REALISTIC SECOND SENTENCE ADDED)
Blood Pressure Check (95.3%)	BP testing was highly valued as it helped them detect issues early. Respondents said they rarely get BP checked in villages, so having it done free and nearby felt reassuring and convenient.
Blood Sugar Test (90.7%)	Sugar testing provided people with clarity about potential diabetes risks. Many shared that they typically need to travel long distances or pay for the test so receiving it at the MMV saved time and money.
X-ray Services (46.3%)	X-rays were seen as a major benefit because such facilities are usually distant or expensive. People said getting an X-ray locally was a "big relief," especially for those with pain or chest issues.
ECG/ Heart Test (37.3%)	ECG access was considered valuable for checking heart health, which is rarely available in rural areas. Respondents said they would never have gone to a city hospital for an ECG unless their symptoms had become severe.
CBC– Complete Blood Count (29.0%)	The CBC test helped detect anaemia or infections, problems common in rural settings. Some beneficiaries found it useful because such tests usually require visiting private labs in nearby towns.
Other Services (28.0%)	Additional tests or consultations were appreciated for addressing individual concerns. People felt the MMV team listened to their problems and provided tests they could not normally afford or access easily.

Field Insight: Health Conditions Identified through Community-Based Screening

Interactions with screening beneficiaries indicated that the mobile health van served as a key platform for identifying a wide spectrum of previously undetected health conditions within the community. Many respondents reported learning for the first time about high blood pressure, high blood sugar, pre-diabetes, heart-related risks, and breathing or oxygen-related problems, often in the absence of noticeable symptoms. Beneficiaries reported that comprehensive testing at a single visit enabled simultaneous detection of multiple risk factors that had not been identified earlier through routine care. This field evidence highlights the programme's contribution to shifting diagnosis from symptom-based detection to systematic early identification, thereby strengthening timely counselling, referral, and the initiation of preventive and clinical care pathways.

Beyond routine mobile van screening, the programme organised dedicated diagnostic and specialist camps to enable confirmatory testing and specialised clinical assessment. These camps played a critical role in translating early risk identification into formal diagnosis and treatment initiation. The table below presents district-wise outputs of diagnostic and specialist camps, patient detection, and gender-wise coverage.

DIAGNOSTIC AND SPECIALIST CAMP OUTPUTS

Indicator	Alwar District	Palghar District	Total
Diagnostic Camps Conducted	154	60	214
Specialist Camps Conducted	4	6	10
Patients Diagnosed	5283	1499	6782
Female Beneficiaries	2219	852	3071
Male Beneficiaries	3,064	647	3711

(Source: Project Documents)

CASE STUDY 3: PREVENTING CARDIOVASCULAR COMPLICATIONS THROUGH CONTINUOUS CARE

Jitendra Bari, a middle-aged farmer, had been experiencing symptoms related to hypertension, diabetes, and heart risk for several years but delayed seeking care due to work commitments and financial constraints. Like many in his community, he believed medical visits were necessary only during emergencies.

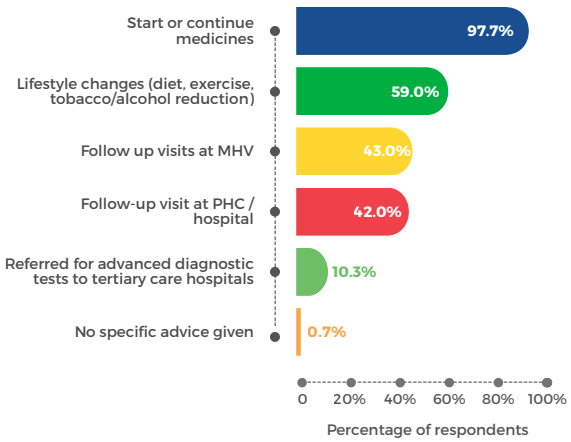
During a community-based screening campaign, health workers detected dangerously high blood pressure levels. The MMV team provided immediate consultation, initiated free medication, and counselled him on diet, exercise, and routine monitoring. He was enrolled for regular follow-up and continued to meet the team during scheduled village visits.

With sustained support, his blood pressure and sugar levels gradually improved, preventing a potential cardiovascular event. His overall stamina improved, and hospital visits reduced. Today, Jitendra actively encourages neighbours, especially men of his age group, to attend screening camps and not ignore early symptoms, becoming a local advocate for preventive healthcare.

INTERACTION WITH STAKEHOLDER DURING FIELD VISIT

CLINICAL ADVICE AND LINKAGE TO CARE AFTER DIAGNOSIS

CHART 9: ADVICE OR ACTION SUGGESTED AFTER DIAGNOSIS



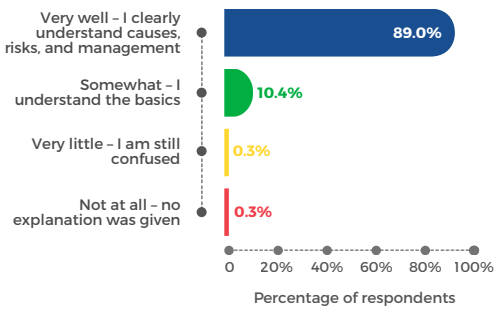
ADVICE OR ACTION SUGGESTED AFTER DIAGNOSIS

ADVICE / ACTION SUGGESTED	SHORT NARRATIVE (AS REPORTED BY RESPONDENTS)
Start or continue medicines (97.7%)	Most respondents were advised to begin or maintain medication to manage their condition. They shared that this guidance helped them understand the importance of taking medicines regularly.
Lifestyle changes: diet, exercise, tobacco/alcohol reduction (59.0%)	Over half were encouraged to improve daily habits to prevent complications. Respondents said this made them think about cutting down on unhealthy foods and being more active.
Follow-up visits at MMV (43.0%)	Many were asked to return to the Mobile Health Unit for monitoring. People felt this was convenient since the MMV visits their area regularly.
Follow-up visits at PHC/hospital (42.0%)	A similar proportion were guided to continue treatment at PHCs or hospitals. Respondents noted this advice helped them plan their next steps for ongoing care.
Referred for advanced diagnostics (10.3%)	Some were directed to higher-level facilities for specialised tests. They mentioned this usually happened when their condition needed a more detailed examination.
No specific advice given (0.7%)	Only a very small number reported receiving no particular advice. These respondents said their issue may have been minor and did not require any additional steps.

Some respondents were directed to tertiary care centres for specialised investigations such as 2D Echo, HRCT, and stress tests, reflecting appropriate clinical judgement and timely referral for advanced diagnostic assessment when higher-level evaluation was required.

Perceptions of diagnostic timing in the control group indicate delayed engagement with care: only 78.7% reported a timely diagnosis, while a considerable proportion expressed uncertainty or perceived a delay. This reflects gaps in early detection, counselling, and structured follow-up among individuals not covered by programme-supported screening and referral mechanisms.

CHART 10: CURRENT UNDERSTANDING OF HEALTH CONDITION(S)



A large majority of respondents reported strong comprehension of their health status, with 89.0% indicating a clear understanding of the causes, risks, and management of their condition. This reflects effective post-diagnosis counselling and successful strengthening of health literacy at the point of care.

INTERVIEW WITH MR VISHAN LAL, SARPANCH, RAJPUR CHHOTA, ALWAR DISTRICT

Mr Vishan Lal shared that he learned about the LIVES programme and MMV services through field staff and local health workers, and that he has actively supported mobilisation and coordination at the village level. He noted improved awareness of blood pressure, diabetes, and the importance of regular screening, with villagers increasingly attending camps and seeking early care.

He described MMV services as highly valuable for elderly persons, women, chronically ill patients, and residents of distant hamlets, providing access to doctors, on-the-spot screening, medicines, and referrals within the village, and reducing dependence on private clinics. He highlighted occasional challenges with crowd management and visit duration, suggesting fixed schedules and longer visits to improve coverage.

Mr Vishan Lal observed gradual behaviour change, including better diet practices, reduced tobacco use in some households, and higher acceptance of regular check-ups, though misconceptions about medicines and symptom-based care remain. He appreciated LHWRF's SBCC efforts and noted improved access, responsiveness, and trust in nearby PHCs and HWCs. He affirmed continued support for future health initiatives to strengthen community health outcomes.

PRIOR AWARENESS OF HEALTH CONDITION OR RISK

"The mobile health van came to our village, and the team carefully checked my blood pressure, sugar, and weight. Earlier, I never thought of going to the hospital unless I was very sick. The staff explained my reports in simple language and told me what the problem was and what I should do. Because of Lupin, I came to know about my illness at the right time and started taking medicines early. They also guided me about food, walking, and follow-up visits. This programme has helped people like us who cannot easily go to big hospitals, and now we feel more confident about taking care of our health"

- Jitu Kadu, Community Beneficiary, Palghar, Maharashtra

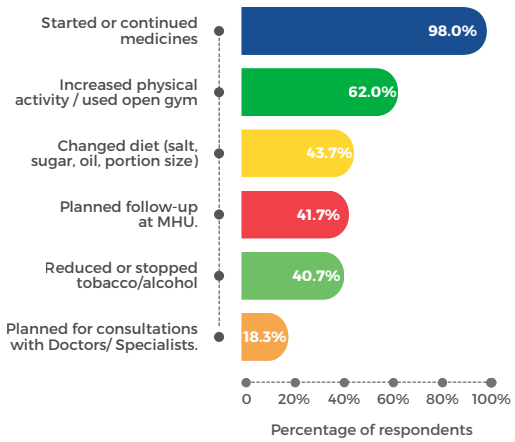
KEY IMPACTS

BEHAVIOUR AND LIFESTYLE CHANGE FOLLOWING PROGRAMME EXPOSURE

The intervention group comprised beneficiaries who accessed screening and counselling through the MMV, whereas the control group included individuals diagnosed at other centres who did not interact with MMV services. While both groups took some post-diagnosis actions, only the intervention group received structured guidance that supported wider and more sustained behaviour change.

MEDICAL EXAMINATION OBSERVED DURING FIELD VISIT AT ALWAR, RAJASTHAN

CHART 11: CHANGES EXPERIENCED BY BENEFICIARIES DUE TO THE PROGRAMME



COMPARISON TABLE: BEHAVIOUR CHANGE AFTER DIAGNOSIS – PROGRAMME VS CONTROL GROUP

BEHAVIOUR INDICATOR	PROGRAMME (EXPERIMENTAL) GROUP	CONTROL GROUP
Started or continued medicines	98.0% — Nearly all beneficiaries initiated or maintained medication, reflecting strong treatment uptake supported by programme counselling.	76.3% — Most began medicines, but this reflected a reactive response typical after diagnosis without structured counselling.
Increased physical activity	62.0%— Many adopted regular activity, showing the programme's influence on healthier lifestyle habits.	37.7% — Lower adoption of exercise, indicating limited motivation without guided lifestyle advice.
Planned follow-up care	41.7% — Beneficiaries took steps for ongoing care, supported by referral and continuity mechanisms within the programme.	26.7%— Fewer planned follow-ups, revealing weaker continuity of care when MMV support was absent.
Changed dietary practices	43.7% — Many made dietary improvements, and although only moderately higher than the control group, this suggests the programme provided an added nudge toward healthier choices.	35.7% — A considerable share also changed diets after diagnosis, showing that receiving a diagnosis itself prompts behaviour change, even without MMV counselling.
Reduced or stopped tobacco/alcohol use	40.7%— Reductions in tobacco/alcohol use were notable, indicating that diagnosis and counselling together encouraged risk-reduction efforts.	37.7% — Similar behavioural shifts were seen, suggesting that learning about one's health condition drives people to cut harmful habits, though sustained support may improve durability.

99.3%
of respondents expressed willingness to recommend the programme.

COST SAVINGS AND REDUCTION IN OUT-OF-POCKET EXPENDITURE

THROUGH THE PROGRAMME

COMPARISON TABLE: COST SAVINGS VS HEALTHCARE EXPENDITURE

COST COMPONENT	INTERVENTION GROUP (MMV USERS) N=300	CONTROL GROUP (NON-MMV USERS) N=300
Doctor Consultation Fees	100% saved consultation costs by accessing free services through the programme.	47.7% paid between INR 301 and INR 500 per visit, and 42.0% paid between INR 100 and INR 300 per visit, resulting in recurring annual expenses with 4–5 visits per year.
Diagnostic Testing Costs	100% avoided diagnostic charges because the MMV provided tests at no cost.	Paid privately for all diagnostic tests, typically spending anywhere between INR 300 and INR 1,000 per test, depending on the type of investigation, which substantially increased their out-of-pocket health expenses.
Travel Expenses	Minimal or no travel cost, since the MMV reached their locality.	Nearly half spent between INR 51 and INR 100 per visit, and 21.0% spent between INR 101 and INR 300, adding to the overall cost burden.
Wage Loss	Little to no wage loss due to doorstep services and short waiting times.	62.3% lost half a day or more of income per visit due to travel distance, queuing, or time spent at facilities.

"Because testing is done free at the mobile health unit, many people come to know about their illness at an early stage and do not need to go to private clinics or laboratories. When the disease is detected early, treatment can start on time, and the problem does not become serious. People also save their daily wages because they fall sick less often and do not miss work for repeated hospital visits. This programme has helped reduce complications and improve both health and productivity in the community."

- Arju, Community Mobiliser, Team, Rajgarh, Alwar

"I am very happy with this programme. The tests were done for free, and the staff explained everything clearly. Because of LUPIN, I could know my health problem early and start treatment. I have also told my neighbours to come for this check-up because this service is very useful for people in our village."

- Raadesh Ravi, Community Beneficiary, Palghar, Maharashtra

LUPIN LIVES PROGRAMME – DISTRICT-WISE COMPARATIVE ANALYSIS

NCD SBCC IMPACT ASSESSMENT – DISTRICT-WISE COMPARISON

SOURCE: NCD SBCC IMPACT ASSESSMENT SURVEY | PALGHAR (N=104) | ALWAR (N=106)

SECTION A: DEMOGRAPHIC PROFILE

TABLE 1: AGE GROUP OF RESPONDENTS

RESPONSE OPTION	PALGHAR (N=104)	(%)	ALWAR (N=106)	(%)	GAP (PP)
30–39 years	2	1.9%	12	11.3%	-9.4%
40–49 years	8	7.7%	20	18.9%	-11.2%
50–59 years	32	30.8%	26	24.5%	6.3%
60+ years	62	59.6%	48	45.3%	14.3%

TABLE 2: GENDER DISTRIBUTION OF RESPONDENTS

RESPONSE OPTION	PALGHAR (N=104)	(%)	ALWAR (N=106)	(%)	GAP (PP)
Male	63	60.6%	72	67.9%	-7.3 pp
Female	41	39.4%	34	32.1%	+7.3 pp

TABLE 3: EDUCATIONAL LEVEL OF RESPONDENTS

RESPONSE OPTION	PALGHAR (N=104)	(%)	ALWAR (N=106)	(%)	GAP (PP)
No formal education	37	35.6%	24	22.6%	+13.0 pp
Primary	13	12.5%	30	28.3%	-15.8 pp
Secondary	23	22.1%	37	34.9%	-12.8 pp
Higher secondary	23	22.1%	12	11.3%	+10.8 pp
Graduate+	8	7.7%	3	2.8%	+4.9 pp

TABLE 4: OCCUPATION OF RESPONDENTS					
RESPONSE OPTION	PALGHAR (N=104)	(%)	ALWAR (N=106)	(%)	GAP (PP)
Homemaker	17	16.3%	35	33.0%	-16.7 pp
Self-employed	24	23.1%	27	25.5%	-2.4 pp
Daily wage worker	2	1.9%	22	20.8%	-18.9 pp
Retired	19	18.3%	4	3.8%	+14.5 pp
Salaried	12	11.5%	11	10.4%	+1.1 pp
Unemployed	30	28.8%	7	6.6%	+22.2 pp

TABLE 5: AVERAGE MONTHLY HOUSEHOLD INCOME					
RESPONSE OPTION	PALGHAR (N=104)	(%)	ALWAR (N=106)	(%)	GAP (PP)
Less than ₹5,000	12	11.5%	15	14.2%	-2.7 pp
₹5,001 – ₹10,000	5	4.8%	15	14.2%	-9.4 pp
₹10,001 – ₹15,000	16	15.4%	41	38.7%	-23.3 pp
₹15,001 – ₹25,000	14	13.5%	30	28.3%	-14.8 pp
₹25,001 – ₹40,000	3	2.9%	3	2.8%	+0.1 pp
More than ₹40,000	1	1.0%	0	0.0%	+1.0 pp
Prefer not to say	53	51.0%	2	1.9%	

TABLE 5: AVERAGE MONTHLY HOUSEHOLD INCOME					
RESPONSE OPTION	PALGHAR (N=104)	(%)	ALWAR (N=106)	(%)	GAP (PP)
High blood pressure	77	74.0%	75	70.8%	+3.2 pp
Diabetes	70	67.3%	46	43.4%	+23.9 pp
Heart condition	13	12.5%	34	32.1%	-19.6 pp
Respiratory condition.	4	3.8%	19	17.9%	-14.1 pp
Dyslipidaemia.	3	2.9%	15	14.2%	-11.3 pp
Liver/Kidney related conditions.	4	3.8%	7	6.6%	-2.8 pp

SECTION B: SBCC EXPOSURE – ACTIVITY-WISE

TABLE 7: AWARENESS OF HEALTH AND LIFESTYLE WALL PAINTINGS UNDER LIVES

RESPONSE OPTION	PALGHAR (N=104)	(%)	ALWAR (N=106)	(%)	GAP (PP)
Yes	98	94.2%	106	100.0%	-5.8 pp
No	6	5.8%	0	0.0%	+5.8 pp

TABLE 8: EXPOSURE TO STREET PLAYS UNDER LIVES

RESPONSE OPTION	PALGHAR (N=104)	(%)	ALWAR (N=106)	(%)	GAP (PP)
Yes	94	90.4%	106	100.0%	-9.6 pp
No	10	9.6%	0	0.0%	+9.6 pp

TABLE 9: AWARENESS OF OPEN GYM INSTALLED UNDER LIVES

RESPONSE OPTION	PALGHAR (N=104)	(%)	ALWAR (N=106)	(%)	GAP (PP)
Yes	95	91.3%	105	99.1%	-7.8 pp
No	9	8.7%	1	0.9%	+7.8 pp

SECTION C: IMPACT ON AWARENESS, PREVENTION & BEHAVIOUR

TABLE 10: IMPROVED UNDERSTANDING AFTER SBCC EXPOSURE

RESPONSE OPTION	PALGHAR (N=104)	(%)	ALWAR (N=106)	(%)	GAP (PP)
Importance of early screening	91	87.5%	82	77.4%	+10.1 pp
Risk factors	87	83.7%	66	62.3%	+21.4 pp
Prevention methods	62	59.6%	65	61.3%	-1.7 pp
What NCDs are	34	32.7%	89	84.0%	-51.3 pp

TABLE 11: BEHAVIOUR CHANGES AFTER SBCC EXPOSURE					
RESPONSE OPTION	PALGHAR (N=104)	(%)	ALWAR (N=106)	(%)	GAP (PP)
Started exercising/walking	74	71.2%	97	91.5%	-20.3 pp
Got BP/sugar checked	87	83.7%	65	61.3%	+22.4 pp
Improved diet	70	67.3%	68	64.2%	+3.1 pp
Reduced tobacco/alcohol	46	44.2%	62	58.5%	-14.3 pp
Used open gym	27	26.0%	62	58.5%	-32.5 pp

TABLE 12: COMMUNITY SPILLOVER ACTIONS FOLLOWING SBCC EXPOSURE					
RESPONSE OPTION	PALGHAR (N=104)	(%)	ALWAR (N=106)	(%)	GAP (PP)
Discussed health with family	86	82.7%	85	80.2%	+2.5 pp
Shared SBCC messages	87	83.7%	80	75.5%	+8.2 pp
Suggested screening	89	85.6%	66	62.3%	+23.3 pp
Encouraged others to exercise	48	46.2%	65	61.3%	-15.1 pp

SECTION D: ACTIVITY-WISE LIKERT SCALE RATINGS

TABLE 13: WALL PAINTINGS – CLARITY OF HEALTH MESSAGES					
RESPONSE OPTION	PALGHAR (N=104)	(%)	ALWAR (N=106)	(%)	GAP (PP)
Strongly Agree	64	65.3%	57	53.8%	+11.5 pp
Agree	32	32.7%	46	43.4%	-10.7 pp
Neutral	2	2.0%	3	2.8%	-0.8 pp
Disagree	0	0.0%	0	0.0%	0.0 pp
Strongly Disagree	0	0.0%	0	0.0%	0.0 pp

TABLE 14: WALL PAINTINGS – REGULAR REMINDERS					
RESPONSE OPTION	PALGHAR (N=104)	(%)	ALWAR (N=106)	(%)	GAP (PP)
Strongly Agree	59	60.2%	55	51.9%	+8.3 pp
Agree	36	36.7%	51	48.1%	-11.4 pp
Neutral	3	3.1%	0	0.0%	+3.1 pp
Disagree	0	0.0%	0	0.0%	0.0 pp
Strongly Disagree	0	0.0%	0	0.0%	0.0 pp

TABLE 15: STREET PLAYS – RELATABILITY TO REAL LIFE					
RESPONSE OPTION	PALGHAR (N=104)	(%)	ALWAR (N=106)	(%)	GAP (PP)
Strongly Agree	47	50.0%	52	49.1%	+0.9 pp
Agree	41	43.6%	54	50.9%	-7.3 pp
Neutral	6	6.4%	0	0.0%	+6.4 pp
Disagree	0	0.0%	0	0.0%	0.0 pp
Strongly Disagree	0	0.0%	0	0.0%	0.0 pp

TABLE 16: STREET PLAYS – MOTIVATION FOR PREVENTIVE ACTION					
RESPONSE OPTION	PALGHAR (N=104)	(%)	ALWAR (N=106)	(%)	GAP (PP)
Strongly Agree	43	45.7%	40	37.7%	+8.0 pp
Agree	40	42.6%	64	60.4%	-17.8 pp
Neutral	11	11.7%	2	1.9%	+9.8 pp
Disagree	0	0.0%	0	0.0%	0.0 pp
Strongly Disagree	0	0.0%	0	0.0%	0.0 pp

LUPIN LIVES PROGRAMME – DISTRICT-WISE COMPARATIVE ANALYSIS

NCD SCREENING & DIAGNOSIS – DISTRICT-WISE COMPARISON

SOURCE: COMMUNITY-BASED NCD SCREENING & DIAGNOSTICS SURVEY | PALGHAR (N=176) | ALWAR (N=124)

SECTION A: DEMOGRAPHIC PROFILE

TABLE 1: AGE GROUP OF BENEFICIARIES

RESPONSE OPTION	PALGHAR (N=176)	(%)	ALWAR (N=124)	(%)	GAP (PP)
30–39 years	5	2.8%	5	4.0%	-1.2%
40–49 years	13	7.4%	17	13.7%	-6.3%
50–59 years	50	28.4%	26	21.0%	7.4%
60+ years	108	61.4%	76	61.3%	0.1%

TABLE 2: GENDER DISTRIBUTION OF BENEFICIARIES

RESPONSE OPTION	PALGHAR (N=176)	(%)	ALWAR (N=124)	(%)	GAP (PP)
Male	86	48.9%	71	57.3%	-8.4 pp
Female	90	51.1%	53	42.7%	+8.4 pp

SECTION B: COMMUNITY-BASED PRELIMINARY SCREENING (HOME VISIT)

TABLE 3: TYPES OF HEALTH CHECKS CONDUCTED DURING HOME VISIT

RESPONSE OPTION	PALGHAR (N=176)	(%)	ALWAR (N=124)	(%)	GAP (PP)
Blood pressure	168	95.5%	117	94.4%	+1.1 pp
Blood sugar	167	94.9%	114	91.9%	+3.0 pp
Height & weight (BMI)	167	94.9%	107	86.3%	+8.6 pp
Questions on medical & family history	130	73.9%	80	64.5%	+9.4 pp
Waist / hip measurement	80	45.5%	33	26.6%	+18.9 pp
Questions on lifestyle (diet, activity, tobacco/alcohol)	47	26.7%	22	17.7%	+9.0 pp

SECTION C: ACCESS TO MOBILE HEALTH VAN

TABLE 4: EASE OF ACCESS TO THE MOBILE HEALTH VAN LOCATION

RESPONSE OPTION	PALGHAR (N=176)	(%)	ALWAR (N=124)	(%)	GAP (PP)
Very easy	163	92.6%	112	90.3%	+2.3 pp
Somewhat easy	11	6.2%	12	9.7%	-3.5 pp
Difficult	2	1.1%	0	0.0%	+1.1 pp

TABLE 5: TOTAL TIME SPENT AT THE MOBILE HEALTH VAN

RESPONSE OPTION	PALGHAR (N=176)	(%)	ALWAR (N=124)	(%)	GAP (PP)
Less than 30 minutes	129	73.3%	90	72.6%	+0.7 pp
30–60 minutes	19	10.8%	27	21.8%	-11.0 pp
More than 1 hour	28	15.9%	7	5.6%	+10.3 pp

SECTION D: EXPERIENCE AT MOBILE HEALTH VAN (SCREENING & DIAGNOSTICS)

TABLE 6: SERVICES AND TESTS RECEIVED AT THE MOBILE HEALTH VAN

RESPONSE OPTION	PALGHAR (N=176)	(%)	ALWAR (N=124)	(%)	GAP (PP)
Blood pressure	165	93.8%	121	97.6%	-3.8 pp
Blood sugar	158	89.8%	114	91.9%	-2.1 pp
X-ray	33	18.8%	106	85.5%	-66.7 pp
ECG (Heart test)	45	25.6%	67	54.0%	-28.4 pp
CBC (Complete Blood Count)	64	36.4%	23	18.5%	+17.9 pp
SpO_2 (oxygen level)	47	26.7%	21	16.9%	+9.8 pp
Others (Spirometry, Lipid Profile, HbA1c, LFT, Trop-T/I, RFT, Serum Electrolytes)	13	7.4%	71	57.3%	`-49.9 pp

TABLE 7: ADVICE OR ACTION SUGGESTED AFTER DIAGNOSIS

RESPONSE OPTION	PALGHAR (N=176)	(%)	ALWAR (N=124)	(%)	GAP (PP)
Start or continue medicines	171	97.2%	122	98.4%	-1.2 pp
Lifestyle changes (diet, exercise, tobacco/alcohol reduction)	69	39.2%	108	87.1%	-47.9 pp
Follow up visits at MHV	27	15.3%	102	82.3%	-67.0 pp
Follow-up visit at PHC / hospital	18	10.2%	108	87.1%	-76.9 pp
Referred for advanced diagnostic tests to tertiary care hospitals	1	0.6%	30	24.2%	-23.6 pp
No specific advice given	2	1.1%	1	0.8%	+0.3 pp

TABLE 8: CURRENT UNDERSTANDING OF HEALTH CONDITION(S)

RESPONSE OPTION	PALGHAR (N=176)	(%)	ALWAR (N=124)	(%)	GAP (PP)
Very well – I clearly understand causes, risks, and management	146	83.0%	121	97.6%	-14.6 pp
Somewhat – I understand the basics	28	15.9%	3	2.4%	+13.5 pp
Very little – I am still confused	1	0.6%	0	0.0%	+0.6 pp
Not at all – no explanation was given	1	0.6%	0	0.0%	+0.6 pp

TABLE 9: CHANGES EXPERIENCED BY BENEFICIARIES DUE TO THE PROGRAMME

RESPONSE OPTION	PALGHAR (N=176)	(%)	ALWAR (N=124)	(%)	GAP (PP)
Started or continued medicines	171	97.2%	123	99.2%	-2.0 pp
Increased physical activity / used open gym	77	43.8%	109	87.9%	-44.1 pp
Changed diet (salt, sugar, oil, portion size)	85	48.3%	46	37.1%	+11.2 pp
Planned follow-up at MHU.	29	16.5%	96	77.4%	-60.9 pp
Reduced or stopped tobacco/alcohol	15	8.5%	107	86.3%	-77.8 pp
Planned for consultations with Doctors/ Specialists.	6	3.4%	49	39.5%	-36.1 pp

COMPONENT 3 – HEALTH SYSTEM STRENGTHENING

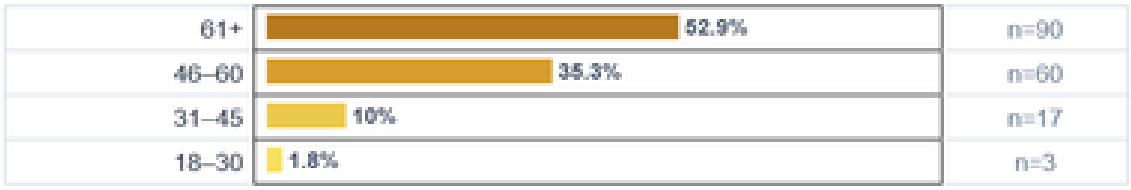
This section presents findings related to the Health System Strengthening component of the LIVES NCD Programme, focusing on improvements in facility readiness, infrastructure, equipment availability, and service delivery capacity at public health facilities. Targeted investments were made to strengthen institutional systems for routine screening, diagnosis, treatment continuity, and referral integration. The table below summarises the principal health system strengthening inputs established across Alwar and Palghar districts during the assessment period, providing an overview of the foundational platforms created to support sustained NCD service delivery.

HEALTH SYSTEM STRENGTHENING INPUTS

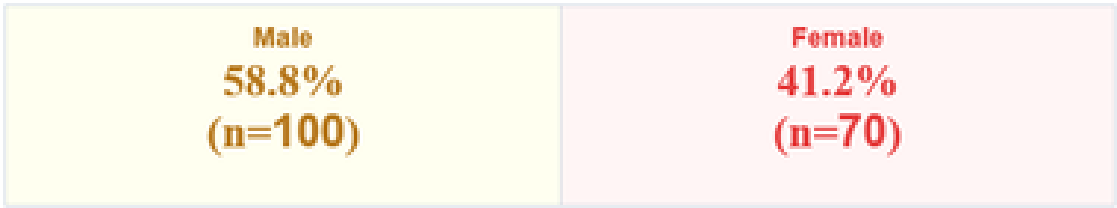
INDICATOR	ALWAR DISTRICT	PALGHAR DISTRICT	TOTAL
NCD Corners Established	9	9	18
Mobile Medical Vans	1	1	2
Healthcare Staff Deployed	84	59	143

DEMOGRAPHIC PROFILE

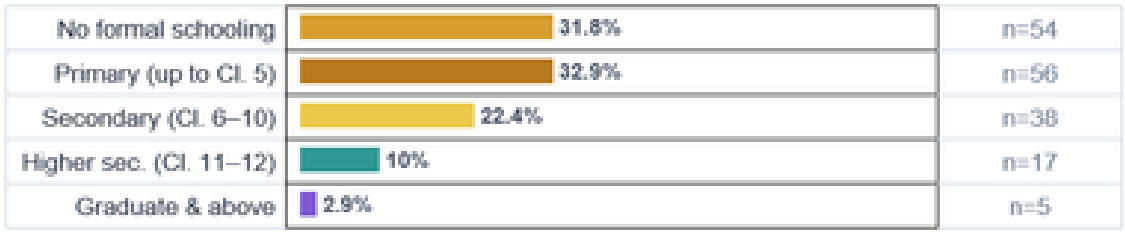
AGE GROUP DISTRIBUTION



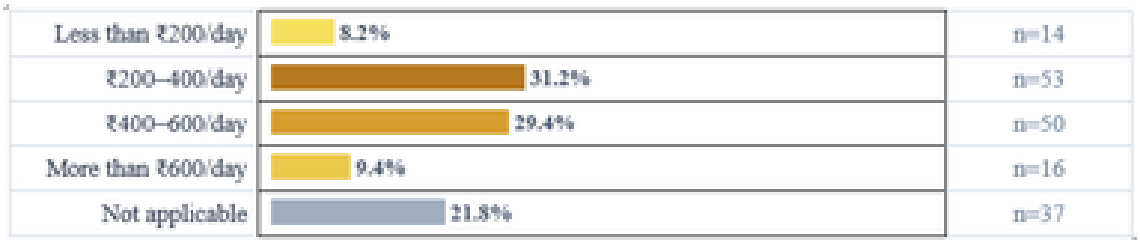
GENDER DISTRIBUTION



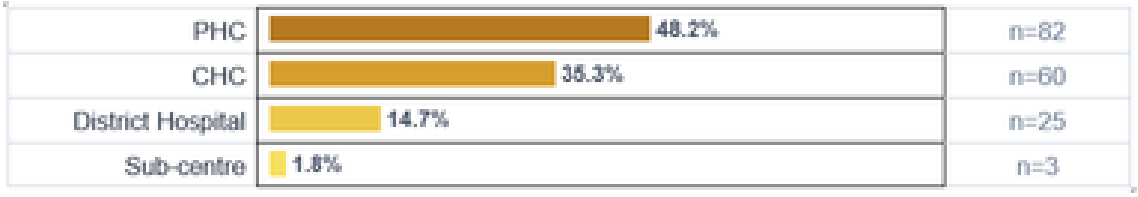
EDUCATION LEVEL



APPROXIMATE EARNING PER WORKDAY



FACILITY TYPE VISITED



The HSS component assessed 170 beneficiaries accessing NCD care at public health facilities. The age distribution indicated that 52.9% of beneficiaries were aged 61 and over, with an additional 35.3% in the 46–60 bracket. Similar to the previous two components, this demographic concentration also aligned with epidemiological findings from the LASI, which established a steep increase in NCD prevalence among older adults. The gender distribution of the respondents was 58.8% male and 41.2% female. Educational attainment among beneficiaries was notably limited, with 31.8% reported no formal schooling, and 32.9% had completed only primary education. Health literacy research consistently demonstrates that low educational attainment is a primary barrier to NCD self-management and medication adherence.

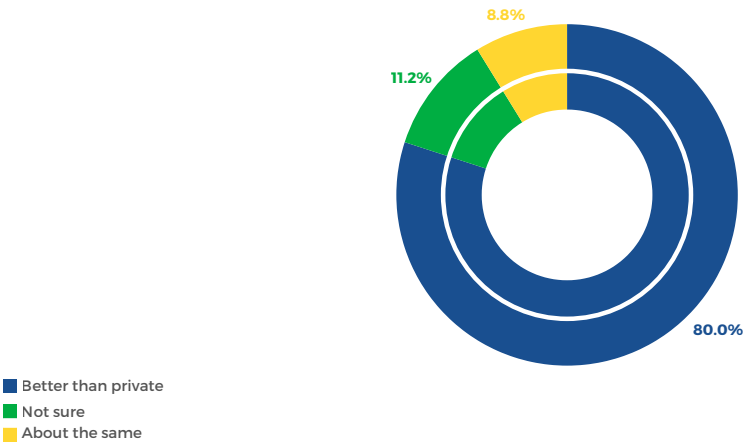
Regarding facility utilisation, 48.2% of beneficiaries accessed care at Primary Health Centres (PHCs), followed by Community Health Centres (CHCs) at 35.3%, and District Hospitals at 14.7%. Economically, 60.6% of working respondents reported daily wages between INR 200 and INR 600, while 21.8% selected "not applicable" (representing unemployed, retired, or homemaking individuals). Extensive health economics research in India highlights that out-of-pocket (OOP) payments for chronic NCD treatment are a primary driver of household impoverishment. Therefore, access to free or subsidised public healthcare at these strengthened facilities served as a documented, critical safety net preventing catastrophic health expenditure (CHE) for low-income and vulnerable populations.

KEY FINDINGS

The following section synthesises key findings from the qualitative data from the beneficiaries and other stakeholders.

SERVICE UTILISATION AND CARE-SEEKING PATTERNS

CHART 12: OVERALL COMPARISON OF FACILITY WITH PRIVATE NCD SERVICES



COMPARATIVE INDICATOR	SHORT NARRATIVE (AS REPORTED BY RESPONDENTS & STAFF)
Perceived Superiority over Private Care (80.0%)	A commanding majority of respondents rated the government facility as "Better than private." This successfully positioned PHCs and CHCs as the primary choice for NCD care.
Operational Efficiency & Accuracy	Medical officers attributed the improved service quality to the provision of digital tools (glucometers, tablets). These inputs enabled faster assessments and more accurate measurements, directly addressing the challenge of high patient loads. *"Before the LIVES programme, screening coverage and awareness were limited, follow-up was irregular, and access to medicines and diagnostics was inadequate. Digital BP equipment has been most useful. The equipment has supported faster assessment, more accurate measurements, and increased patient load handling capacity." - Dr Riddhi Sankhe, Medical Officer, PHC Satpati, Palghar District*
Integrated "One-Stop" Service Model	Beneficiaries in Alwar highlighted the convenience of consolidated services. The ability to receive BP checks, diagnostics, and doctor consultations in a single visit eliminated the need to travel to multiple locations, reducing the logistical burden on patients. *"Earlier, I had to go to different places for a BP test and a doctor check up. Now everything is done here in one visit. The staff checked my BP quickly, and then I met the doctor without much waiting. I feel comfortable coming here regularly because the process is simple and the staff explain things nicely." - Pyarelal, PHC Beneficiary, Alwar, Rajasthan*
Patient Engagement & Trust	The simplified care process and consistent availability of medicine have fostered trust. Respondents noted that clear communication from staff and timely care made them feel comfortable returning regularly, ensuring better long-term health management. *"I am very happy with the treatment I am getting here. Doctors and nurses explain everything nicely, and medicines are easily available. Because of the Lupin programme, services have improved a lot, and many people in our village are getting timely care." — Prashant Parshuram Tare, Beneficiary, Palghar, Maharashtra*

STRENGTHENED FRONTLINE COORDINATION

Field interviews highlighted improved coordination across stakeholder groups. Community mobilisers met weekly with ASHAs and ANMs, and fortnightly with CHOs and medical officers, and monthly with village leaders to coordinate health activities. Village leaders and SHG members actively supported mobilisation for MMV visits and awareness sessions.

> We meet with ASHAs and ANMs weekly, CHOs and medical officers fortnightly, and village leaders monthly to coordinate health activities.
>
> **- Sucheta Ganesh Patil, Community Mobiliser, Murbhe Rural Area, Palghar District**

Medical officers reported effective MMV integration that reduced facility load, expanded outreach to remote areas, and improved continuity of care. Facility workflows became more systematised and aligned with NPCDCS and HWC goals.

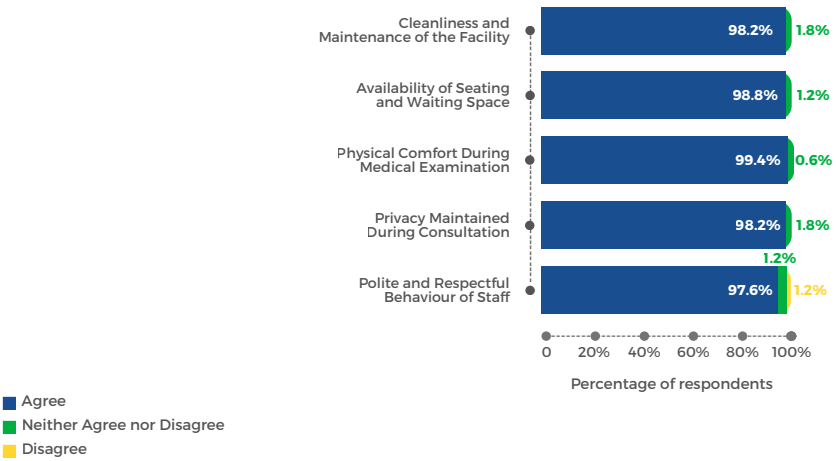
In Alwar, ANMs reported that their role extended beyond clinical screening to include coordination, documentation, and community-level health management. Two health camps were held monthly (one at the PHC and one at the CHC), with systematic planning of camp schedules and patient lists.

> Two health camps are conducted regularly every month, one at the PHC level and one at the CHC level. The majority of patients attending these camps are elderly, with most aged 60 or older. At each camp, approximately seven to eight patients are newly detected and initiated on treatment.
>
> **- Ms Tanu, ANM, PHC Dhamred, Alwar, Rajasthan**

KEY IMPACT

IMPACT OF FACILITY UPGRADES AND STAFF CAPACITY ON PATIENT EXPERIENCE

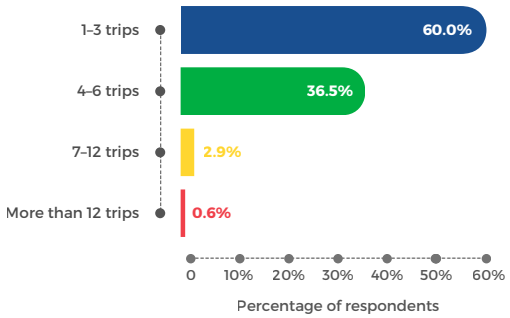
CHART 13: BENEFICIARY SATISFACTION WITH QUALITY OF CARE AND INFRASTRUCTURE



INFRASTRUCTURE & EXPERIENCE INDICATOR	SHORT NARRATIVE (AS REPORTED BY RESPONDENTS)
Physical Comfort During Medical Examination (99.4%)	Nearly all respondents reported feeling physically at ease during their check-ups. Beneficiaries indicated that proper examination tables and specialised equipment made the process feel professional and dignified.
Availability of Seating and Waiting Space (98.8%)	The vast majority found adequate space to wait without overcrowding. Respondents noted that proper seating arrangements made the waiting period much less tiring, particularly appreciated by elderly patients.
Cleanliness and Maintenance of the Facility (98.2%)	High agreement was observed regarding the centre's hygiene standards. Beneficiaries reported that the clean, well-maintained environment increased their confidence in the quality of care and made them feel safe during their visit.
Privacy Maintained During Consultation (98.2%)	A significant proportion confirmed that their consultations were conducted privately. Respondents reported feeling secure discussing sensitive health issues without being overheard, likely aided by the designated NCD corners.
Polite and Respectful Behaviour of Staff (97.6%)	Most patients experienced courteous and supportive treatment from the healthcare team. They expressed that the staff's respectful attitude—bolstered by capacity building—made them feel valued rather than just a number.

REDUCED PATIENT TURNAROUND TIME & ELIMINATION OF TRAVEL BARRIERS

CHART 14: NUMBER OF HEALTH-RELATED TRIPS MADE PER YEAR WITHOUT THIS FACILITY



IMPACT INDICATOR	SHORT NARRATIVE (AS REPORTED BY RESPONDENTS & STAFF)
Avoidance of Distant Medical Trips (60.0% 1-3 trips and 36.5% 4-6 trips)	The vast majority of respondents (96.5%) would otherwise be forced to undertake 1 to 6 trips annually to district headquarters or private labs. The program's decentralised approach successfully eliminated these journeys, removing a significant logistical hurdle for rural families.
Economic & Opportunity Cost Savings	By bringing diagnostics to the village level, the intervention addressed the "double burden" of travel costs and lost daily wages. Previously, these financial pressures forced high-risk patients to delay testing.
Behaviour Change in Vulnerable Groups	The convenience of proximity has transformed health-seeking behaviour among older adults and homemakers. Beneficiaries like Savitri Patil, who previously neglected testing due to distance, now adhere to monthly monitoring schedules, directly resulting in better disease control. *"I was diagnosed with diabetes two years ago, but never got tested regularly because it was too far and too costly. After the MMV started coming to our village, I get my sugar checked every month. The doctor also told me about diet and walking. My sugar levels are better now."* *— Savitri Patil (62 years), Female, Homemaker, Murbhe Village, Palghar*

HIGH-RISK PATIENTS IDENTIFIED AT AN EARLIER STAGE

The integration of community mobilisation, household screening, and MMV services enabled earlier identification of NCD cases among older adults and high-risk groups.

> A patient from Dahanu with chest pain was referred for angiography and showed a positive response.
>
> **- Dr Mayur Swami, Medical Officer, Mobile Medical Unit, Palghar-Dahanu**

In Alwar, the free testing services through mobile health units enabled early-stage detection among populations who would otherwise have relied on private clinics or gone undiagnosed.

> Because testing is done free at the mobile health unit, many people come to know about their illness at an early stage and do not need to go to private clinics or laboratories. When the disease is detected early, treatment can start on time, and the problem does not become serious.
>
> **- Arju, Community Mobiliser, MMV Team, Rajgarh, Alwar, Rajasthan**

> I never knew I had a sugar problem. During the camp in our village, they checked my blood and said my sugar was very high. They immediately referred me to the PHC. Now I am on treatment, and my sugar has come down. If I had not attended that camp, I would not have known.
>
> **- Ganesh Thakur (64 years), Male, Daily wage labourer, Dahanu, Palghar**

DIGITISATION STREAMLINED DATA MANAGEMENT

The introduction of tablets and digital data entry improved the accuracy, accessibility, and timeliness of patient information. CHOs reported greater confidence in entering and managing patient data on the NCD portal.

In Alwar, diagnostic reports were now better integrated into patient records, enabling continuity of care. Patient histories, investigation results, and follow-up schedules were maintained in a structured format, allowing staff to monitor adherence and identify gaps in care.

> **Patient histories, investigation results, and follow-up schedules are now maintained in a structured format, allowing staff to monitor adherence and identify gaps in care.**
>
> **- Meena Bhardwaj, Senior Nursing Officer, CHC Pinan, Alwar, Rajasthan**

MEETING WITH CONTROL GROUP MEMBER AT PALGHAR, MAHARASHTRA

CASE STUDIES

These case studies highlight the transformation of public health facilities under Component 3 of the LIVES NCD Programme. They focus on how strengthening infrastructure, equipment, and staff capacity at PHCs and CHCs has directly improved patient lives in Palghar and Alwar.

CASE STUDY 1: THE BREATH OF RELIEF

BENEFICIARY: DNYASHWAR MAHADEV TANDE

LOCATION: DAHANU BLOCK, PALGHAR

For 65-year-old Dnyashwar, living with both diabetes and a chronic respiratory condition meant that every breath was a calculation of effort and cost. In his village in Dahanu, a simple check-up used to be an ordeal. To monitor his oxygen saturation or blood sugar, he would have to travel to a private clinic in the main town. The journey was exhausting for his weak lungs, and the fees chipped away at his meagre household budget. Often, he would skip checks, hoping his breathlessness would pass on its own.

The strengthening of his local Sub-Centre under the LIVES NCD Programme changed this reality. The facility was equipped with digital blood pressure monitors, glucometers, and, crucially for Dnyashwar, pulse oximeters.

"I used to dread the travel more than the sickness," Dnyashwar recalls. "Now, I just walk to the centre. The Tai (health worker) checks my oxygen and sugar right here. It feels like the big hospital has come to our small village."

The availability of functioning equipment and trained staff at the village level has given Dnyashwar a sense of security. He no longer ignores his symptoms. The immediate care he receives has stabilised his condition, allowing him to breathe freely both literally and financially.

CASE STUDY 2: STABILITY IN SENIOR YEARS

BENEFICIARY: KALAKAR LAXMAN TARE

LOCATION: PALGHAR BLOCK, PALGHAR

At 62, Kalakar Tare carries the heavy burden of "triple NCDs", namely, hypertension, diabetes, and asthma. For years, managing his health was a chaotic juggling act. He used to visit private doctors where he paid for consultation, separate lab tests, and medicines. The financial strain was immense, often eating into the earnings from his small-scale work of tailoring.

The transformation of his local PHC has brought a new order to his life. The LIVES programme established a dedicated NCD Corner, streamlining the patient flow. Now, when Kalakar visits, there is a clear system: registration, vital signs check, doctor consultation, and medicine dispensing occur in a logical, efficient sequence.

"Everything is in one place now," Kalakar says with relief. "I don't have to run from one window to another or wait for hours. They check my BP, sugar, and weight all at once. It respects my time and my age."

For Kalakar, the strengthened health system means dignity. He saves substantial money every month, funds that now go towards his family rather than medical bills.

CASE STUDY 3: DIGNITY IN CARE

BENEFICIARY: MUNNI DEVI

LOCATION: ALWAR DISTRICT

Munni Devi, 63, had always found large government hospitals intimidating. The crowds, the noise, and the feeling of being "just a number" made her anxious. Like many elderly women in her village, she often preferred local private practitioners, even though she knew they were "money drains," simply because they spoke to her nicely.

However, her recent experience at the strengthened Community Health Centre (CHC) in Alwar shifted her perspective entirely. Under the LIVES programme, not only was the facility upgraded with better equipment, but the staff also received training in soft skills and NCD management.

"The difference is in how they treat you," Munni explains. "The sister (nurse) didn't just rush me. She asked about my health, explained why I need to take the pills every day, and spoke politely. I felt looked after."

This human element of Health System Strengthening, where technical upgrades meet compassion, has been transformative. Munni now visits the CHC regularly for her check-ups. She saves between INR 500 and INR 800 every month that would have been spent on private clinics. But more than the money, it is the feeling of being respected and cared for that keeps her coming back, helping her stay on track with her health.

CASE STUDY 4: THE EFFICIENT SYSTEM

BENEFICIARY: KESHAV JI

LOCATION: ALWAR DISTRICT

For Keshav Ji, a 52-year-old daily wage worker, time is quite literally money. Every hour spent waiting in a hospital queue is an hour of lost wages. Diagnosed with hypertension, he knew he needed regular check-ups, but the choice was always difficult: health or livelihood? In the past, a government hospital visit meant writing off the entire day.

The Health System Strengthening component changed this equation. With the integration of digital data entry (via tablets provided by LIVES) and improved lab workflows, the turnaround time at the CHC has drastically reduced.

"I went in, got my BP checked, gave my blood sample, and saw the doctor, all within 45 minutes," Keshav shares, pleasantly surprised. "The reports were ready on the doctor's table when I went in. I was back at work by noon."

The system's efficiency has removed the biggest barrier to his care. Keshav no longer has to choose between earning a living and staying alive. The strengthened facility works as hard as he does, ensuring that his health remains a priority without becoming a financial burden.

BENEFICIARY INTERACTION DURING FIELD VISIT AT ALWAR, RAJASTHAN

04. KEY CHALLENGES AND BARRIERS

Follow-Up and Treatment Adherence

Patients frequently missed follow-up visits and discontinued treatment due to practical barriers. Distance to facilities, travel costs, work commitments, and low perception of risk when symptoms were mild or absent were the primary factors.

Coverage of Remote and Tribal Populations

Certain populations remained harder to reach despite programme efforts. These included migrant workers, elderly individuals with mobility issues, and residents of remote hamlets.

Medicine Supply

While the program has successfully deployed trained staff and diagnostic support, their ability to deliver care is occasionally capped by external factors such as medicine stock-outs.

Behavioural Barriers and Misconceptions

Persistent misconceptions about NCDs limited behaviour change in some communities. Cultural norms and poor health literacy constrained behavioural adoption.

Digital and Connectivity Constraints

Connectivity challenges affected data entry and patient tracking, particularly in remote villages. Delayed data entry and network issues limited real-time monitoring.

05. IMPACT ACROSS MULTIPLE LEVELS

INDIVIDUAL LEVEL

- Early detection and timely diagnosis enabled a large proportion of beneficiaries to initiate treatment and adopt preventive behaviours.
- Improved health literacy strengthened confidence in long-term disease management and treatment adherence.
- Regular follow-up and monitoring supported sustained control of NCD risk factors.
- Reduced out-of-pocket expenditure improved the affordability of essential care.

FAMILY LEVEL

- Increased household awareness led to wider screening, early care-seeking, and shared preventive practices.
- Family members actively supported treatment adherence, follow-up, and lifestyle modification.
- Reduced illness-related financial stress strengthened household economic stability.
- Peer influence within families promoted sustained healthy behaviours.

DISTRICT LEVEL

- Strengthened referral linkages improved continuity between community screening, facilities, and higher-level care.
- Upgraded diagnostic capacity and service efficiency enhanced routine NCD service delivery.
- Improved patient experience increased utilisation of public health facilities for chronic care.
- Financial protection reduced pressure on district-level tertiary services through early intervention.

STATE LEVEL

- Strengthened primary and secondary care capacity, improved system readiness for long-term NCD management.
- Standardised screening, diagnostics, and follow-up supported uniform quality across facilities.
- Improved trust in public health services increased utilisation and reduced dependence on private care.
- Demonstrated scalability of integrated SBCC, screening, and facility-strengthening models.

NATIONAL LEVEL

- Contribution to early detection and secondary prevention supports national NCD control priorities.
- Reduced financial burden aligns with universal health coverage and financial protection goals.
- Strengthened public sector capacity enhances the sustainability of chronic disease management systems.
- The evidence generated supports the replication of community-based screening and HSS models in high-burden settings.

STAKEHOLDER INTERVIEW DURING FIELD VISIT

06. SOCIAL RETURN ON INVESTMENT (SROI) ANALYSIS

SECTION 1: INTRODUCTION AND SROI FRAMEWORK

INTRODUCTION

This chapter presents a Social Return on Investment (SROI) analysis of the LIVES NCD Programme, also known as the Desh Bandhu Jan Aarogya Pariyojana, implemented by Lupin Human Welfare and Research Foundation (LHWRF) during the financial year 2023-24. The SROI methodology employed in this analysis adheres to the principles established by Social Value UK and the SROI Network, ensuring that social outcomes are valued transparently, verifiably, and grounded in stakeholder engagement. The analysis adopts a retrospective evaluative approach for Year 1 outcomes and a forecast approach for subsequent years, applying standard adjustments for deadweight, attribution, displacement, and drop-off to arrive at conservative estimates of social value created.

PURPOSE AND OBJECTIVES OF THE SROI ANALYSIS

The primary purpose of this SROI analysis is to quantify and communicate the social value generated by the LIVES NCD Programme in monetary terms, thereby enabling stakeholders to understand the intervention's broader impact beyond conventional output metrics. The analysis establishes accountability by clearly showing to the funding organisation, implementing partner, government authorities, and beneficiary communities the extent to which programme resources have been converted into meaningful social outcomes.

The analysis aims to support strategic decision-making by providing evidence on which programme components generate the greatest social return, thereby informing future resource allocation, programme design modifications, and scaling decisions. The component-wise outcome mapping within this unified SROI framework enables such comparative assessment while avoiding the methodological pitfalls of arbitrary investment splitting.

SCOPE SUMMARY

SCOPE SUMMARY OF THE SROI ANALYSIS

Parameter	Description
Programme Name	LIVES NCD Programme (Desh Bandhu Jan Aarogya Pariyojana)
Implementing Organisation	Lupin Human Welfare and Research Foundation (LHWRF)
Implementation Period	Financial Year 2023-24
Geographic Coverage	Alwar District (Rajasthan): 4 Blocks, 160 Villages; Palghar District (Maharashtra): 2 Blocks, 120 Villages
Total Investment	INR 7,32,33,569 (Alwar: INR 3,88,64,159; Palghar: INR 3,43,69,410)
SROI Type	Evaluative (Year 1) and Forecast (Years 2-5)
Time Horizon	Five years (Year 1 retrospective; Years 2-5 projected)
Discount Rate	8.0% per annum (standard social discount rate)

SECTION 2: SCOPE AND STAKEHOLDERS (PHASE 1)

STAKEHOLDER REGISTER

Phase 1 of the SROI methodology establishes the analytical boundaries and identifies the stakeholder groups whose outcomes will be valued. The primary stakeholder groups include direct beneficiaries (individuals screened, diagnosed, and treated), their households (including family members who provide caregiving support), healthcare providers at public facilities, the implementing organisation, and the state health system.

STAKEHOLDER REGISTER

Stakeholder Group	Quantity	Relationship to Programme	Nature of Change
Individuals screened	26,789	Received household screening for NCD risk factors	Early risk identification; health awareness
High-risk individuals	3747	Identified through screening; referred to MMV	Timely referral; avoided hospitalisation
Diagnosed patients	6782	Received diagnosis at camps; initiated treatment	Avoided costs; early treatment
Family members (caregivers)	6,782	Family members of diagnosed patients providing care support	Avoided wage loss; reduced caregiver burden
SBCC beneficiaries	55,900	Exposed to health messages (Alwar only)	Awareness; behaviour change
HSS facility patients	36,000	Accessed NCD corners at strengthened facilities	Improved access; quality care

DISPERSAL OF MEDICINES OBSERVED DURING FIELD VISIT IN ALWAR, RAJASTHAN

SECTION 3: OUTCOME MAPPING (PHASE 2)

PROGRAMME OUTPUTS

SUMMARY OF PROGRAMME OUTPUTS BY DISTRICT

Output Indicator	Alwar	Palghar	Total
Individuals screened at the household level	19,360	7,429	26,789
High-risk individuals identified	3,055	692	3,747
Diagnostic camps conducted	150	54	204
Specialist camps conducted	6	6	10
Patients diagnosed with NCD conditions	5,283	1,499	6,782
Nukkad Nataks (Street Plays)	180	-	180
Wall Paintings	500	-	500
Open Gyms installed	10	-	10
NCD corners established at PHC/CHC	9	9	18

DISEASE-WISE DIAGNOSIS PROFILE

DISEASE-WISE DIAGNOSIS AT CAMPS

Condition	Alwar	Palghar	Total	% Share
Hypertension	1,228	772	2,000	29.5%
Diabetes	918	327	1,245	18.4%
COPD	724	12	736	10.9%
Asthma	548	55	603	8.9%
Ischemic Heart Disease	430	22	452	6.7%
Multiple Comorbidities	1,435	311	1,746	25.7%
TOTAL DIAGNOSED	5,283	1,499	6,782	100%

CONSOLIDATED OUTCOME MAP

The consolidated outcome map identifies eight monetisable outcomes for valuation in this SROI analysis. The outcomes are consistently named throughout this report as follows:

CONSOLIDATED OUTCOME MAP WITH CONSISTENT NAMING

No.	Monetisable Outcome	Stakeholder	Quantity
1	Avoided hospitalisation costs	High-risk patients	3,747 patients
2	Avoided consultation fees	Diagnosed patients	27,128 consultations
3	Avoided diagnostic test costs	Diagnosed patients	Disease-specific tests
4	Avoided travel costs	Diagnosed patients	27,128 visits
5	Avoided lost working days (beneficiaries)	Diagnosed patients	13,564 days
6	Avoided wage loss of family members (caregivers)	Family members	6,782 households
7	Value of free medicines	Diagnosed patients	6,782 patients

SECTION 4: EVIDENCING AND VALUATION (PHASE 3)

OUTCOME 1: AVOIDED HOSPITALISATION COSTS

OUTCOME DESCRIPTION AND EVIDENCE

The programme identified 3,747 individuals as high-risk through community-based screening. These individuals exhibited elevated blood pressure, blood sugar levels, or other clinical indicators suggesting undiagnosed or uncontrolled NCD conditions. Without early detection and intervention, these high-risk individuals would have been at significant risk of progressing to acute episodes requiring hospitalisation, including hypertensive crisis, diabetic ketoacidosis, myocardial infarction, stroke, or acute respiratory failure.

The assumption that all high-risk patients would have required hospitalisation in the absence of early detection represents a conservative analytical position for the rural populations served by this programme. Evidence from comparable settings indicates that undetected and unmanaged NCDs in rural India frequently present first at the emergency department due to limited primary care access and low awareness of warning signs. The programme's early identification and treatment initiation prevented progression to acute episodes for this cohort.

FINANCIAL PROXY AND RATIONALE

The financial proxy for avoided hospitalisation is the average cost of inpatient treatment for NCD-related acute episodes at district and tertiary hospitals. Hospitalisation costs vary by condition, with cardiovascular events and diabetic emergencies typically costing more than respiratory admissions. For this analysis, disease-specific hospitalisation costs have been applied based on published estimates and CGHS (Central Government Health Scheme) rates, which represent standardised costs for government-empanelled healthcare facilities.

DISEASE-SPECIFIC HOSPITALISATION COSTS

Condition	High-Risk Patients	Cost per Episode (INR)	Total Value (INR)
Hypertension (Hypertensive Crisis/Stroke)	1,105	25,000	2,76,25,000
Diabetes (Diabetic Emergency)	688	20,000	1,37,60,000
COPD (Acute Exacerbation)	407	15,000	61,05,000
Asthma (Acute Attack)	333	12,000	39,96,000
Ischemic Heart Disease (MI/ACS)	250	50,000	1,25,00,000
Multiple Comorbidities (Composite)	964	30,000	2,89,20,000
TOTAL	**3,747**	**Weighted Avg: 24,548**	**9,29,06,000**

Note: High-risk patient distribution is proportionate to the diagnosed disease profile. Hospitalisation costs based on CGHS/PM-JAY package rates for respective conditions. MI = Myocardial Infarction; ACS = Acute Coronary Syndrome.

OUTCOME 2: AVOIDED CONSULTATION FEES

OUTCOME DESCRIPTION AND EVIDENCE

The programme provided free doctor consultations to 6,782 diagnosed patients through diagnostic camps and Mobile Medical Van services. In the absence of the programme, these patients would have sought consultations at private clinics, incurring consultation fees. Evidence from the control group survey indicates that 47.7% of non-programme beneficiaries paid INR 301 to INR 500 per consultation, whilst 42.0% paid INR 100 to INR 300 per consultation. The weighted average consultation fee is estimated at INR 350.

Survey data indicate that the control group had an average of 4-5 doctor visits per year for NCD management. Adopting a conservative estimate of 4 visits per annum, the total number of consultations avoided is calculated as 6,782 patients multiplied by 4 visits, yielding 27,128 consultations.

FINANCIAL PROXY AND CALCULATION

AVOIDED CONSULTATION FEE CALCULATION

Parameter	Value
Number of diagnosed patients	6,782
Average consultations per patient per year	4
Total consultations avoided	27,128
Average consultation fee (INR)	350
GROSS VALUE (INR)	**94,94,800**

Source: Control group survey data; calculation: 6,782 × 4 × 350 = INR 94,94,800.

OUTCOME 3: AVOIDED DIAGNOSTIC TEST COSTS

OUTCOME DESCRIPTION AND EVIDENCE

The programme provided comprehensive diagnostic testing free of charge to patients at diagnostic camps. Tests conducted included Complete Blood Count (CBC), Liver Function Test (LFT), Renal Function Test (RFT), Lipid Profile, Serum Electrolyte, HbA1c, Troponin-T, and Troponin-I. In accordance with the analytical framework, diagnostic tests have been attributed to specific disease categories based on clinical relevance: CBC and Serum Electrolyte as general tests applicable to all patients; HbA1c and RFT to diabetes patients; Lipid Profile to hypertension and cardiovascular patients; LFT to patients with metabolic conditions; and Troponin markers to patients with ischemic heart disease.

FINANCIAL PROXY AND DISEASE-SPECIFIC ATTRIBUTION

Financial proxies for diagnostic tests are based on private-laboratory rates in semi-urban and rural settings, reflecting the costs patients would have incurred in the absence of the programme. The table below presents the test-wise attribution and valuation.

AVOIDED DIAGNOSTIC TEST COST CALCULATION

Test	Attribution	Patients	Cost/Test	Value (INR)
CBC	All diagnosed patients	6,782	350	23,73,700
Serum Electrolyte	All diagnosed patients	6,782	350	23,73,700
HbA1c	Diabetes + Comorbidities	2,991	450	13,45,950
RFT	Diabetes + Comorbidities	2,991	450	13,45,950
Lipid Profile	**HTN + IHD + Comorbidities**	**4,198**	550	**23,08,900**
LFT	**Diabetes + Comorbidities**	2,991	450	**13,45,950**
Troponin-T	**IHD patients only**	452	900	**4,06,800**
Troponin-I	**IHD patients only**	452	900	**4,06,800**
TOTAL AVOIDED DIAGNOSTIC TEST COSTS				**1,19,07,750**

Note: Test costs based on private laboratory rates in semi-urban areas. HTN = Hypertension; IHD = Ischemic Heart Disease. Comorbidities (1,746 patients) were attributed to relevant test categories in proportion to their prevalence.

OUTCOME 4: AVOIDED TRAVEL COSTS

OUTCOME DESCRIPTION AND EVIDENCE

The programme delivered services at the village level through Mobile Medical Vans and at nearby PHCs and CHCs through strengthened NCD corners. This reduced the need for patients to travel to distant district hospitals or urban private clinics. Survey data from the control group indicates that nearly half of respondents spent between INR 51 and INR 100 per visit on travel, whilst over one-fifth spent between INR 101 and INR 300. The weighted average travel cost is estimated at INR 100 per visit.

FINANCIAL PROXY AND CALCULATION

AVOIDED TRAVEL COST CALCULATION

Parameter	Value
Number of diagnosed patients	6,782
Average visits per patient per year	4
Total visits	27,128
Average travel cost avoided per visit (INR)	100
GROSS VALUE (INR)	**27,12,800**

OUTCOME 5: AVOIDED LOST WORKING DAYS

OUTCOME DESCRIPTION AND EVIDENCE

Survey data from the control group indicate that 62.3% of respondents reported losing at least half a day of work per healthcare visit due to travel time, waiting time at facilities, and time spent in consultation. The programme reduced this burden by providing services at the village level and at nearby PHCs with efficient patient flow. The value of avoided productivity loss is estimated using the MGNREGA wage rate as a conservative proxy for daily earnings among the programme's rural population.

FINANCIAL PROXY AND CALCULATION

AVOIDED LOST WORKING DAYS CALCULATION

Parameter	Value
Number of diagnosed patients	6,782
Average visits per patient per year	4
Working days saved per visit	0.5
Total working days saved	13,564
Daily wage rate (MGNREGA, INR)	267
GROSS VALUE (INR)	**36,21,588**

Note: MGNREGA wage rate for FY 2023-24 (average of Rajasthan and Maharashtra rates). Calculation: 6,782 × 4 × 0.5 × 267 = INR 36,21,588.

OUTCOME 6: AVOIDED WAGE LOSS OF FAMILY MEMBERS (CAREGIVERS)

Family members of NCD patients typically accompany them to healthcare facilities, resulting in wage loss. Without the programme, family members would have lost additional working days spent accompanying patients to distant facilities and during hospitalisation. The programme reduced this burden by providing village-level services and preventing acute episodes.

AVOIDED WAGE LOSS OF FAMILY MEMBERS (CAREGIVERS)

Parameter	Value
Number of diagnosed patient households	6,782
Caregiver days saved per patient per year (accompanying visits)	2 days
Total caregiver days saved	13,564
Daily wage rate (MGNREGA, INR)	267
GROSS VALUE (INR)	**36,21,588**

OUTCOME 7: VALUE OF FREE MEDICINES

OUTCOME DESCRIPTION AND EVIDENCE

The programme provided essential NCD medicines free of cost to diagnosed patients at diagnostic camps and through strengthened NCD corners. Survey data indicate that 87.6% of beneficiaries received all prescribed medicines at facilities, and 98.0% started or continued medicines following programme exposure. In the absence of the programme, patients would have purchased these medicines from private pharmacies.

FINANCIAL PROXY AND CALCULATION

The financial proxy for free medicines is the retail market price of essential NCD medications. Based on published data on average monthly expenditure on NCD medicines in rural India, a conservative estimate of INR 500 per month is applied, yielding an annual value of INR 6,000 per patient.

VALUE OF FREE MEDICINES CALCULATION

Parameter	Value
Number of patients receiving free medicines	6,782
Average annual value of medicines per patient (INR)	6,000
GROSS VALUE (INR)	**4,06,92,000**

SUMMARY OF YEAR 1 GROSS VALUES

VALUE OF FREE MEDICINES CALCULATION

No.	Monetisable Outcome	Stakeholder	Gross Value (INR)
1	Avoided hospitalisation costs	High-risk patients	9,29,06,000
2	Avoided consultation fees	Diagnosed patients	94,94,800
3	Avoided diagnostic test costs	Diagnosed patients	1,19,07,750
4	Avoided travel costs	Diagnosed patients	27,12,800
5	Avoided lost working days (beneficiaries)	Diagnosed patients	36,21,588
6	Avoided wage loss of family members (caregivers)	Family members	36,21,588
7	Value of free medicines	Diagnosed patients	4,06,92,000
	TOTAL YEAR 1 GROSS VALUE		**16,49,56,526**

SECTION 5: IMPACT ADJUSTMENTS (PHASE 4)

IMPACT ADJUSTMENT FACTORS

IMPACT ADJUSTMENT FACTORS AND RATIONALE

Outcome	Deadweight	Attribution	Displacement	Rationale
Avoided hospitalisation costs	10.0%	10.0%	0%	Limited alternative screening in rural areas
Avoided consultation fees	10.0%	10.0%	0%	Some may have accessed free government consultations
Avoided diagnostic test costs	10.0%	10.0%	0%	Limited free diagnostics in rural areas
Avoided travel costs	10.0%	10.0%	0%	Some nearby facilities existed
Avoided lost working days (beneficiaries)	10.0%	10.0%	0%	Linked to travel cost savings
Avoided wage loss of family members (caregivers)	10.0%	10.0%	0%	Same rationale as beneficiary wage loss
Value of free medicines	20.0%	10.0%	0%	Some government supplies exist

BENEFICIARIES AT CAMP IN ALWAR, RAJASTHAN

YEAR 1 NET IMPACT VALUE CALCULATION

The following table applies deadweight and attribution adjustments to gross values to derive the Year-1 net impact. Displacement is set at 0% across all outcomes. The formula applied is:

NET VALUE = GROSS VALUE × (1 - DEADWEIGHT) × (1 - ATTRIBUTION) × (1 - DISPLACEMENT)

YEAR 1 NET IMPACT VALUE CALCULATION

Outcome	Gross Value	DW	Attr	Disp	Factor	Net Impact
Avoided hospitalisation costs	9,29,06,000	10.0%	10.0%	0%	0.81	7,52,53,860
Avoided consultation fees	94,94,800	10.0%	10.0%	0%	0.81	76,90,788
Avoided diagnostic test costs	1,19,07,750	10.0%	10.0%	0%	0.81	96,44,278
Avoided travel costs	27,12,800	10.0%	10.0%	0%	0.81	21,97,368
Avoided lost working days (beneficiaries)	36,21,588	10.0%	10.0%	0%	0.81	29,33,486
Avoided wage loss of family members (caregivers)	36,21,588	10.0%	10.0%	0%	0.81	29,33,486
Value of free medicines	4,06,92,000	20.0%	10.0%	0%	0.72	2,92,98,240
TOTAL	**19,06,96,526**					**12,99,51,506**

SECTION 6: SROI CALCULATION (PHASE 5)

YEAR 1 SROI RATIO

SROI RATIO = NET PRESENT VALUE OF BENEFITS / TOTAL INVESTMENT

YEAR 1 SROI CALCULATION

Component	Value (INR)
Total Programme Investment (A)	7,32,33,569
Total Year 1 Net Impact Value (B)	12,99,51,506
YEAR 1 SROI RATIO (B / A)	**1.77: 1**

The Year 1 SROI ratio of 1.77:1 indicates that for every INR 1 invested in the programme during FY 2023-24, approximately INR 1.77 of social value was generated. This represents a strong return on investment in Year 1 alone, before accounting for the continuing benefits that accrue over subsequent years.

FIVE-YEAR PROJECTION METHODOLOGY

The five-year projection extends the Year-1 net social value over a five-year horizon, applying outcome-specific drop-off rates and a standard social discount rate. This approach captures the enduring benefits of infrastructure investments and sustained health improvements while conservatively accounting for outcome decay.

Key assumptions for the projection:

- Social Discount Rate: 8.0% per annum (aligned with NITI Aayog/IEG Study)
- One-time outcomes: Full value in Year-1 only (100% drop-off); includes travel savings, diagnostic tests, consultations, and avoided wages
- Continuing outcomes: Annual drop-off applied; avoided hospitalisation (20.0%), NCD corners (15.0%), open gyms (15.0%)

FIVE-YEAR PROJECTED SROI

The five-year projection estimates the present value of social benefits accruing over the period FY 2023-24 to FY 2027-28. This projection recognises that many programme outcomes, particularly those relating to early detection and behaviour change, generate benefits that persist beyond the initial implementation year. The projection applies annual drop-off rates to account for a gradual reduction in outcome persistence and discounts future values to present value using a social discount rate of 8.0% per annum, consistent with the NITI Aayog/IEG Study.

DROP-OFF RATES BY OUTCOME CATEGORY

ANNUAL DROP-OFF RATES BY OUTCOME

Outcome	Drop-off	Rationale
Avoided hospitalisation costs	20.0%	Moderate adherence decline over time
Avoided consultation fees	10.0%	Ongoing programme support maintains access
Avoided diagnostic test costs	10.0%	Ongoing programme support maintains access
Avoided travel costs	10.0%	Ongoing programme support maintains access
Avoided lost working days (beneficiaries)	10.0%	Linked to service utilisation patterns
Avoided wage loss of family members (caregivers)	10.0%	Linked to beneficiary service utilisation
Value of free medicines	10.0%	Continued programme of medicine supply

FIVE-YEAR PRESENT VALUE PROJECTION

The annual values are discounted to present value using a social discount rate of 8.0% per annum. The formula applied is: PV = FV / (1 + r) ^n, where r = 0.08 and n = year number (Year 1 = 0).

FIVE-YEAR PRESENT VALUE CALCULATION

Outcome	Year 1	Year 2	Year 3	Year 4	Year 5
Avoided hospitalisation costs	7,52,53,860	6,02,03,088	4,81,62,470	3,85,29,976	3,08,23,981
Avoided consultation fees	76,90,788	69,21,709	62,29,538	56,06,584	50,45,926
Avoided diagnostic test costs	96,44,278	86,79,850	78,11,865	70,30,679	63,27,611
Avoided travel costs	21,97,368	19,77,631	17,79,868	16,01,881	14,41,693
Avoided lost working days (beneficiaries	29,33,486	26,40,137	23,76,123	21,38,511	19,24,660
Avoided wage loss of family members (caregivers)	29,33,486	26,40,137	23,76,123	21,38,511	19,24,660
Value of free medicines	2,92,98,240	2,63,68,416	2,37,31,574	2,13,58,417	1,92,22,575
Annual Total	**12,99,51,506**	**9,94,30,968**	**8,24,67,561**	**6,84,04,559**	**5,67,11,106**
Discount Factor (8.0%)	1.000	0.926	0.857	0.794	0.735
Present Value	**12,99,51,506**	**9,20,72,276**	**7,06,74,518**	**5,43,13,220**	**4,16,82,663**

CUMULATIVE FIVE-YEAR SROI RATIO

FIVE-YEAR CUMULATIVE SROI CALCULATION

Component	Value (INR)
Total Programme Investment (A)	7,32,33,570
Total Five-Year Present Value (B)	38,86,94,183
FIVE-YEAR SROI RATIO (B ÷ A)	**5.31: 1**

The five-year cumulative SROI ratio of 5.31:1 indicates that for every INR 1 invested in the LIVES NCD Programme, approximately INR 5.31 of social value is generated over the five-year projection period. This ratio reflects the sustained benefits of early detection, behaviour change, and system strengthening outcomes that persist beyond the initial implementation year.

SUMMARY OF SROI RATIOS

SUMMARY OF SROI RESULTS

Metric	Value (INR)	SROI Ratio
Programme Investment	7,32,33,570	-
Year 1 Net Impact	12,99,51,506	1.77: 1
Five-Year Present Value	**38,86,94,183**	**5.31: 1**

The SROI analysis demonstrates that the LIVES NCD Programme generates substantial social value relative to the investment made. The Year 1 ratio of 1.77:1 confirms a positive return within the implementation year, whilst the five-year projection of 5.31:1 reflects the compounding benefits of early detection and sustained behaviour change over time. These results support the effectiveness and value-for-money of the integrated community-to-facility NCD care model.

SECTION 7: LIMITATIONS

LIMITATIONS

The SROI analysis is subject to several limitations. Intangible outcomes such as improved quality of life, reduced anxiety, enhanced family wellbeing, and community empowerment are not captured in the SROI ratio. Attribution complexity persists, as the precise contribution of the programme relative to other factors cannot be definitively established in the absence of a randomised controlled trial. The five-year projection relies on assumptions about the persistence of outcomes, which inherently involve uncertainty. Financial proxies are estimates based on available data and may not accurately reflect the actual costs incurred by individual beneficiaries. While the analysis assumes 100% hospitalisation risk for identified high-risk patients due to the acute nature of findings in this specific rural demographic, we acknowledge that disease progression rates vary by individual.

INTERACTION WITH BENEFICIARIES DURING FIELD VISIT AT ALWAR, RAJASTHAN

SECTION 8: CONCLUSION

This Social Return on Investment analysis has assessed the social value generated by the LIVES NCD Programme, implemented by Lupin Human Welfare and Research Foundation in Alwar district, Rajasthan, and Palghar district, Maharashtra, during FY 2023-24. The analysis has followed a rigorous methodology consistent with Social Value UK principles, applying conservative assumptions throughout to ensure the credibility of findings.

The programme invested a total of INR 7.32 crore across both districts to deliver an integrated model of community screening, mobile diagnostics, social behaviour change communication, and health system strengthening. Eight monetisable outcomes were identified and valued: avoided hospitalisation costs, avoided consultation fees, avoided diagnostic test costs, avoided travel costs, avoided lost working days (beneficiaries), avoided wage loss of family members (caregivers), value of free medicines, and employment income.

The Year 1 SROI ratio of 1.77:1 indicates that for every rupee invested in the programme, approximately INR 2 of social value was generated within the implementation year. The five-year cumulative SROI ratio of 5.31:1 demonstrates that when the sustained benefits of early detection, behaviour change, and continued treatment are accounted for, the programme generates over six rupees of social value for every rupee invested.

The SROI analysis provides robust evidence that community-based NCD prevention and management programmes represent sound investments that deliver significant social value. The findings support continued investment in the LIVES model and its potential expansion to additional districts and populations facing similar NCD burden. As India confronts the growing challenge of non-communicable diseases, programmes such as LIVES offer a proven and cost-effective approach to improving health outcomes, reducing catastrophic expenditure, and strengthening the foundation of primary healthcare.

INTERACTION DURING FIELD VISIT AT ALWAR, RAJASTHAN

07. OECD-DAC EVALUATION FRAMEWORK

★★★★★

RELEVANCE

The programme specifically targeted rural and tribal populations in Alwar and Palghar, where NCD diagnostic facilities were largely absent or inaccessible. By deploying Mobile Medical Units (MMUs) and strengthening local PHCs, it brought "doctor and diagnostics" to the doorstep, overcoming the "distance and cost" barrier that previously prevented villagers from seeking care. 61.3% of beneficiaries were aged 60+, directly addressing the high-risk demographic most vulnerable to NCDs.

★★★★★

COHERENCE

The programme's design is fully aligned with the NPCDCS (National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke) and Ayushman Bharat – Health and Wellness Centres (HWCs) guidelines. It operationalised the "continuum of care" model mandated by government policy. Additionally, it directly contributes to SDG Target 3.4 (Reduce premature mortality from non-communicable diseases) by enabling early detection and management of hypertension and diabetes.

★★★★★

EFFECTIVENESS

Successfully established an end-to-end NCD care model. 26,789 individuals screened (Target met). 3,747 (14.0%) high-risk individuals were identified who were previously unaware or untreated—204 diagnostic camps conducted, diagnosing 6,782 patients. Control-group analysis showed significantly higher health awareness and treatment-seeking behaviour in intervention villages (99.0% referral uptake) compared with non-intervention areas.

★★★★½

EFFICIENCY

The "Integrated Model" (Mobiliser MMV Public Facility) ensured that specialist resources (Doctors/Lab Techs) were utilised only for identified cases, preventing wastage. Instead of creating parallel systems, the programme strengthened 18 existing Government Health Facilities (PHCs/CHCs) with equipment and training, ensuring long-term utility of invested capital. The Year 1 SROI Ratio of 1.77:1 shows that for every rupee invested, value worth INR 1.77 was created.

★★★★½

IMPACT

Timely identification of "silent killers" (Hypertension/Diabetes) prevented potential cardiac events and complications for thousands of beneficiaries. 99.3% of respondents expressed willingness to recommend the programme. By providing free diagnostics and medicines closer to home, the programme significantly reduced Out-of-Pocket Expenditure (OOPE) on travel and private care.

★★★★

SUSTAINABILITY

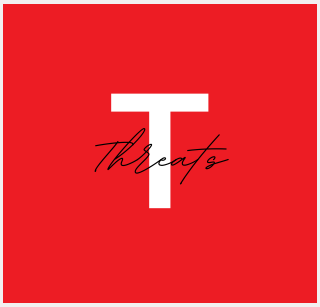
Equipped 18 public facilities and trained 143 staff (ANMs/ASHAs), leaving a lasting asset base within the public system. High involvement of Sarpanches (elected village heads) indicates strong local buy-in. The programme still faces threats from staff turnover in government facilities and from reliance on continuous funding for the mobile units (MMUs), which the state system cannot yet fully absorb.

08. SWOT ANALYSIS

- Strong doorstep outreach enabling early identification of NCD risk among rural and tribal populations.
- Integrated service pathway linking screening, diagnostics, referral, counselling, and follow-up within one programme framework.
- High community trust in mobile services and strong acceptance of screening and diagnostics at the village level.
- Strengthened PHCs and HWCs through equipment support, trained staff, and structured NCD service delivery..
- Effective coordination among community teams, MMVs, and public facilities enables smooth referrals and linkages.

- Follow-up tracking across large geographies remains resource-intensive with the existing field workforce.
- Limited availability of dedicated staff for intensive home-based follow-up in high-burden clusters.
- Temporary service disruptions during equipment maintenance or repair periods require rescheduling and additional counselling.

- Expansion of the model to additional underserved districts with high unmet NCD burden.
- Gradual integration with state and national NCD digital platforms to strengthen continuity of care.
- Strengthening referral linkages with higher-level facilities for advanced diagnostics and specialised care.
- Scale-up of preventive outreach to younger and working-age populations to delay disease onset.
- Replication of the community-to-facility model as a district health system best practice for NCD management.



- Rising NCD prevalence may exceed current operational capacity, increasing service demand.
- Turnover of public facility staff may affect continuity, training retention, and service quality.
- Sudden health emergencies or other priority programs may temporarily shift staff and resources away from routine screening and follow-up services.

09. RECOMMENDATIONS

The following recommendations are derived directly from the key challenges and barriers identified in the field notes, testimonials, and stakeholder interviews. They focus on specific, actionable operational improvements within the scope of the LIVES NCD programme.

To tackle isolation and motivation issues, the team can pilot "NCD Adherence Clubs" in high-burden villages. These groups can meet monthly (facilitated by the mobiliser/ASHA) for peer support, shared experiences, and group counselling, which can reinforce the habit of regular medication and lifestyle change. To operationalise this, the implementing agency can first conduct village profiling to identify high-burden areas based on disease prevalence and documented medication dropout rates. Following this, dedicated mobilisers or ASHA workers must be assigned as primary facilitators and provided with structured training modules focusing on group facilitation. Furthermore, a fixed monthly schedule for club meetings must be established, with a standard agenda, and the programme's efficacy must subsequently be evaluated by tracking participant attendance against clinical health indicators.

For beneficiaries struggling with "forgetfulness," the programme can distribute simple, pictorial medication calendars or pillboxes. Field staff can mark these calendars during visits to visually track adherence. Strategically, the programme can design and procure culturally relevant pictorial tracking tools that require no literacy to understand, alongside durable pillboxes categorised by times of the day. These visual aids must be targeted directly at beneficiaries with a history of missed doses during routine NCD camps or home visits. To ensure efficacy, field staff must be mandated to review, mark, and update these calendars during their scheduled visits, transforming the calendar into a verifiable tracking tool for both the beneficiary and the programme monitor.

The programme can record and play short video/audio testimonials from "Model Patients" (such as Jitendra or Champa) during camp waiting times. Hearing a peer explain why long-term medicine is vital (even when feeling well) can be more convincing than clinical advice alone. These recordings must focus solely on the patient's health journey and the critical need for continuous care, even when the patient feels physically well. NCD camp waiting areas can then be equipped with portable audio-visual playback devices, and camp coordinators can be trained to continuously play these testimonials during patient waiting periods.

10 CONCLUSION

The LIVES NCD Programme, implemented by Lupin Human Welfare & Research Foundation, has delivered strong, consistent results across prevention, early detection, treatment linkage, behaviour change, financial protection, and health system strengthening. The integrated model of SBCC, community screening, mobile diagnostics, and facility-level support has effectively improved access to care, enabled timely diagnosis, strengthened treatment adherence, and enhanced patient experience among rural and vulnerable populations.

Comparison with the control group establishes clear programme attribution. Beneficiaries in intervention areas demonstrated higher adherence to medicines and follow-up, stronger preventive behaviours, better understanding of health conditions, lower out-of-pocket expenditure, and greater satisfaction with public health services. At the same time, control populations continued to face higher costs, longer waiting times, greater wage loss, and more limited continuity of care.

The programme has also strengthened public health facilities by improving service efficiency, diagnostic reliability, provider–patient interactions, and infrastructure readiness, positioning public facilities as a preferred source of long-term NCD care. The results demonstrate a scalable and sustainable community-to-facility model aligned with national priorities for early detection, quality care, and universal health coverage.