



# Habits For Health

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## Introduction

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Non-communicable diseases (NCDs) like diabetes and cardiovascular disease are on the rise globally due to the rapid urbanization and socioeconomic changes in low-middle income countries [1]. In India, an estimated 60% of all mortalities are caused by NCDs, making them the leading cause of death [2].

Behavioral and biological risk factors for NCDs include a myriad of things: physical inactivity, overweight and obesity, increased fat and sodium intake, low fruit and vegetable intake, raised blood pressure (BP), blood glucose, and cholesterol levels [1]. Preventative healthcare to target these risk factors in India is lacking. Further barriers lie in people's ability to change behaviors. Areas with high rates of NCDs coincide with ones that lack resources like time and money that are important in being capable of behavior change [1].

To address some of these issues, our team aims to create a 90-day program that offers educational seminars and a structured guide to building and reflecting on healthy habits.

### 1. Problem

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NCDs in India surged from 37.9% in 1990 to 61.8% in 2016, reflecting growing concern of increased prevalence of diseases like diabetes all over the nation [1, 3]. This situation is exacerbated by the glaring absence of health education to prevent diseases, particularly in rural areas [4].

The Indian healthcare system faces numerous challenges such as a lack of emphasis on preventative medicine. Alarming projections suggest that by 2030, India stands to lose a staggering \$4.58 trillion due to the escalating burden of NCD and mental health costs [2]. Every moment this problem is unaddressed, the cost to individuals and society grows exponentially.

This critical issue stems from five primary factors: awareness, access, absence, affordability, and accountability. Lack of awareness arises from lower education levels and inadequate functional literacy. Access to healthcare is defined by both the physical capability to access care and the quality of it. The absence of an adequate healthcare workforce, particularly in rural areas, means that some individuals have to travel great distances to find healthcare practitioners. Affordability remains a critical issue; where public hospitals may offer free care, individuals still face numerous financial burdens due to long wait times, travel expenses, and lost wages. Meanwhile, private services, while quick to access, often fall above the budget of low-income individuals in India [5, 6].

This brings us to the focal point of our grand challenge: the lack of preventative care and resources to support healthy habits. The repercussions of NCDs, both financially and physically, disproportionately affect low-resourced individuals in India. Poverty and limited resources are linked to higher NCD rates and elevated healthcare costs. High out-of-pocket healthcare is prevalent in lower socio-economic communities [7]. These expenditures trap families in cycles of poverty, unable to build the resources to combat NCDs.

This predicament arises from the challenge of instigating behavioral changes toward health practices. Currently, there exists an apparent lack of prioritization and support for preventive healthcare behaviors concerning non-communicable diseases within the healthcare systems and communities in India, notably where resources are lacking.

## **2. Customer/Beneficiaries**

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Our customers are NGOs interested in establishing ways to motivate health-related behavioral changes in communities where resources are limited. Our program is designed to be implemented in healthcare NGOs that can leverage financial services as an incentive. We have slightly tailored our program to fit the organization we plan to pilot through, ADSS, a Bangalore-based community health NGO.

The beneficiaries of our program would be low-resource individuals within the geographical range of the community center where the program operates. Beneficiaries would be both current and potential members of the health NGO. While not limited to young to middle-aged adults (18-60 yrs), we are focusing on them in hopes of combating NCDs early.

From multiple interviews with health specialists based in Karnataka, we know that NGOs believe that the lack of emphasis on preventative healthcare is an issue. We asked two doctors from St. John's Medical College Hospital in Bangalore what the biggest areas for improvement within the Indian healthcare system were. They both listed the underutilization and lack of priority placed in preventative healthcare.

From surveys and interviews we conducted with Bangalorean residents, we discovered why behavior change can be difficult. About 56.9% of our survey respondents strongly agreed or agreed that their current health behaviors are a problem, and 67.3% strongly agreed or agreed that they find it difficult to adhere to a new habit [Appendix I]. Through qualitative interviews, we found that people often struggle prioritizing their health because of time commitments like family and work. These findings were consistent with data from a systematic review of studies surrounding barriers to behavior change [5].

A peer reviewed journal article discussed similar findings in the context of the Indian health system. Lack of access (both physically and in-terms of quality), absence of a sufficient healthcare workforce, affordability, and accountability are some of the reasons why solutions surrounding the healthcare crisis fail at an individual and systemic level [6]. Low resource communities need comprehensive systems to assist them in making behavioral changes. A bridge is needed to connect NGOs with community members around Bangalore and address barriers to preventative healthcare. This is where our program could provide a way for both these groups to save money, improve health, and work to improve the status of NCDs over time.

### **3. Solution**

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To promote preventative health practices, we created *Habits for Health*, a program that aims to educate, cultivate healthy habits, and instill long-term behavioral changes in participants. Preventative health acts as a low-cost solution to address the key risk factors of NCDs. The most critical aspect of preventative medicine for NCDs is lifestyle management at the individual level. Early and sustainable changes in diet, activity, and education investment are essential for a community to lower their NCDs [8].

The program will be 90 days following studies guidelines on the average length needed for behavior automaticity [9]. The program will focus on three components: educational seminars, daily habit tracking, and community engagement. Enlistment and participation in the program will be financially incentivized.

In order to establish measurements for success for both the individual and the program, we include knowledge evaluations and wellness check-ins. In conversation with Dr. Joseph, he suggested we use a short knowledge evaluation to test how effectively our program conveyed information. Wellness check-ins serve the dual purpose of familiarizing program participants with the health services the NGO offers and establishing biological markers, like blood pressure and sugar, to track success.

Seminars: As briefly discussed in the Customer/Beneficiaries section, our surveys indicate that the main reason Bangalorans struggle to practice preventative health behavior is due to a lack of time. To address this barrier, seminars on each topic are held for two weeks, allowing participants flexibility in which they choose to attend [Appendix H.1]. Though in-person participation is highly recommended, seminars have an online option to mitigate issues of travel or time constraints.

The seminars will cover five topics: health-seeking behavior, diet, exercise, sleep, and mental health that empower participants to utilize available resources. These topics were chosen based

on an analysis of multiple case studies showing that educational seminars on these topics can prevent or delay the onset of diabetes in high-risk populations [4].

The structure of the seminars [Appendix H.2] was developed to loosely reflect seminars led by St. John Medical College Hospital in Bengaluru which are highly successful with similar objectives [10]. The seminars minimize lecturing and emphasize activity and discussion-based learning, following advice from our mentor and public health specialist, Simran Singh, who has found that the most effective way to engage participants is through games.

Seminars are led by community health workers (also referred to by ADSS as Wellness Facilitators (WF)). This decision is informed by interviews with multiple health specialists in India who have emphasized to us in interviews that it is vital to have trusted community members as the leaders of health initiatives. An analysis of preventative health initiatives and their relative success confirms this. It showed that the majority of ineffective initiatives failed to engage the community meaningfully, ultimately unable to gain trust or properly assess the community's needs [11].

From our problem survey [Appendix I] 81.5% of respondents reported being interested in having a community space to talk and learn about their health, and a general sentiment of interviews was a want for a location to socialize with their community. Thus, the seminars are held in a community space and conclude with a free meal. This will allow participants to connect with one another and the community health workers, ultimately building a network that can support them past the 90- day program.

#### *Daily Habit Tracking:*

In addition to the seminars, participants must fill out a health journal daily, which is designed to take minimal time and effort [Appendix G]. These journals are to be filled out at home and discussed during the seminars. As mentioned in the Customer/Beneficiaries section, accountability and consistency are the main challenges to establishing preventative health behaviors. Research has shown that progress monitoring is an effective self-regulation process that increases goal attainment [12] Thus, the journals serve as a low-commitment activity that keeps participants accountable to the program and reflecting on their current habits. Journals also serve as feedback and quantitative data, indicating how the program can be better customized to the participants and the overall success of patients and the program as a whole.

#### *Finances:*

- a. *Financial incentive:* Because we recognize that getting people to value preventative health, we provide participants with financial incentive. The NGOs we operate through offer financial services, including savings accounts with high Return on Investment (ROI). The savings account will offer a base ROI rate of 7%. Contingent on engagement

with seminars and journals, participants can work up to 12%, nearly doubling their return yearly.

- b. *Financial model:* The program's financial model builds on the existing community bank model that thrives in many health-related NGOs. Operating similarly to a standard bank, a community bank generates revenue by loaning out money and collecting interest.

Using ADSS's member and interest statistics [see Appendix J for specific numbers and calculations], the revenue reaches approximately 30 lakh/year, using a 7% ROI on saving accounts. Assuming 100% of ADSS members achieve a 12% ROI, our revenue is approximately 22 lakh/year. The cost of our program, which accounts for employees, food, and rented space, is 22 lakh to serve the entire member base. This means we are still financially sustainable even if 100% of the members enroll in the program and participate enough to achieve a 12% ROI rate. Although this is highly unlikely—we only expect a third of members to enroll and 80% to achieve the 12% ROI—the model was intentionally designed to be financially sustainable for 100% success so that we can guarantee the program has the resources for anyone who wants to better their health.

This doesn't even account for the fact that as people go through this program and practice preventative health, they are less likely to have NCDs and health emergencies, ultimately saving the NGO money. Dr. Alen, a St. John's Medical College and Hospital provider, told us about a study he worked on with a Delhi-based health NGO that runs similar preventative health initiatives. They found that members who underwent the educational seminars cost the organization 45% less than members who did not.

After the 90-day program, participants can maintain their higher rate of ROI as long as they complete bi-monthly check-ins with WF. We recognize that significant life events may disrupt healthy habits, so it is important that support is continuously provided beyond the 90 days.

#### **4. Make it Real**

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While developing this program, we conducted interviews and surveys to ensure we received appropriate input from the communities we were attempting to serve. We have received 60 responses to our problem survey and feedback on our prototype/program outline from 30 interviews. Our surveys showed us that poor health behaviors are common, and many locals see this as a problem [Appendix I]. This behavior pattern showed us that a program targeting healthy lifestyle choices can be a feasible solution. The first feedback we got from the prototype interviews was that the poster lacked enough information to convey the program's message and the financial incentive. Interviewees needed additional explanations to fully understand. To improve our design, we brainstormed ways to deliver concise information without overcrowding

the poster. For example, we specified the NCDs this program would aid in preventing, specifically diabetes and heart disease. As we have found in research, these are common NCDs in India, and therefore, people are more likely to be interested in preventing them.

Our team received outside feedback from health professionals around Bangalore. From ADSS workers, specifically our mentors Hareesh and Simran, we were told that leveraging the ROIs they currently provide to get enrolment was a creative idea. From Dr. Joseph, who has run similar health programs in Bangalore for the past 30 years, we received positive feedback on our chosen seminars. He provided valuable advice on the importance of hiring a manager for the entire program, rather than adding responsibilities to existing positions.

We have a four-month plan to pilot our program through ADSS. The first month will be for preparations like staffing and promotion. We want to update the responsibilities of WFs who will be paid an hourly wage. We will also need a manager to keep the curriculum updated, and deal with normal program costs, advertising, and salaries. The most important responsibility for this position is to keep the program updated, ensuring it can adapt to an ever-changing health climate. Our final position would be a banker to oversee the savings accounts, manage interest, and loan out money.

Once these positions are filled begin advertising. We will utilize posters, word of mouth, WhatsApp, and ADSS' connections with the community. At the end of this period, we will begin the 3-month trial program. We will also conduct knowledge evaluations and wellness check-ups to test participants' level of health education and establish biological baselines for health. These results would be evidence of the efficacy of our program in promoting preventative healthcare and changing behaviors. Throughout this process, we will record participant feedback on successful features and ones that could be improved. Once this pilot is over, we plan to sell this program to other health NGOs interested in similar methods of behavior incentivization. Spreading to more NGOs means overcoming our geographical barriers and reaching new populations. By investing for Habits for Health we can help communities build wealth, improve health, and prevent non-communicable diseases.

Habits for Health reflects the culmination of interests and expertise from health professionals, community members, and mentors from around Bangalore. This solution addresses our grand challenge of preventative care, working to bring together the interests of communities and organizations in a respectful way. Our model allows for growth and development, so it can be implemented on a large scale and be molded to fit the needs of many different communities around the world. By reducing risk of noncommunicable disease, cutting health costs, and growing community wellness we can create change, one habit at a time.



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## Appendices:

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### Appendix A: Strength-of-Idea-Rubric (16 Questions)

#### A.1 Problem:

1. What problem are you working on?
  - a. Preventative healthcare behaviors for non-communicable diseases are not currently prioritized or supported by the health systems and communities in India, especially where resources are lacking.
2. What evidence do you have that this is a problem?
  - a. Peer reviewed journal articles highlighting the mortality statistics on non-communicable diseases, and the lack of priority around preventative medicine. For example, non-communicable diseases make up 60% of all mortalities in India, making it the leading cause of death.
3. Who faces this problem?
  - a. Low-resourced people in India
4. Why does this problem exist?
  - a. Difficulty of changing habits towards health practices. Lack of awareness regarding health issues, access to quality care, absence of adequate healthcare workforce, affordability.

#### A.2 Customer:

1. Who is your customer/beneficiary?
  - a. Health NGOs are our customers. The beneficiaries are the community members within the geographical range of the community center Habits for Health will operate out of.
2. Why do they face the problem?
  - a. Low resource communities often don't have the time or money to focus on preventative health. For example, systematic analysis found that transport issues, and occupational responsibilities were hindering individuals from instilling behavior changes.
3. What evidence do you have that they consider this to be a problem?
  - a. From our surveys 50% found it difficult to adhere to a new habit change while 43% agreed that their current health behaviors are a problem. From conversations with ADSS mentors they also stressed that the lack of priority around preventative medicine is one of their biggest challenges to confront. From our conversation with Dr. Joseph, he stated that prevention is one of the main areas of improvement needed in the Indian healthcare system.
4. Why haven't they solved this problem themselves?
  - a. Providers lack the comprehensive health systems to create large scale behavior change. Coupled with absence of a sufficient sized healthcare workforce,

affordability, and lack of accountability many solutions made to address the preventative healthcare fail.

### **A.3 Solution:**

1. What is your solution?
  - a. Habits for health, a 90-day financially incentivised health promotion program. Over the 90-days participants will attend bi-weekly health seminars, fill out daily healthy habit trackers, and create peer connections around health. The goal of this program is to instill healthy behavioral changes in participants.
2. How will the solution help the problem? (social value proposition/theory of change)
  - a. Through the theory of change, our program instills healthy behaviors which are a part of preventative healthcare. By prioritizing those preventative practices we can lower the risk of developing a chronic disease further down the line. Additionally, financial incentivization will encourage enrollment and participation.
3. What evidence do you have that the solution will help the problem?
  - a. We have evidence from a peer review journal article showing that on average participants achieve automaticity of a new habit at 84 days. Evidence also shows that “repetition in stable contexts” has been a key element of behavior change. This is why we made a healthy habit tracker daily.
  - b. Additionally, an NGO that runs similar preventative health initiatives found that members who underwent the educational seminars cost the organization 45% less than members who did not attend.
  - c. A separate case study ran in an outpatient program found that patients that were educated on healthy habits and their long term benefits were 3x less likely to need inpatient services than the control (did not receive education), and patients that received the education and tracked their habits were 4x less likely to need inpatient services than the control.
4. How do you sustain yourself financially? (financial value proposition)
  - a. Working like a bank, our program collects the savings investments from participants. We then loan out that money and collect interest which is higher than the return on investments for the savings accounts. Extra profits from the positive difference can be re-invested in the program to reach a larger audience, or invest in new health services.
  - b. The financial incentivization we offer is offset by the fact that organizations will save money long-term because they will have to pay less, on average, in health services for those who participated in the program.

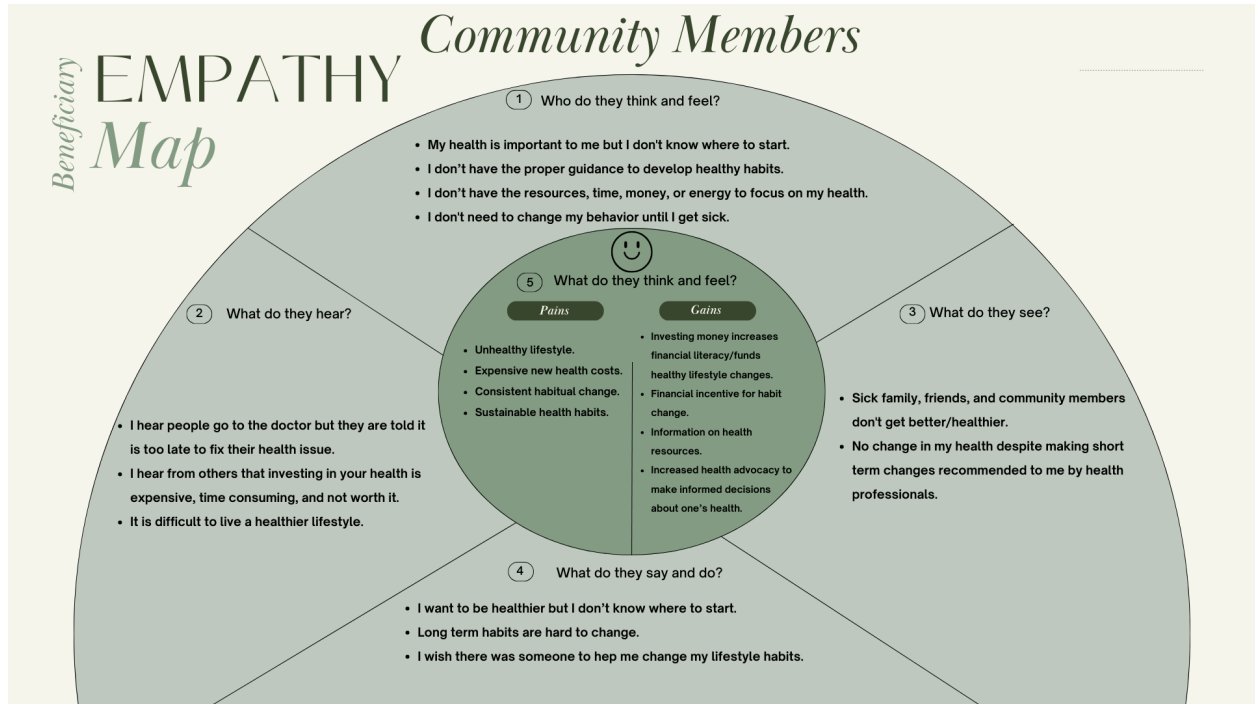
### **A.4 Make it Real:**

1. Do you have primary data?
  - a. Yes, we have done 30 interviews and 61 surveys.

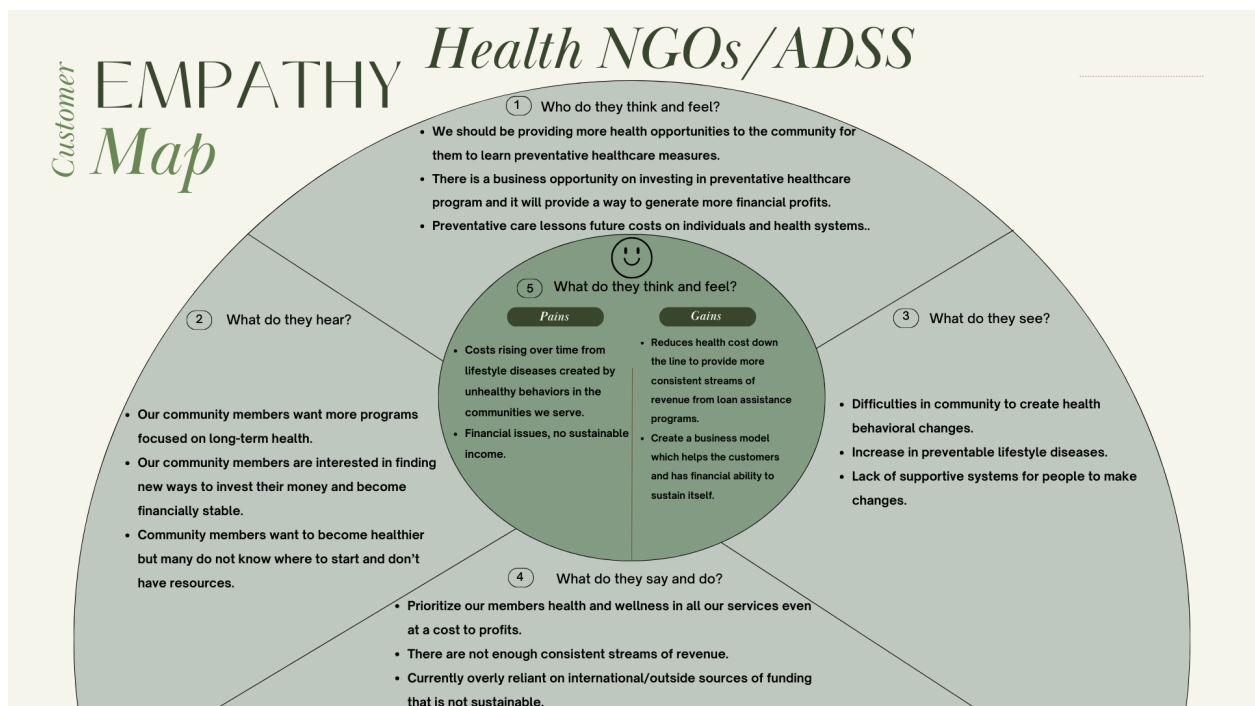
2. Have you received outside feedback on your ideas? (prototype/minimum viable product [MVP])
  - a. Yes, we have had 12 interviews done about our prototype, and on our program as a whole. Locals liked our posters, but wanted more information on it. In terms of the program, interviewees liked the sound of it, but were confused about the financial incentives of the program.
  - b. Health professionals were excited about our program and thought it was feasible in implementation, and especially liked the journaling aspect.
  - c. Hareesh, our mentor from Swasti helped us adjust some logistics and is presenting the idea at a board meeting
3. Do you have a clearly articulated plan for the next steps?
  - a. Yes, we want to create a pilot program through ADSS. Over the next month we want to choose the staff we need. Wellness facilitators to run seminars, a manager to run the program, and a banker to manage the savings account. Once we have this team we want to start advertising the program through posters, word of mouth, and the strong connections ADSS already has within the community.
  - b. Then we will begin the pilot which will last three months and collect feedback and make adjustments before selling the program to other NGO's.
4. Do you have the right partners+team; have you identified who you would like to work with/bring into your team?
  - a. We want two wellness facilitators working on normal salary plus commission. They will run seminars. Additionally we need a manager to keep the curriculum updated and deal with staffing, advertising, and other normal costs of the program. Finally we want a banker to manage savings accounts. And loan out money. These skilled workers with ADSS are the partners we want to run Habits for Health.
  - b. For selling the program to other NGOs we have the support of Swasti Health Catalyst, who has the connections and experience needed for selling the pilot programs they create.

## Appendix B: Empathy Maps

### B.1 Beneficiary Community Members:



### B.2 Customer ADSS:



## **Appendix C: Randomized Controlled Trials**

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In a randomized control trial, we would gather a group of 50 ADSS members who live in the same community and deal with issues of low resources. These participants will already be utilizing ADSS savings accounts. In the beginning of the study all participants will have their blood pressure and blood sugar levels taken to establish a baseline. Then they would be randomly split into 2 groups of 25.

The intervention group would enroll in the Habits for Health program. They will participate in the seminars, journal entries, and in the return on invest incentive. Every thirty days during the program this group will have their blood pressure and sugar taken, along with reports of pains and aches.

The control group would not enroll in the Habits for Health program. They will stay in their normal savings program and not receive any type of specialized health education. They will also have blood pressure and sugar tested along with reports of aches and pains taken every thirty days during the program.

We would measure the blood pressure and blood sugar levels at the end of the 90-day period, comparing results between the two groups. To see if there's a significant difference we will calculate the weighted mean difference for both blood sugar and pressure from the initial measurement to the final measurement. If the weighted mean difference for the intervention group is less than the weighted mean for the control group by at least 25% then the intervention will be viewed as a success.

## **Appendix D: Story in 7 Sentences**

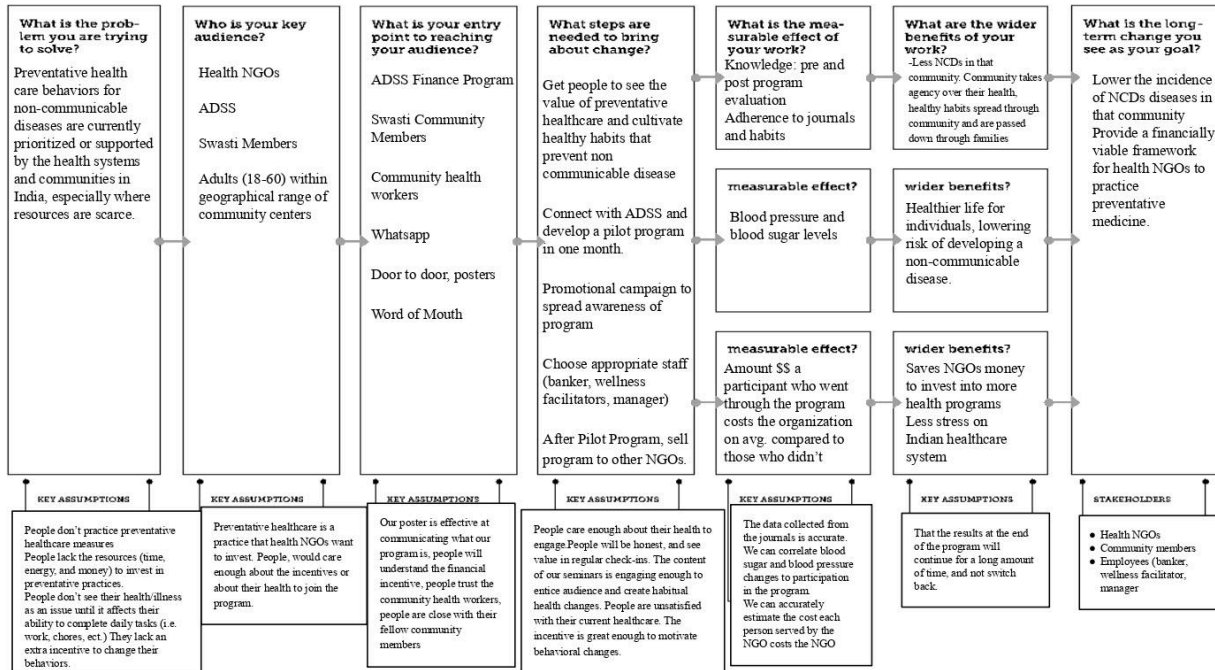
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1. Once upon a time there was a man named Raj who lived and worked with his family in Bangalore.
2. And every day Raj felt healthy so he didn't exercise, and ate unhealthy food.
3. Until one day his community doctor told him he was pre-diabetic.
4. And because of this Raj's community doctor told him about needing to join health programs to help manage his diet.
5. And because of that Raj researched the programs for health behavior change with incentives.
6. Until finally Raj joined the Habits for Health and stayed dedicated hard for 90-days.
7. And ever since that day Raj has been healthier, and has a lower chance of developing a chronic disease.

# Appendix E: Theory of Change

I want to clarify my priorities  
by defining my goals and the path to reach them

## THEORY OF CHANGE





## Appendix F: Business Model Canvas

Business Model Canvas				Date: 8 March 2024
Habits for Health				
<p><i>Key Partners</i></p> <ul style="list-style-type: none"> <li>● Health NGOs</li> <li>● ADSS/Swasti</li> </ul>	<p><i>Key Activities</i></p> <ul style="list-style-type: none"> <li>-Preventative Healthcare Seminars</li> <li>-Provide daily healthy habit tracking</li> <li>-Create peer connection</li> <li>-Savings accounts management</li> </ul>	<p><i>Value Proposition</i></p> <ul style="list-style-type: none"> <li>● Provide a service that educates on healthy habits to prevent non communicable diseases in the future.</li> <li>● Increased savings account returns for participating in a program for a healthier lifestyle.</li> <li>● A program that increases the health of the population and prevents further health costs on the healthcare system in the future.</li> <li>● A program that creates a healthier community, while providing a sustainable profit, to invest in more health programs.</li> </ul>	<p><i>Customer Relationships</i></p> <ul style="list-style-type: none"> <li>● Bi-weekly seminars where we educate and discuss with the customer.</li> <li>● Daily habit tracker, that Habits for Health reads, which has a comment and extra notes section.</li> </ul>	<p><i>Customer Segments</i></p> <ul style="list-style-type: none"> <li>● Early adopters: Those who know that chronic diseases are a rising problem.</li> <li>● People interested in increasing their health.</li> <li>● Low-resourced communities.</li> <li>● Individuals in the geographically constrained area around the NGO running the program.</li> <li>● People looking to invest their money.</li> <li>● Health NGOs</li> </ul>
<p><i>Key Resources</i></p> <ul style="list-style-type: none"> <li>● Wellness Facilitators</li> <li>● Community bank that will manage savings accounts and loan out money with interest.</li> <li>● Habit Tracking Journals</li> <li>● Community Meeting Spaces</li> </ul>			<p><i>Channels</i></p> <ul style="list-style-type: none"> <li>● Posters</li> <li>● Word of mouth</li> <li>● NGOs</li> <li>● NGO's previous community connections</li> <li>● Community meetings about the program</li> <li>● Microentrepreneur network</li> <li>● NGOs</li> </ul>	
<p><i>Cost Structure</i></p> <ul style="list-style-type: none"> <li>● Salaries - Wellness facilitators.</li> <li>● Meals.</li> <li>● Printing and materials for posters.</li> <li>● Printing and materials for journals</li> </ul>			<p><i>Revenue Streams</i></p> <ul style="list-style-type: none"> <li>● Selling the program</li> <li>● The initial investments and the interest from the loans made with that money.</li> </ul>	

## Appendix G: Prototypes

### G.1 First Program Poster Prototype:

### Habits for Health

a 90 day preventable healthcare program

**Our seminar topics:**

Seeking Care

Healthy Eating

Exercise

Sleep

Mental Health

In this program:

- Earn up to 12% on your return on investment!
- Gain access to health services and consultations!
- Work towards healthier habits for a better you!

We await you with open arms!

Contact us @##### for more information

### ಉತ್ತಮ ಆರೋಗ್ಯಕ್ಕಾಗಿ ಅಭ್ಯಾಸಗಳು

90 ದಿನಗಳ ತಡೆಗಟ್ಟಬಹುದಾದ ಆರೋಗ್ಯ ಕಾರ್ಯಕ್ರಮ

**ನಮ್ಮ ಸೆಮಿನಾರ್ ವಿಷಯಗಳು:**

ಆರೋಗ್ಯವನ್ನು ಕುಡುಕುವುದು

ಆರೋಗ್ಯಕರ ಸೇವೆ

ವ್ಯಾಯಾಮ

ನಿದ್ರೆ

ಮಾನಸಿಕ ಆರೋಗ್ಯ

ಈ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ:

- ಹೂಡಿಕೆಯ ಮೇಲಿನ ನಿಮ್ಮ ಲಾಭದ ಮೇಲೆ 12% ವರೆಗೆ ಗಳಿಸಿ!
- ಆರೋಗ್ಯ ಸೇವೆಗಳು ಮತ್ತು ಸಮಾಲೋಚನೆಗಳಿಗೆ ಪ್ರವೇಶವನ್ನು ಪಡೆಯಿರಿ!
- ಆರೋಗ್ಯಕರ ನಿಮಗಾಗಿ ಆರೋಗ್ಯಕರ ಅಭ್ಯಾಸಗಳ ಕಡೆಗೆ ಕೆಲಸ ಮಾಡಿ!

ತೆರೆದ ತೋಳುಗಳೊಂದಿಗೆ ನಾವು ನಿಮ್ಮನ್ನು ಕಾಯುತ್ತಿದ್ದೇವೆ!

### G.2 Second Program Poster Prototype:

### ಉತ್ತಮ ಆರೋಗ್ಯಕ್ಕಾಗಿ ಅಭ್ಯಾಸಗಳು

ಆರೋಗ್ಯ ಅಭ್ಯಾಸಗಳನ್ನು ಸುಧಾರಿಸಲು 90 ದಿನಗಳ ಕಾರ್ಯಕ್ರಮ.

ಈ ಪ್ರೋಗ್ರಾಂ ಒಳಗೊಂಡಿದೆ:

- ಮದುವೇಹ ಮತ್ತು ಹೃದಯ ಸಮಸ್ಯೆಗಳಂತಹ ಕಾಯಿಲೆಗಳ ಅಪಾಯವನ್ನು ಕಡಿಮೆ ಮಾಡುವ ಆರೋಗ್ಯ ಅಭ್ಯಾಸಗಳ ಕುರಿತು ಶೈಕ್ಷಣಿಕ ವಿಚಾರಗೋಷ್ಠಿಗಳು.
- ಆರೋಗ್ಯ ಸೇವೆಗಳು ಮತ್ತು ಸಮಾಲೋಚನೆಗಳಿಗೆ ಪ್ರವೇಶ.
- ಭಾಗವಹಿಸುವ ಮೂಲಕ ನಮ್ಮೊಂದಿಗೆ ನಿಮ್ಮ ಉಳಿತಾಯ ಖಾತೆಯಲ್ಲಿ **ನೀವು 12% ವರೆಗೆ ಗಳಿಸಬಹುದಾದ** ಆರ್ಥಿಕ ಪ್ರೋತ್ಸಾಹ!

**ಆರೋಗ್ಯ ಗುರಿಗಳು:**

ಆರೋಗ್ಯ ರಕ್ಷಣೆಯನ್ನು ಕುಡುಕುವುದು

ಆರೋಗ್ಯಕರ ಸೇವೆ

ವ್ಯಾಯಾಮ

ನಿದ್ರೆ

ಮಾನಸಿಕ ಆರೋಗ್ಯ

ನೀವು ಉತ್ತಮವಾಗಲು ಆರೋಗ್ಯಕರ ಅಭ್ಯಾಸಗಳ ಕಡೆಗೆ ಕೆಲಸ ಮಾಡಿ!

### Habits For Health

A 90 day program to improve health habits.

This program includes:

- Educational seminars about health habits that can reduce risk of diseases like diabetes and heart issues.
- Access to health services and consultations.
- Financial incentive where you can **earn up to 12%** on your savings account with us through participation!

**Health Goals:**

SEEKING CARE

HEALTHY EATING

EXERCISE

SLEEP

MENTAL HEALTH

Work toward healthier habits for a better you!

### G.3 First Journal Prototype:

## DAILY CHECK IN DATE \_\_\_\_\_


1.) FOOD ATE TODAY? \_\_\_\_\_


BREAKFAST: \_\_\_\_\_


LUNCH: \_\_\_\_\_

DINNER: \_\_\_\_\_

SNACK: \_\_\_\_\_


2.) MINUTES EXERCIZED: 


3.) HOURS SLEPT: 





**Habits  
for Health**


4.) RATE YOUR MENTAL STATE TODAY:

  
ANGRY

  
TIRED

  
SAD

  
HAPPY

  
EXCITED

5.) DID YOU PRACTICE YOUR HEALTHY HABIT TODAY? \_\_\_\_\_

YES  NO


COMMENTS/REFLECTIONS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### G.4 Second Journal Prototype:



DATE: \_\_\_\_\_

## DAILY CHECK IN


1.) FOOD ATE TODAY? \_\_\_\_\_


BREAKFAST: \_\_\_\_\_

LUNCH: \_\_\_\_\_

DINNER: \_\_\_\_\_

SNACK: \_\_\_\_\_


2.) MINUTES PHYSICALLY ACTIVE: 


3.) HOURS SLEPT: 


5.) DID YOU PRACTICE YOUR HEALTHY HABIT TODAY? \_\_\_\_\_

YES  NO

4.) RATE YOUR MENTAL STATE TODAY ON A SCALE OF 1 - 10:








0 1 2 3 4 5 6 7 8 9 10

COMMENTS/REFLECTIONS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



ಉತ್ತಮ  
ಆರೋಗ್ಯಕ್ಕಾಗಿ ಅಭ್ಯಾಸಗಳು

ದಿನಾಂಕ: \_\_\_\_\_


## ಡೈಲಿ ಜರ್ನಲ್


1.) ನೀವು ಇಂದು ತಿಂದ ಆಹಾರ  
ತಿಂದಿ: \_\_\_\_\_

ಊಟ: \_\_\_\_\_

ಬೋಜನ: \_\_\_\_\_

ತಿಂದಿಗಳು: \_\_\_\_\_


2.) ದೈಹಿಕವಾಗಿ ಸಕ್ರಿಯವಾಗಿರುವ ನಿಮಿಷಗಳನ್ನು ರಿಪೋರ್ಟ್ ಮಾಡಿ: 


3.) ಗಂಟೆಗಳ ನಿದ್ರೆ: 


4.) ನೀವು ಇಂದು ನಿಮ್ಮ ಆರೋಗ್ಯಕರ ಅಭ್ಯಾಸವನ್ನು ಅಭ್ಯಾಸ ಮಾಡಿದೀರಾ? \_\_\_\_\_

YES  NO

5.) ಇಂದು ನಿಮ್ಮ ಮಾನಸಿಕ ಸ್ಥಿತಿಯನ್ನು 1 - 10 ರ ಪ್ರಮಾಣದಲ್ಲಿ ರೇಟ್ ಮಾಡಿ:







0 1 2 3 4 5 6 7 8 9 10

6.) ಕಾಮೆಂಟ್‌ಗಳು/ಪ್ರತಿಫಲನಗಳು: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Appendix H: Seminar Schedule

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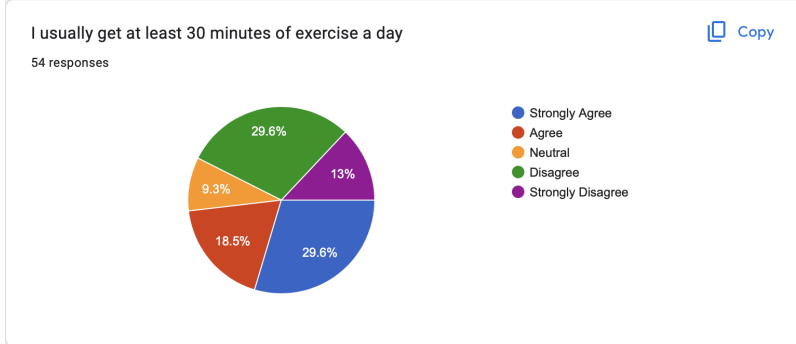
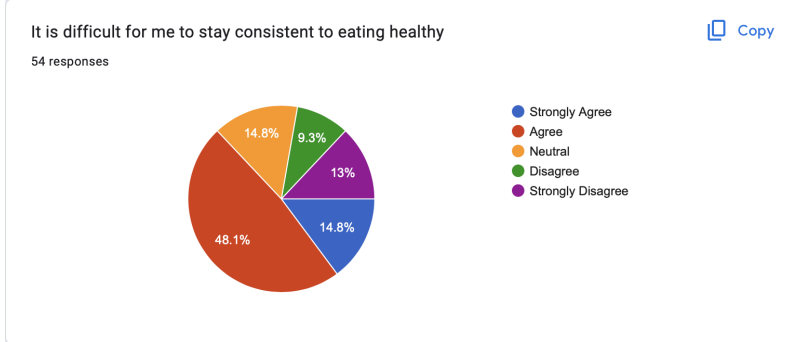
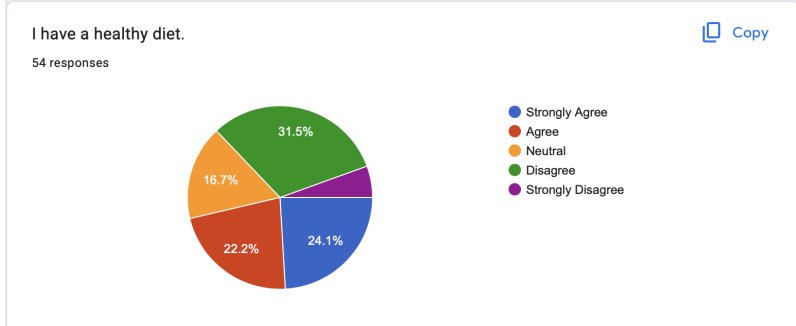
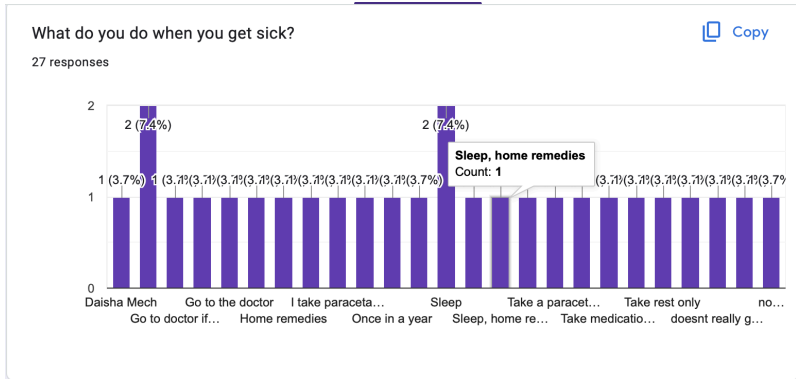
### H.1: 12 Week Seminar Schedule

Week #	Topic
1-2	Introduction: Introductions by WF, how the program operates, what is expected, how the financial incentive works.
3-4	Health Seeking Behavior: Resources available and how to access them. <u>Activity</u> : Panel of healthcare workers (or programs that offer health resources), roleplay where participants are given a health issue and need to navigate what resources to utilize using cellphones.
5-6	Diet: Eating healthy within time and monetary constraints. <u>Activity</u> : Cooking class and/or sharing recipes.
7-8	Sleep: Discussing sleep patterns, sleep disorders, sleep hygiene. <u>Activity</u> : Meditation/savasana.
9-10	Exercise: Discussion on importance and different ways to stay active. <u>Activity</u> : Yoga, soccer, etc.
11-12	Mental Health: Information on available resources, community building, and destigmatization. <u>Activity</u> : Circle/identity game.

### H.2: Seminar Structure

15 minutes: Lecture on topic
30 minutes: Activity or discussion
15 minutes: Reflection and Q&A

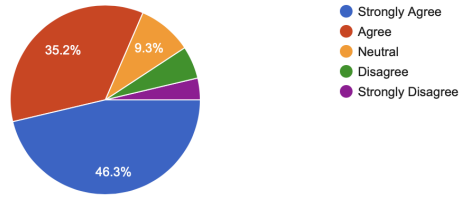
# Appendix I: Survey Responses



I would be interested in having a community space to talk and learn about my health and habits

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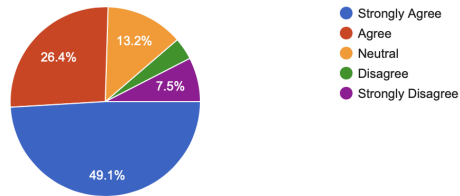
54 responses



I would be interested in participating in a program that focuses on health education

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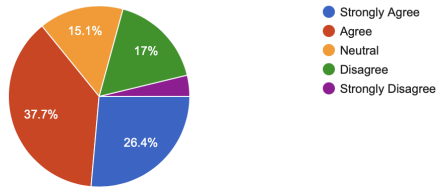
53 responses



I want to improve my health behavior but I do not know where to start

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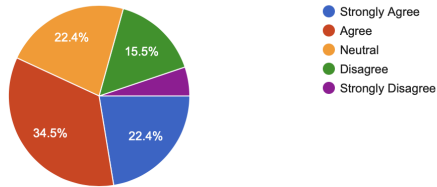
53 responses



I think that my current health behaviors are a problem.

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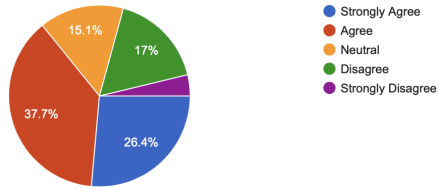
58 responses



I want to improve my health behavior but I do not know where to start

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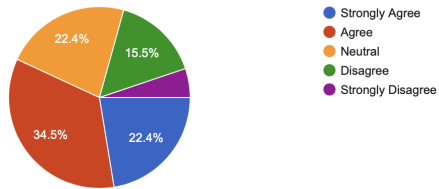
53 responses



I think that my current health behaviors are a problem.

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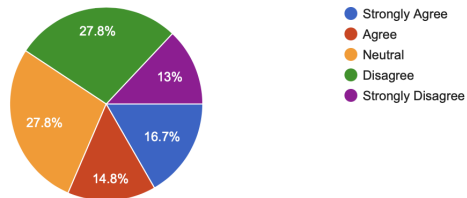
58 responses



I prioritize my mental health

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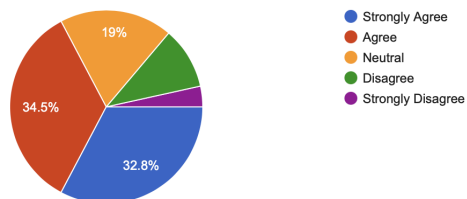
54 responses



I find it difficult to adhere to a new habit change in my life

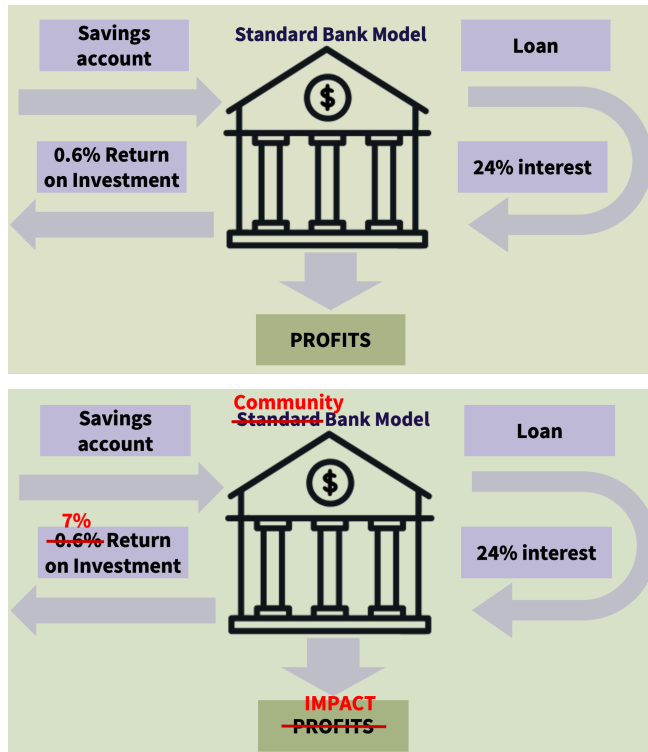
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58 responses



## Appendix J: Financial Report

*Habits for Health's* financial model builds on an existing non-profit community bank model that thrives in many health related NGOs. Functioning like a standard bank, a community bank gets money in from savings accounts which is loaned out and collects interest. A portion of this interest goes back to savings account holders and the rest is profit. The key differences are that a community bank tends to give higher return rates to savings account holders to build the community's wealth and the "profits" are invested back into the community. Since we will be piloting the program via ADSS, their specific model and numbers will be what is reflected in our financial model and the financial feasibility calculations.



### Context:

ADSS offers financial services such as microfinance loans as well as saving accounts with a monthly return on investment (ROI). ADSS generates income from the difference between their profits from loans and their payout on savings accounts, which is put towards paying their expenses such as screening technology, wages of employees, and rent. Additionally, 75% of ADSS's current income comes from external sources (grants, donations) and their goal is to be more financially independent.



## Elements of the Financial Model:

### 1. Microfinance Loans:

- a. *General:* Microfinance loans are a banking service that provides small loans (typically under Rs. 1 lakh) to low-income individuals who otherwise would have no other access to financial services. The goal of offering microfinance loans is to help alleviate poverty and empower financial freedom for low-income communities. Studies have shown that microfinance loans increase the “income accumulation of poor households,” instills saving practices, and brings significant economic gains [13]. Additionally, microfinance institutions generally have great track records and are able to be self-sufficient.
- b. *ADSS:* ADSS provides microfinance loans with an interest rate of 24%. Most microfinance institutions have an interest rate ranging between 24-32%, meaning ADSS’s rate is competitive in the market [14]. ADSS’s microfinancing services in conjunction with their savings accounts attract over 80% of their customer base. ADSS has about 2,400 people accessing their loans annually at an average amount of Rs. 30,000. Further, microfinance loans are a pivotal part to the financial sustainability of the organization, and all profits are reinvested into operational expenses and programs.

### 2. Savings Accounts:

- a. *General:* Savings accounts are a fundamental financial tool that enables individuals to securely store their money while earning a return on investment . Since a savings account is low risk, the average yield for savings accounts is just 0.59% (given this is an average rate from mainly for-profit banks) [15]. However, there are some government and NGO saving schemes that aim to promote wealth accumulation and offer ROI rates between 3.5-7%. One barrier when it comes to encouraging people, especially from lower economic backgrounds, to invest in savings accounts is there is a lock-in period. This means customers are unable to take out their money, which may leave them in a vulnerable position in an emergency situation.
- b. *ADSS/ADSS:* Currently, ADSS offers a savings account with a fixed 10% return on investment to their members. Additionally, they require all 3,000 members to invest at least Rs. 500 monthly. Unlike other saving schemes, ADSS does not require a lock-in period. Between the very high ROI and no lock-in requirement, ADSS is one of the better options for saving schemes available in India. However, in order to increase their income (a portion of which will fund the program and the rest will help ADSS be financially independent) and leverage their high return on investment rates, ADSS will restructure their saving schemes to have a base ROI of 7% that can increase to 12% based on members participation in initiatives

such as *Habits for Health*. 7% ROI is still significantly better than what other schemes offer, meaning it will still attract members, and the potential to earn 12% ROI would significantly incentivize members to join and actively participate in the program.

Ultimately, for *Habits for Health* to be financially sustainable the way we have outlined, it would be sold to NGOs that offer financial services like ADSS. However, other NGOs can buy and adapt this program structure as long as they are able to source funding and identify incentives.

### Calculations:

#### 1. Cost of Program:

The cost of the program, assuming it would be run through an existing NGO with financial services already in place, would include labor of two additional Community Healthcare Workers/Wellness Facilitators, renting a community space, and the meals provided.

##### a. Wellness Facilitators:

- i. Wellness facilitators/Community Health Workers already exist within most health organizations, so we would just have to increase their wage for the additional work they do for the program. The program would only require the Wellness Facilitators 2 hours a week (one for the seminar itself, and one for preparation). The daily wage of a Wellness Facilitator is 300 rupees (wage provided by St. John's Medical College), so we would pay the wellness facilitators an extra 150 rupees a week.

$$\frac{Rs.150}{week * Wellness Facilitator} * \frac{12 weeks}{90 day period} * 2 wellness facilitators = Rs. 3,600/90 day period$$

Based on feedback from employees at St. John's and ADSS, the commission based wage is preferred among both administrative staff and WF, thus we will use that model. But for the sake of the calculation, we used the St. John's wage (assuming ADSS WF on average makes a similar wage with commission).

$$\frac{Rs. 20,000}{month * worker} * 2 workers * 3 months = Rs. 120,000/90 day period$$

##### b. Renting Community Space:

Rs. 0

This will vary NGO to NGO but in the experience of ADSS and St. John's Medical Hospital, if the NGO has a good enough connection within the community they will not have to pay or they can utilize their own office/clinic spaces.

c. Meals Provided:

St. John's said meals cost Rs. 120 per person. Our program has a capacity of 60 people per program cycle (or 240 people yearly), and since people come to seminars bi-weekly we can assume there's an average of 30 people at each seminar weekly.

$$\frac{\text{Rs. 110}}{\text{meal}} * \frac{30 \text{ meals}}{\text{week}} * \frac{12 \text{ weeks}}{90 \text{ day period}} = \text{Rs. 39,600/90 day period}$$

Total cost: (Rs. 3,600 + 39,600)/90 day period = Rs. 43,200/90 day period = Rs. 172,800/year

Cost of program per person:  $\frac{\text{Rs. 172,800}}{\text{year}} * \frac{1 \text{ year}}{240 \text{ people}} = \text{Rs. 720 per person}$

2. Financial Sustainability:

To calculate the financial sustainability, we assume the following:

- the NGO's adopting the program has 3,000 members (based on ADSS membership numbers)
- amount invested per member monthly: Rs. 500

*Cost:* Although it is highly unlikely we get every member to participate in the program (we expect only about a third to enroll over time), we want to have the resources to serve every member, thus we calculate the cost of the program to serve all 3,000 members, making the final cost =  $\frac{720}{\text{person}} * 3,000 \text{ people} = \text{Rs. 21,60,000}$  or approx 22 lakh.

a. *Revenue:*

1. Revenue calculated using ROI of 7%:

$$3000 \text{ members} * \frac{\text{Rs. 500}}{\text{members*monthly}} * \frac{12 \text{ months}}{\text{year}} = \text{Rs. 180,00,000/year}$$

Thus, the bank has Rs. 180 lakh a year to loan out at 24%. To calculate the profit margin we multiple Rs. 18,000,000 by the difference between the loan rate (24%) and the savings payout (7%) =  $\text{Rs. 180,00,000} * 0.17 = \text{Rs. 30,60,000/year}$  or approx 30 lakh a year.

Since the revenue (30 lakh) is higher than the cost (22 lakh), we can conclude this model is financially sustainable.

2. Revenue calculated that 100% of the members attain 12% ROI

$$\text{Rs. 180,00,000/year} * (0.24 - 0.12) = \text{Rs. 21,60,000/year}$$
 or approx 22 lakh.

With this calculation, you can see the model breaks even when 100% of the members reach and maintain a ROI of 12%. This calculation assumes that every member enrolls in the program, participates enough to reach an ROI of 12%, and continues to maintain their higher ROI post program. In reality, this is highly unlikely. With generosity, we approximate a third (in this case 1,000) of the members would enroll and 80% (800) participate enough to reach the 12% ROI, meaning that our profit margins would be higher. However, it is intentionally designed to be financially sustainable for 100% success so that we can guarantee the program has the resources for anyone who wants to better their health.

Finally, it is important to note that these calculations on the financial feasibility of the program do not take into account the costs the NGO will save down the line. As members of the NGO cycle through this program and begin practicing and prioritizing preventative health behaviors they are less likely to develop noncommunicable disease and have health emergencies. Meaning, both the patient and the provider will save costs.