

HUMBLE SMILE
FOUNDATION



Summary of Phase 2 (Gatherings and Home Visits) Evaluation

Cohort 1 + 2

MEAL Department

October 2022

Introduction

The Healthy Homes program aims to promote health and hygiene individually and at a household level for women in Bhaskar Nagar, Kalwa, India. To observe the effect of initiating the project, a survey was conducted at baseline and after the project, which asked general questions about the respondent's income, education, marital status, household head, and general attitudes and behaviors in relation to health to identify the socio demographics of the sample and baseline oral health knowledge, attitude, behavior, and practices, as well as general health behavior, attitude, and practices.

The surveys were used to present statistics and determine results of health knowledge, attitudes, and behavioral change after participating in monthly group sessions and health training, and initial vs final results were compared. Data was collected multiple times throughout the duration of the program to study how knowledge and behaviors improve over time with increased exposure to training and home visits.

Project Objectives

- 12% improvement in health habits amongst 60 women living in Bhaskar Nagar, Kalwa in 1 year.
- 20% increase in knowledge in oral health, hygiene, nutrition, dangers of tobacco, and water safety.
- 10% improvement in oral hygiene practices including toothbrushing and other non-harmful oral hygiene methods.
- 10% of women who suffer from swellings, pain, or bleeding in the mouth, seek a registered dentist
- 10% improvement of determinants that challenge families' health including nutrition, tobacco use, sanitary and hygiene resources, and water safety.
- 25% of women in SHGs are willing to be actively involved in and take ownership in activities regarding improving the health status in their community.

Project Outcome and Key Findings

- Accomplishments by the end of the project
 - 10% increase in brushing teeth twice/day
 - 5.5% increase in usage of fluoride toothpaste in participants
 - 11% increase in self-rated oral health among participants
 - 32% increase of consuming fruits and vegetables 3+times per week
 - 8% decrease in daily consumption of of sugary beverages in cohort 1, 8% increase in cohort 2
 - Overall average % increase in knowledge: 24.5%
 - 12.4% increase in post-test scores (from pre-test scores) - Questions that many participants got right cover topics including hand hygiene, identifying oral disease, water safety, and understanding the dangers of tobacco

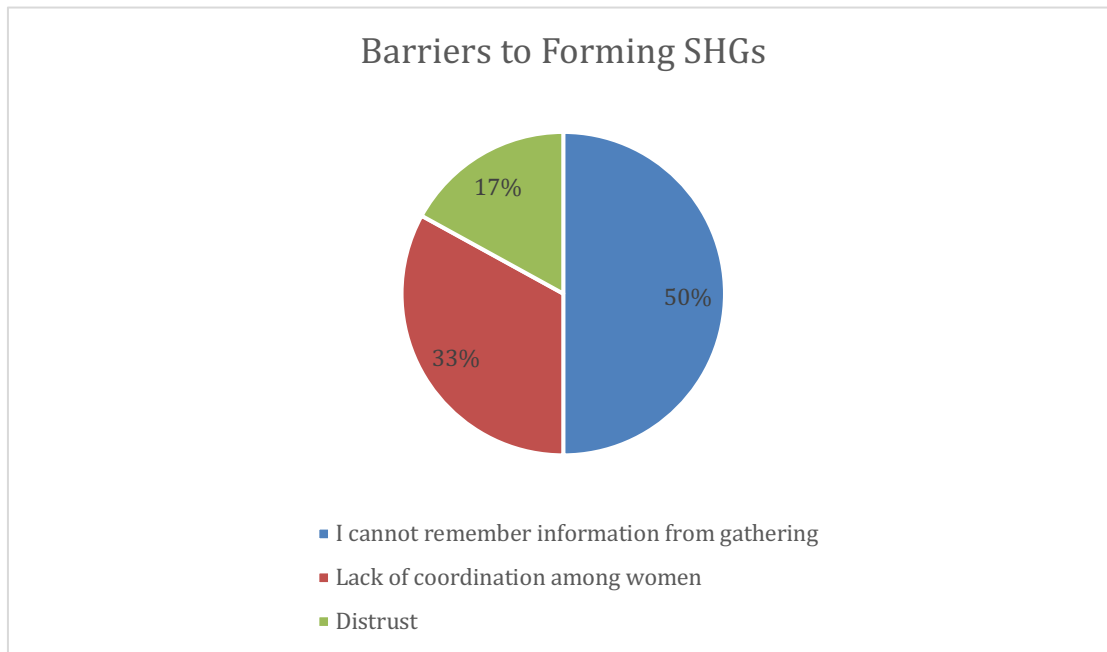
	Pre-test Average Score (%)	Pre-test Score Range (%-%)	Post-test Average Score (%)	Post-test Score Range (%-%)
Cohort 1	Not taken	None	80.3	63 - 90.3
Cohort 2	71.9%	38.0 – 93%	84.3	64.5 – 100%

- Most common answer for number of family members exposed to secondhand smoke was 0
- Average of 38% of participants’ husbands showed unsupportive/negative attitudes toward tobacco health knowledge
- At the beginning of the project, a common misconception about tobacco was that it aided in digestive health
- 100% of women have tobacco readily accessible to them because it was sold around their houses
- There is no relationship between the motivation to quit smoking and the successfulness of overcoming barriers

- Very few of the women's husbands have quit tobacco entirely since the gatherings. In some instances, requesting for husbands to quit resulted in arguments
- When suffering from dental issues, participants are more likely to take their family members or children to the dentist/hospital than take themselves. When a participant suffers from dental issues, they have equal chances of visiting a registered dentist and brushing their teeth hoping it would go away.
- Common misconceptions at the end of the program included:
 - *Milk teeth do not need to be cared for because they will be replaced by permanent teeth*
 - *Only white teeth and strong and healthy*
 - *Mother's oral health cannot affect children's oral health*
- At baseline, only 56% of women were able to adequately answer questions related to menstrual health, which is quite low compared to the other topics where adequate answers usually range from 70% to 93%. Also, the vast majority, 64% of women, were not able to describe the events that occur during the menstrual cycle
- 25% of participants in cohort 1, who did not attend a menstruation session, believe that menstruation is a time of the month in which women are impure and polluting, which is a common misconception about menstrual health
- 62% of participants in the project believe that being in an SHG will facilitate health improvement in their households.
- The most common barrier to healthier households, which impacted over 30% of women, was that they did not obtain enough knowledge on how to properly take care of their health prior to involvement in Healthy Homes
- The most common barriers to forming a SHG include issues to do with finances and location, unsupportive family members and lack of coordination between the

participants in the SHG. Participants were not sure how to overcome this barrier, but a few suggested vocalizing concerns to the group

- There is a significant relationship between the support received by others in gatherings and the motivation to be a part of self-help groups



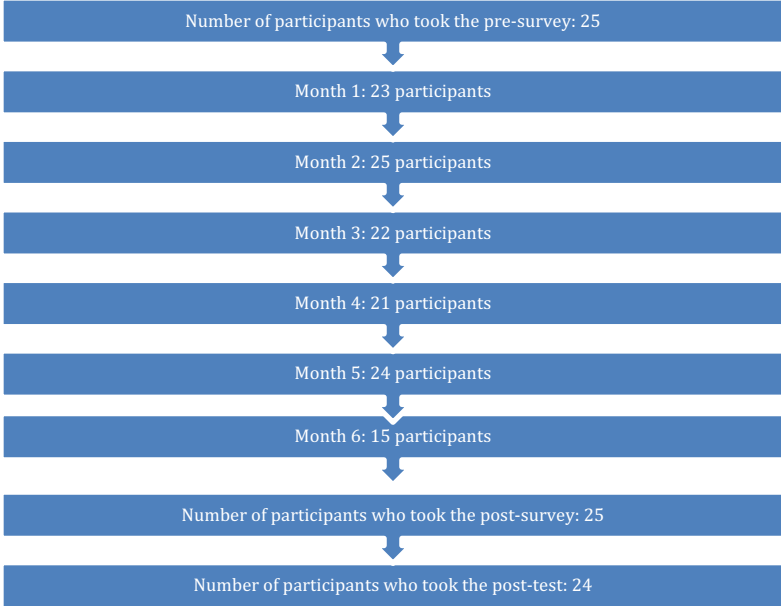
Project Recommendations

- Engages household heads in home visits to extend knowledge to more members with the family.
- Place more emphasis on nutrition and damages of sugar on health
- Provide incentives to remain in the project and prevent participant drop out
- Distribute pre-tests among all participants to track progress more accurately in health knowledge, attitudes, and behaviors.
- Revision sessions on menstrual health, nutrition, and oral health.
- Addressing barriers to SHG formation to ensure participants are able to overcome barriers to forming an SHG

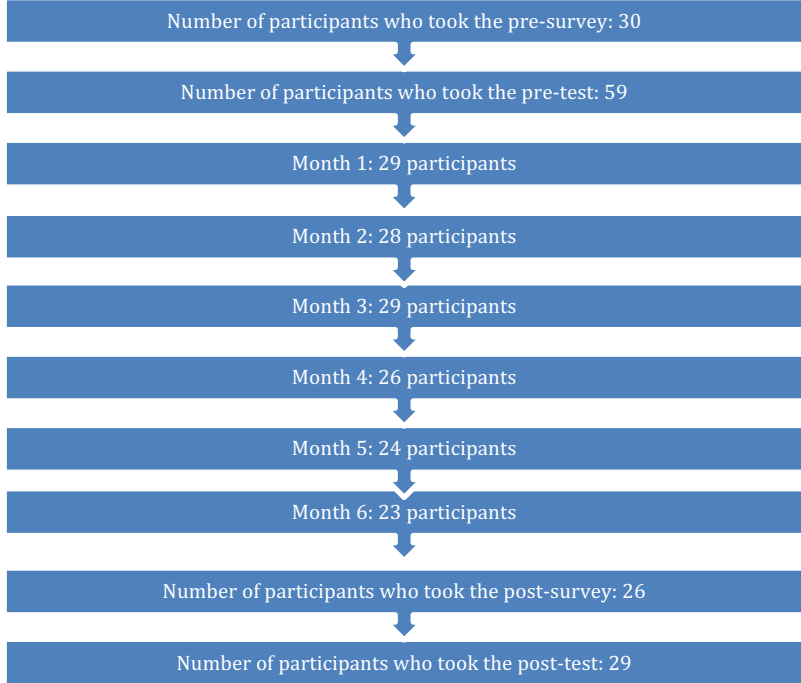
- Discussing fear of fraud in SHGs as a potential barrier
- More menstrual health promotion to eliminate shyness and 'taboo' as a barrier
- More menstrual health awareness events to increase women's knowledge of menstrual health
- Brainstorming ways to increase male ownership and responsibility of health and household health



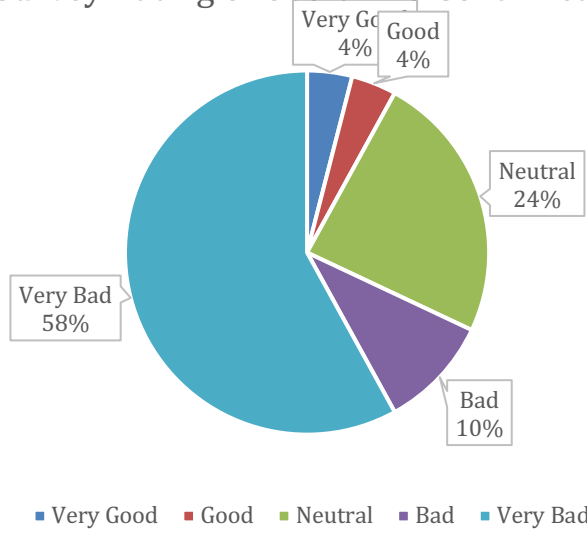
Cohort 1 Flow Diagram



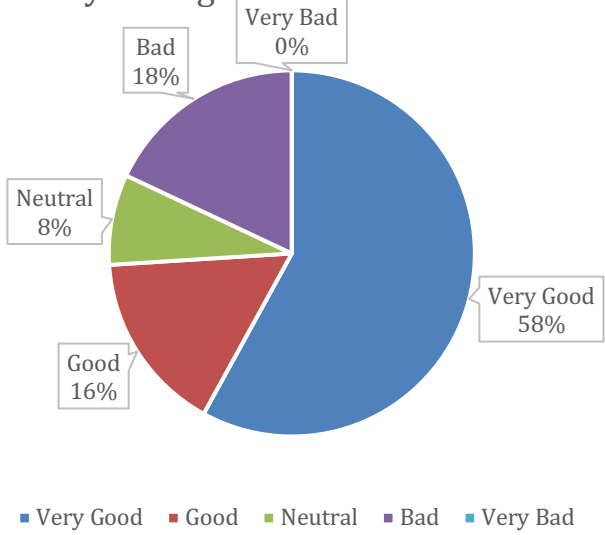
Cohort 2 Flow Diagram



Pre-Survey Rating of Overall Personal Health



Post-Survey Rating of Overall Personal Health



Discussion

The purpose of Healthy Homes Phase 1 (Recruitment, CHW Training and Calibration) and 2 (Gatherings and Home Visits) was to record the change in health knowledge, habits, and attitudes over time. To observe improvement, a pre-survey was distributed amongst participants to understand the baseline knowledge of individuals. Since the beginning of the project, women have attended group sessions and tested on their knowledge to observe what information is retained. At the end of Phase 2 of the HH project, a post-test and post-survey was distributed to record overall improvement amongst participants. Given the data from the post-tests and surveys, it is evident that there has been an overall improvement in health literacy, attitudes, and behaviors. However, misconceptions on some topics are still present. For example, a common misconception amongst participants involving oral health include the importance of taking care of milk teeth, whether non-white teeth can be health and strong, and the importance of a mother's oral health on her child's oral health. Moreover, common misconceptions in tobacco are also present, as many believe tobacco is a digestive aid and is the only way to occupy oral fixation. Community health workers (CHWs) corrected misconceptions via gatherings and home visits.

Additionally, there has been resistance from the men of the households/husbands in creating tobacco-free households and applying strategies to improve household health. While many men refused to listen to their women raising awareness on tobacco, the majority of them listened more when a male doctor was sent into the community to discuss the harms of tobacco.

From the data collected, it is evident that participants and their families have positive attitudes toward

limiting tobacco usage to improve health. However, more male figures within the household, such

as the husbands of participants, are pushing against limiting or quitting tobacco. Many women struggle with overcoming barriers to eradicate tobacco from their households. This may stem from

uncooperative and unmotivated family and friends, especially the husbands. Other reported

barriers include lack of knowledge and fear of quitting. This barrier, fear of quitting, may be due

to societal factors such as social norms ('normalizing of tobacco usage') and lack of support.

Though many participants were able to give advice to a woman experiencing abdominal pain during her menstruation, and describe abnormal signs of a menstrual cycle, the vast majority, 64% of women, were not able to describe the events that occur during a menstrual cycle.

Moreover, only 56% of participants were able to adequately answer questions about menstrual health, which is quite low in comparison to other topics where the range for adequate answers is

much higher.

Additionally, attitudes towards menstrual health are still positive, despite some embarrassment that occurs when discussing menstruation. Most menstruating individuals surveyed believed that

improving menstrual health is a high priority issue, but some individuals remained neutral toward

the subject. Remaining negative attitudes toward menstrual health may be due to discomfort with

speaking of menstrual health to others, as many women stated that they had never talked about

menstrual cycles so openly before their home visits.



Oral Dental Checkup Camp. April 2022.

Final Evaluation Table

Description	Narrative Summary	Indicators	Results Indicators Final report
Overall Aim	To improve the health status of 60 women and their families in Bhaskar Nagar, Kalwa		
Goal	12% improvement in health habits (oral and general hygiene, water storage, healthy nutrition, and tobacco avoidance) of 60 women living in the Bhaskar Nagar, Kalwa in 1 year.	% Improvement in health habits (oral and general hygiene, water storage, nutrition, and tobacco consumption) of 60 women living in the Bhaskar Nagar, Kalwa in 1 year.	
Specific Objective 1	20% increase in knowledge in oral health, hygiene, nutrition, dangers of tobacco, and water safety.	% Increase in knowledge in oral health, hygiene, nutrition, dangers of tobacco, and water safety	<ul style="list-style-type: none"> • 12.4% increase in test scores. • Overall avg % increase in knowledge: 24.5%
Outcome	<p>12 women have a significant better understanding & overall knowledge in defined subjects</p> <p>Training of CHWs & service delivery</p>	<ul style="list-style-type: none"> • Proportion of higher scores in the post-test compared to pre-test assessments • Proportion of higher scores in post-test compared to pre-test assessment for CHWs 	<ul style="list-style-type: none"> • 82% increase in participants that averaged a 70% or higher on the tests. • 4.2% increase in test score average among CHWs, 2/3 CHWs received higher post-test scores.

<p>Outputs</p>	<p>30 women participated in 6 gatherings about OH, hygiene, nutrition, dangers of tobacco, and water safety</p> <p>30 women participated in 3 refresher gatherings about OH, hygiene, nutrition, dangers of tobacco, and water safety</p> <p>Individuals trained & calibrated to deliver & facilitate gatherings</p>	<ul style="list-style-type: none"> • Number of women recruited who attended the 6 gatherings • Number of women who attended the 3 refresher gatherings • Number of individuals (project manager & CHWs) trained to facilitate women's gatherings 	<ul style="list-style-type: none"> • 26.5 (average newly recruited attendees in 6 gatherings out of a cohort n=29) • Average women who attended 3 refresher gatherings (cohort 1's gatherings 1, 2 & 3): 23.3 (average attendees in OH and Hygiene, Nutrition and Water Safety, and Tobacco n=25) • 3 (1 project manager, 2 CHWs) trained to facilitate gatherings
<p>Specific Objective 2</p>	<p>10% improvement in oral hygiene behaviors & practices including toothbrushing and other non-harmful oral hygiene methods (such as use of salt, turmeric, coal)</p>	<p>% Improvement in oral health behavior & patterns of toothbrushing with fluoride toothpaste & practicing non-harmful oral hygiene methods</p>	<ul style="list-style-type: none"> • 2.4% overall increase in oral health behaviors including brushing twice a day, replacing toothbrush 4+ times/year, tobacco consumption, sugary beverage intake, and eating fruits and vegetables daily.
<p>Outcome</p>	<p>Improved access to products to practice oral hygiene</p>	<ul style="list-style-type: none"> • Number of Humble brush packs distributed 	<ul style="list-style-type: none"> • 271

	<p>Development & improvement in the skills, quantity & quality of oral hygiene practices in Bhaskar Nagar</p> <p>Increased feelings of motivation to improve oral health practices</p>	<ul style="list-style-type: none"> • % improvement in oral health-related behaviors (frequency & patterns of toothbrushing, sugar intake, general dental attendance & smoking habits) • % improvement in self-rated oral health & motivation to improve practices 	<ul style="list-style-type: none"> • 10% increase in brushing twice a day, 3% increase in drinking sugary drinks daily, 4% increase in believing dental checkups are important. • 11% increase in good/very good self-rated oral health. 6% decrease in poor/very poor self-rated oral health. 5% decrease in neutral oral health
Outputs	<ul style="list-style-type: none"> • 60 women received supervised training in toothbrushing& maintaining oral hygiene • 60 women received toothbrushes, fluoride toothpaste and soap 	<ul style="list-style-type: none"> • Number of women who attended the oral hygiene session • Number of women who received toothbrushes, fluoride toothpaste, and soap 	<ul style="list-style-type: none"> • 23 (c1) + 28 (c2) = 51 participants attended the oral hygiene session 24 (c1) + 28 (c2) = 52 participants received toothbrushes and fluoride toothpaste • 0 participants received soap
Specific Objective 3	10% of women who suffer from swelling, pain, or bleeding in the mouth seek a registered dentist.	% of women who suffer from swellings, pain, or bleeding in the mouth, seek a registered dentist	41% of women who suffer from swellings, pain, or bleeding in the mouth sought a registered dentist.

<p>Outcome</p>	<p>Women and CHWs are trained to recognize symptoms of oral health problems</p> <p>Women are aware of locations of registered dentists</p> <p>Women who report experiencing oral health problems are encouraged to seek a registered dentist</p> <p>Facilitation of access to dental services in Bhaskar Nagar</p>	<ul style="list-style-type: none"> • Extent to which women and CHWs can recognize symptoms of oral health problems in pre-test & post-test • Number of women that report experiencing symptoms of OH problems • Number of women that have visited a registered dentist after experiencing symptoms of oral health problems 	<ul style="list-style-type: none"> - 33 % of participants missed at least one symptom of oral disease in post-test. 3.5% decrease overall in oral disease symptoms knowledge. - 22 out of 54 participants report experiencing symptoms of OH problems - 9 participants sought dental help after experiencing symptoms of oral disease
<p>Outputs</p>	<ul style="list-style-type: none"> • 60 women have attended gatherings about oral health • 60 women are trained to recognize symptoms of common oral health problems • 60 women are informed of locations of registered dentists 	<ul style="list-style-type: none"> • Number of women that attended gatherings about OH • Number of participants (& staff members) that recognize symptoms of common oral health problems • Number of women that have received a list of locations of registered dentists 	<ul style="list-style-type: none"> - $23 (c1) + 29 (c2) = 52$ - 67% of participants correctly recognized symptoms of oral health problems. 67% of CHWs correctly recognized symptoms. - 83.3% of CHWs correctly identified oral disease.

			<p>95.5% of participants correctly identified oral disease.</p> <p>- 25 (c1) + 29 (c2) = 54</p>
Specific Objective 4	3 women self-help groups for health are formed whereby women actively encourage and support each other in healthy habits.	Number of formed SHGs whereby women actively encourage and support each other in healthy habits.	6 SHGs currently in progress – TBD in Healthy Homes II Phase II
Outcome	<p>Women’s SHGs registered in Bhaskar Nagar</p> <p>Women encourage & empower each other during gatherings</p> <p>Increased support between women</p>	<ul style="list-style-type: none"> • Number of women’s SHGs registered in Bhaskar Nagar following the end of the project • Improved knowledge on health topics discussed in SHGs • Extent of support between participants experiencing barriers in practicing healthy habits during gatherings 	<p>- NA (TBD in Phase II of the project)</p> <p>- NA</p> <p>- 42 women on average were reported to have offered advice and support to other women experiencing barriers during gatherings</p>
Outputs	<ul style="list-style-type: none"> • 30 women have participated in gatherings about SHGs • 3 SHGs formed 	<ul style="list-style-type: none"> • Number of women who participated in gatherings about SHG • Number of SHGs formed 	<p>- Average of 21 participants attended gatherings focused on SHGs</p>

	<ul style="list-style-type: none"> • Accompanying WhatsApp groups formed for each cohort 	<ul style="list-style-type: none"> • Number and type of health topics discussed in SHGs 	<ul style="list-style-type: none"> - NA - NA
Specific Objective 5	12% increase in women’s motivation to improve their and their families’ health behaviors.	% Change in women’s motivation to improve their and their families’ health behaviors	<ul style="list-style-type: none"> • 31.5% average increase in women’s motivation to improve their and their families’ health and apply new health knowledge to household
Outcomes	<p>Number of women who speak about their barriers to health receive tips from other women</p> <p>Number of women who use their homework tasks to encourage & enforce better health behaviors within their households</p> <p>% of increased motivation to improve nutrition, general, oral health & sanitation practices, and habits within households</p>	<ul style="list-style-type: none"> • Extent of support exchanged by women in the gatherings to improve health practices and habits • Number of women who did their homework tasks (including supervised toothbrushing at home with children/household members, using local ingredients to create healthier alternatives to candy, informing family members about dangers of tobacco, etc.) • Number of women who reported increased feelings of motivation to improve nutrition, general, oral health & sanitation practices, and habits within their households 	<ul style="list-style-type: none"> - 77.8% of participants offered advice and support to other women experiencing barriers during gatherings 1-6 - 43 participating women completed all their homework tasks from gatherings 1-6 - Cohort 1 88% motivated to apply knowledge to household by end of study

			<ul style="list-style-type: none"> - 90% of participants in cohort 2 are motivated to participate in SHGs to continue learning and applying health knowledge to their households
Outputs	<ul style="list-style-type: none"> • 60 women participate in gatherings, share their barriers to health and receive advice from other women • 60 women use their homework tasks to encourage & enforce better health behaviors within their households • CHWs visit women's homes 1-2 times per month for 6 months and discuss the family's overall health in the presence of participating women & their family members 	<ul style="list-style-type: none"> • Number of women who attended gatherings, shared health barriers, and received advice from other women • Number of women that have given tips to other women in the gatherings experiencing barriers to health • Number of homework tasks completed • Number of home visits CHWs conducted per month per participant, for 6 months 	<ul style="list-style-type: none"> - Average of 49 women participated in gatherings, shared barriers to health and received advice from other women - 42 women offered advice and support to other women experiencing barriers during gatherings 1-6 - 17 homework tasks completed - Two home visits per month per participant in cohort 2, one home visit per month per participant in cohort 1