

2017 Grantee

Addressing Ability to Eat with Modified Meals in NYC

Summary:

To build the evidence needed to improve the effectiveness of home delivered meals (HDMS), Live ON NY partnered with several organizations to provide therapeutic meals modified to align with dental and oral function and promote oral health and dental care.

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Case Worker Focus Group Questionnaire and Instructions

Focus group moderator's guide.



Focus Group
HDM Case Managers

Date: _____

Interviewer initials: _____

“Thank you for agreeing to participate in this focus group. I know your time is limited and appreciate you spending this time with me. As you know, we are trying to learn how best to address oral health and dental needs among HDM recipients. Before we begin, please take a minute to read the information sheet. Please feel free to ask me any questions regarding this interview. Your participation is completely voluntary. Your decision to participate/not participate is confidential and will not be communicated to your employer. Your decision to participate will not impact your employment.”

Let the participant read the information sheet and answer any questions that may arise.

“Your focus group will be recorded. As soon as the data are transcribed, we will destroy the recording. Can I turn on the recorder?”

First some questions about you:

1. How long have you been working as a case manager?

2. Have you always worked in case management in the HDM system, or have you worked in other areas, such as child protection and safety?

3. What is the highest level of training/education you have received?

4. Did you receive your training in the United States?

5. Please identify your race. Do you identify as: (Circle correct responses)
 - a. African-American or Black
 - b. White
 - c. Asian
 - d. Native American
 - e. Other (specify _____)

6. Are you of Hispanic/Latino heritage? (circle one response)
 - a. Yes
 - b. No
7. Were you born in the United States
 - a. Yes....go to question 9
 - b. No.....go to question 8
8. Where were you born?
9. Interviewer: record participant gender_____

Now some questions about oral and dental health among your clients

11. Are you familiar with the dental questions in the STARS assessment?
12. How many clients have you identified over the past year as having problems with their teeth, mouth or dentures?
13. What kinds of problems with teeth, mouth or dentures do clients experience?
14. When a client has a problem with their teeth, mouth or dentures, what steps do you take?
Prompts: For example, do you provide them with literature on how to take care of their mouth, or do you make a referral to the dentist?
15. Have you encountered clients who experience problems eating or chewing due to problems with their teeth, mouth or dentures?
16. What are the most common foods that clients experience difficulty eating?

17. When you identify a client who experiences problems eating or chewing due to problems with their teeth, mouth or dentures what steps do you take to help them? Probe: link to dentist, tell client to chop food or puree it to soften food, report to supervisor etc.

18. How useful do you think it will be if you can get pureed or chopped foods for clients who have difficulty eating or chewing due to problems with their teeth, mouth or dentures?

Now some questions about STARS

19. Do you find the dental questions in the STARS assessment easy to use?

20. Do you find the dental questions in the STARS assessment to be useful in identifying clients with dental needs?

21. Are there any additional questions that you think may be useful to add?

22. Are there any questions that you think may be useful to remove?

23. Have you ever used the dentist directory that DFTA developed to find a dentist for a client? If yes, did you find it easy to use?



Columbia University IRB

IRB-AAAR6590 (Y02M00)
IRB Approval Date: 03/01/2019
For use until: 02/29/2020

24. Please rate the following dental care problems among your clients in order from most important (1) to least important (4)

- a. Difficulty getting to the dentist
- b. No dental insurance/no way to pay for dental care
- c. Difficulty keeping teeth, mouth or dentures clean
- d. Difficulty buying toothbrush/toothpaste/denture care (do you poor mobility or finances)

25. Please rate the following dental problems among your clients in order from most important (1) to least important (4)

- a. No teeth
- b. No dentures
- c. Difficulty eating/chewing
- d. Difficulty speaking

26. Do you have any suggestions for how we can better address dental problems among HDM clients?

27. Do you have any additional questions or comments for me?



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In-Depth Questionnaire for Case Managers

Interview guide.



Key informant interview

HDM Case Managers

Date: _____

Interviewer initials: _____

Participant initials: _____

“Thank you for agreeing to being interviewed today. I know your time is limited and appreciate you spending this time with me. As you know, we are trying to learn how best to address oral health and dental needs among HDM recipients. Before we begin, please take a minute to read the consent form. Please feel free to ask me any questions regarding this interview. Your participation is completely voluntary. Your decision to participate/not participate is confidential and will not be communicated to your employer. Your decision to participate will not impact your employment.”

Let the participant read the consent form and answer any questions that may arise.

“Your interview will be recorded. As soon as the data are transcribed, we will destroy the recording. Can I turn on the recorder?” If participant agrees to the recorder, turn it on. If they do not agree to the recorder, ask if they would agree to being interviewed without recording; if yes, turn off the recorder and put it in your bag.”

First some questions about you:

1. How long have you been working as a case manager?

2. Have you always worked in case management in the HDM system, or have you worked in other areas, such as child protection and safety?

3. What is the highest level of training/education you have received?

4. Did you receive your training in the United States?

5. Please identify your race. Do you identify as: (Circle correct responses)
 - a. African-American or Black
 - b. White
 - c. Asian
 - d. Native American
 - e. Other (specify _____)

6. Are you of Hispanic/Latino heritage? (circle one response)

- a. Yes
- b. No

7. Were you born in the United States

- a. Yes....go to question 9
- b. No.....go to question 8

8. Where were you born?

9. Please share the year of your birth_____

10. Interviewer: record participant gender_____

Now some questions about oral and dental health among your clients

11. Are you familiar with the dental questions in the STARS assessment?

12. How many clients have you identified over the past year as having problems with their teeth, mouth or dentures?

13. What kinds of problems with teeth, mouth or dentures do clients experience?

14. When a client has a problem with their teeth, mouth or dentures, what steps do you take?

Prompts: For example, do you provide them with literature on how to take care of their mouth, or do you make a referral to the dentist?

15. Have you encountered clients who experience problems eating or chewing due to problems with their teeth, mouth or dentures?

16. What are the most common foods that clients experience difficulty eating?

17. When you identify a client who experiences problems eating or chewing due to problems with their teeth, mouth or dentures what steps do you take to help them? Probe: link to dentist, tell client to chop food or puree it to soften food, report to supervisor etc.

18. How useful do you think it will be if you can get pureed or chopped foods for clients who have difficulty eating or chewing due to problems with their teeth, mouth or dentures?

Now some questions about STARS

19. Do you find the dental questions in the STARS assessment easy to use?

20. Do you find the dental questions in the STARS assessment to be useful in identifying clients with dental needs?

21. Are there any additional questions that you think may be useful to add?

22. Are there any questions that you think may be useful to remove?

23. Have you ever used the dentist directory that DFTA developed to find a dentist for a client? If yes, did you find it easy to use?

24. Please rate the following dental care problems among your clients in order from most important (1) to least important (4)

- a. Difficulty getting to the dentist
- b. No dental insurance/no way to pay for dental care
- c. Difficulty keeping teeth, mouth or dentures clean
- d. Difficulty buying toothbrush/toothpaste/denture care (do you poor mobility or finances)

25. Please rate the following dental problems among your clients in order from most important (1) to least important (4)

- a. No teeth
- b. No dentures
- c. Difficulty eating/chewing
- d. Difficulty speaking

26. Do you have any suggestions for how we can better address dental problems among HDM clients?

27. Do you have any additional questions or comments for me?

In-Depth Questionnaire for HDM Recipients

Interview guide.



In depth questionnaire for MOW study

1. "Are you missing any of your own teeth?" If yes, probe: "Do you know about how many of your teeth you are missing?"
 - a. If missing teeth, "Do you have dentures?"
 - b. If yes, "do you have complete dentures, or partial dentures?"
 - c. If yes, "do you have upper and lower dentures?"
 - d. If yes, "do you feel your dentures fit you as well as you would like them to?"

2. "Have you had difficulty chewing in the past year?"
 - a. If yes, probe how long respondent has had difficulty chewing.
 - b. "Can you describe the difficulty you have been having?" (Probe: does it hurt on one side of your mouth when you chew? If yes, which side(s) of your mouth? If missing teeth, is it difficult to chew because you are missing teeth?)
 - c. If respondent has dentures, "are you able to chew with your dentures?" (Probe: do your dentures cause you any pain or discomfort when you chew? Can you describe the pain or discomfort you feel, can you tell me where you feel it?)

3. "Have you had difficulty eating in the past year?"
 - a. If yes, probe how long respondent has had difficulty eating.
 - b. "Can you describe the difficulty you have been having?" (Probe: Do you have difficulty swallowing? Do you feel that your mouth is dry and food is difficult to swallow? Does food get stuck in your teeth or dentures, making it uncomfortable to eat? If missing teeth, is it difficult to eat because you are missing teeth?)
 - c. If respondent has dentures, "are you able to eat with your dentures?" (Probe: do your dentures cause you any pain or discomfort when you eat? Do you need to remove your dentures to eat? Can you describe the pain or discomfort you feel, can you tell me where you feel it?)

4. "Do you avoid eating any foods because of problems with your mouth, teeth or dentures?"
 - a. If yes, "which foods are you avoiding?" (probe: fruits, meats, vegetables, nuts – ask for specific foods in each category e.g. apples/pears/steak/chicken/almonds/carrots etc).
 - b. "Can you tell me why you started avoiding these foods?" (probe: too difficult to chew, too hard, they get stuck in my teeth, they don't taste good, pain)
 - c. "How long has it been since you began to avoid or stopped eating these foods?" (probe: 1 year, less than one year, more than one year, six months, one month, one week).
 - d. "Of the food you avoid (name food), are you able to eat them if they are made softer or cut into smaller pieces?" (probe: how do you normally make these foods easier to eat?)
 - e. "Of all the foods you avoid, which do you miss the most?"

5. Are you able to eat all of your home delivered meal?
 - a. If no, "which part of the meal, are you unable to eat?"
 - b. "How can the meals be improved or made to better suit your needs?"

6. "Is there anything else you would like to tell me about your teeth, mouth or dentures?"

Pre-Recruitment Scripts

Sample script for recruiting participants.



ORGANIZATION

Live ON NY in partnership with Citymeals on Wheels, Columbia University College of Dental Medicine (CDM), New York City Department for the Aging (DFTA) and others

ADDRESSING ORAL HEALTH AND EFFECTIVENESS OF HOME DELIVERED MEALS IN NYC



NYF outreach to ensure Citymeals ok to reach out

Hello. I'm your case manager XX and I wanted to ask if it would be alright if someone from Citymeals on Wheels called you because you receive home delivered meals, about participating in a study with Columbia University about oral health and the home delivered meals you receive.

If you are willing to consider participating, a staff member from Citymeals will call you briefly to discuss the study procedures. If you agree to participate, you will be asked to participate in a 20-30 minute phone interview about your ability to eat.

This is voluntary and consent to give information to be contacted for the study or not, will not impact the services you are currently receiving.

Do I have your permission to ask someone from Citymeals to call you to determine your eligibility to participate?

If client says "Yes", please send us the name to Jose Luis Sanchez at Citymeals.

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ADDRESSING ORAL HEALTH AND EFFECTIVENESS OF HOME DELIVERED MEALS IN NYC



Oral health and nutrition in NYC HDM recipients

Eligibility to participate phone script

Hello. My name is “Jose Luis Sanchez” and I am the program coordinator at Citymeals on Wheels. We are partnering with Columbia University to conduct a study to assess the relationship between oral health status, ability to eat and nutrition in home delivered meal recipients.

I am calling to ask if you would consider participating in this study. If you are willing to consider participating, a member of the research team will call you to determine your eligibility and also explain the study procedures. If you agree to participate, you will be asked to participate in a 20-30 minute phone interview about your ability to eat.

Do I have your permission to ask a member of the research team at Columbia University to call you to determine your eligibility to participate?

If client says “Yes”, please send us the name in an encrypted file.

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ADDRESSING ORAL HEALTH AND EFFECTIVENESS OF HOME DELIVERED MEALS IN NYC

Salud bucal y nutrición en destinatarios de HDM en NYC

Guion de teléfono sobre elegibilidad para participar

Hola. Mi nombre es “José Luis Sánchez” y soy el coordinador del programa de Citymeals on Wheels. Nos estamos asociando con la Universidad de Columbia con el fin de llevar a cabo un estudio que tiene por objeto evaluar la relación entre el estado de salud bucal, la capacidad de comer y la nutrición entre los destinatarios de comidas entregadas en casa.

Le llamo para preguntarle si se plantearía la posibilidad de participar en este estudio. Si está dispuesto a plantearse la participación, un miembro del equipo de investigación le llamará para determinar su elegibilidad y también para explicarle los procedimientos del estudio. Si acepta participar, se le pedirá que participe en una entrevista telefónica de entre 20 y 30 minutos sobre su capacidad para comer.

¿Me da su permiso para pedirle a un miembro del equipo de investigación de la Universidad de Columbia que le llame a usted para determinar su elegibilidad para participar?

Si el cliente dice "Sí", envíenos el nombre en un archivo cifrado.

Qualitative Instrument for HDM Recipients

Survey on participants' eating ability.



**Qualitative Instrument
Home Delivered Meal Recipients**

Respondent code:

Interviewer name:

Date:

1. Have you had difficulty chewing or eating in the past year? (Probe: past 12 months, from (month) last year until now) How long have you had this problem? (Probe: one year, more than one year, six months, one month, one week etc).

2. Do you have any of your own teeth? Do you know about how many of your own teeth you have?

3. Do you have dentures? If yes, do you have complete dentures or partial dentures? How many dentures do you have? (Probe: complete upper denture, complete lower denture etc)

4. Can you describe the difficulty you have been having? (Probe: does it hurt when you chew? Do you have difficulty chewing on one side of your mouth or both sides? Do you have difficulty swallowing? Do you feel that your mouth is dry and your food is difficult to chew?

5. If respondent has dentures: Do you feel that your dentures fit you well? Are you able to eat well with your dentures? (Probe: Do your dentures cause you any pain or discomfort when you eat or chew?, Can you describe the pain or discomfort you feel? Can you tell me where you feel this pain or discomfort)?

6. Have you ever avoided or stopped eating any foods because of problems with your mouth, or teeth (or dentures, if respondent has dentures) ?

7. Can you tell me how you interpret the phrase “avoid eating some foods”? (Probe: When you think of the word avoid do you think of “never eat some foods”, “try not to eat some foods”, “stop eating some foods”)

8. If yes, which foods have you stopped eating? (Probe: nuts, fruits, meats, vegetables, – ask for specific foods in categories eg: almonds, pistachios, apples, pears, steak, chicken, potatoes etc)

9. Can you tell me why you stopped eating these foods (Probe: too difficult to chew, too hard, they get stuck in my teeth, they don't taste good anymore, pain)?

10. How long has it been since you began to avoid or stopped eating these foods? (Probe: 1 year, less than one year, more than one year, six months, one month, one week)

11. If respondent avoids or does not eat some foods, ask, "Of the foods you avoid (eg name of food respondent avoids) are you able to eat them if they are made softer or in cut into smaller pieces?"

12. If respondent says yes to avoiding foods, ask, "Of all the foods you do avoid, which ones do you miss the most?"

13. Do you visit the dentist regularly (Probe: every 6 months or every year)? If respondent does not visit dentist regularly Probe reasons why: no dentist, cost, insurance, distance, travel etc

14. When was the last time you went to the dentist? (Probe: why did you go to the dentist? Was it for a regular check-up or because you felt there was something wrong with your mouth, teeth or dentures? What was wrong?)

15. Are you able to eat all of the Home Delivered Meal you receive?

16. If NO, Probe: which foods are you unable to eat? (List: meats, vegetables, fruits, dessert)

17. How can the meals you receive from DFTA be improved or made better to suit your needs

17. Is there anything else you would like to tell or ask me about your teeth, mouth or dentures?

Six-Item Screening Tool for Subject Recruitment

Screening tool for determining eligibility of participants.



ADDRESSING ORAL HEALTH AND EFFECTIVENESS OF HOME DELIVERED MEALS IN NYC

SIX ITEM SCREENER¹

PHASE 1- SUBJECT RECRUITMENT

PARTICIPANT ID _____

RECORDER _____

DATE _____

INSTRUCTIONS TO THE PARTICIPANT:

“I would like to ask you some questions that ask you to use your memory. I am going to say three words. Please wait until I say all three words, then repeat them. Remember what they are because I am going to ask you name them again in a few minutes.

Please repeat these words for me: APPLE-TABLE-PENNY” (Recorder may repeat three times, but repetition not scored)

1. Did respondent correctly repeat all three words?

YES.....go to question 2

NO..... Reason



- H=Hearing Loss
- E = Not proficient in English
- R = Refusal

Score	Correct	Correct	Don't Know
2. What year is this?	1	0	0
3. What month is this?	1	0	0
4. What is the day of the week?	1	0	0
What were the three objects I asked you to remember?			
5. Apple =	1	0	0
6. Table =	1	0	0
7. Penny =	1	0	0

Score of 3 or more – eligible for the study; Score of 1 or 2 – not eligible.

Eligible for study: Y N

¹ Callahan CM, Unverzagt FW, Hui SL, Perkins AJ, Hendrie HC. Six-item screener to identify cognitive impairment among potential subjects for clinical research. *Medical Care* 2002; 40(9): 771-781.

Summary Brief

Snapshot of project and findings.



ORGANIZATION:

Live ON NY in partnership with Citymeals on Wheels, Columbia University College of Dental Medicine (CDM), New York City Department for the Aging (DFTA) and others

ADDRESSING ORAL HEALTH AND EFFECTIVENESS OF HOME DELIVERED MEALS IN NYC



ABOUT US

LiveOn NY is the voice for seniors and the aging services network in NYC. LiveOn NY's programs ensure that older New Yorkers have the supports they need. From training the aging service workforce through workshops and technical assistance, to ensuring access to financial support through the Benefits Outreach Program, to changing how policies are carried out at the City and State level through our advocacy and more, these programs are making a difference in how New Yorkers age.

PROJECT PURPOSE

- The goal of the innovation project was to build the evidence needed to improve the effectiveness of home delivered meals (HDMs) by providing therapeutic meals modified to align with dental/oral function and promoting oral health and dental care.

PROJECT LENGTH

- Two years

KEY PARAMETERS

- **Population targeted:** Homebound older adults
- **Geographic setting:** Urban
- **Service delivery setting:** Community based
- **Services offered:** therapeutic meals delivered along with dental care aides (toothbrushes/toothpastes/denture care kits)
- **Number of staff/FTEs dedicated to innovation project:** 4
- **Total grant funds received:** \$248,046
- **Total project period:** Two years (2017 – 2019)
- **Total funding leveraged from organization (cash/ in-kind):** \$124,023

PROJECT COMPONENTS

- Test the utility of oral health items included in the Senior Tracking Analysis and Reporting System (STARS) to identify clients in need of “modified” meals;
- Develop and deliver modified meals aligned with oral/dental function;
- Coordinate the provision of daily oral care aides, education and linkages to dental care.

SUCCESSES AND LESSONS LEARNED

Client Engagement Techniques

- Multiple calls were deemed to be the most effective method for recruiting project participants, ensuring completed phone interviews, and successfully completing follow up activities. Pretest of screening tools to ensure questions are organized in such a way as to reduce or eliminate redundancy and ensure only the most essential questions are included. Expanding the geographic area and enlisting the support of other case management agencies for client recruitment also increased enrollment. Using gentle, yet persistent engagement efforts improved the ability to collect highly probative qualitative information through post-intervention interviews.

Delays in Getting Institutional Review Board (IRB) Approval

- To facilitate an iterative IRB approval process, the project team submitted the research protocol to the IRB in stages and had several meetings with the IRB committee. The IRB committee approved the first protocol in April 2018, which allowed the project team to begin work on client recruitment. The final IRB approval (for both protocols, as well as the project's approach to Spanish speaking clients) was received six months later (September 2018).

PROJECT IMPACT

- For LiveOn, implementing this project has provided valuable experience in coordinating combined research and social service endeavors. Through the project, LiveOn staff became far more sensitized to how oral and dental health can have a major impact on the overall well-being of homebound older adults, as well as the serious nutritional and dental care needs of this often hard-to-reach population.

ADVICE TO PEERS

- One major piece of advice is that recruiting older adults to participate in dental-nutrition projects requires extensive, yet compassionate outreach, plenty of patience, and months of highly labor and energy intensive work. Multiple phone calls, revisions to study-related tools, and polite persuasion were needed to encourage various participants to respond and participate fully in the project. Reaching the original targeted enrollment goals proved to be elusive, though considerable progress was made, and the collected qualitative information was quite illustrative of the dental and nutrition issues that all too many seniors face.
- Future researchers and HDM providers who wish to replicate this project are strongly advised to budget sufficient financial and staff resources, as well as time, to recruit and sustain engagement of the target older adult population during all stages of the project. Another important note is to think broadly about the stakeholders to engage in the work. For example, the team's engagement with a key partner like the New York City Department for the Aging (DFTA) to ensure the success of this project was so important, as their support and cooperation proved helpful in different ways.



Survey Questionnaire for Case Managers

Survey on participants' mouth, teeth, and dentures.



SURVEY QUESTIONNAIRE FOR HDML RECIPIENTS

Date: _____

Examiner: _____ Subject ID:

Good morning, Mr/Mrs/Dr ____. We had an appointment today to ask you some questions about your mouth, teeth and dentures. Do you still have time today (If respondent replies “yes”, continue with interview; if “no”, ask to make an appointment for another day, and thank them for their participation).

“First, some questions about where you receive dental care”

1. When was the last time you went to the dentist? How many months ago?
 Code ‘0’ for less than 2 weeks ago
 Code ‘7777’ for don’t know/don’t remember
 Code ‘8888’ for refusal
 Code ‘9999’ for not applicable (never visited dentist)

RECORD MONTHS SINCE LAST VISIT:

2. Why did you make this visit?

Routine care – tooth/denture cleaning/check-up	1
Emergency – toothache/aching gums/broken denture	2
Other (specify)	3
Refusal	8888
Not applicable (Never went to the dentist)	9999

3. When you do go to the dentist, where do you go? **CODE ALL THAT APPLY**

Private dentist’s office	1
Public dental clinic	2
Hospital dental clinic	3
Dental school clinic	4
Emergency room	5
Other (specify) _____	6
Don’t know	7777
Refusal	8888
Not applicable	9999

4. How do you normally get to the dentist?

Walking	1
Bus	2
Taxi	3
Subway	4

Access-A-Ride	5
My child/friend/relative drives me	6
I drive myself	7
Other (specify) _____	8
Refusal	8888
Not applicable	9999

5. If you do not visit the dentist regularly (at least once a year), what are the reasons why you do not go? **EXAMINER: PROBE PRIMARY AND SECONDARY REASON**

	Primary Reason	Second Reason
I wear dentures/I do not have my own teeth	1	1
I do not have time	2	2
It costs too much	3	3
I have to travel too far	4	4
I am afraid of the dentist	5	5
I don't think I need to see a dentist	6	6
Dental treatment is not a priority for me	7	7
I am afraid I will contract a disease	8	8
I have to wait a long time at the dentist's office	9	9
Other (specify) _____	10	10
Unknown	7777	7777
Refusal	8888	8888
Not applicable (visits dentist regularly)	9999	9999

6. Do you have all your teeth?

Yes	0
No	1

If no: are you missing all your upper teeth?

Yes	0
No	1

If no: are you missing all your lower teeth?

Yes	0
No	1

7. Do you wear dentures?

Yes	0
No	1

If yes: do you have upper dentures, lower dentures, or both?

Upper Only	0
Lower Only	1
Both	2

8. Do you brush your teeth and/or your dentures yourself, or do you need assistance

I brush my teeth and/or dentures myself	1
My home health aide assists me with brushing my teeth and/or dentures	2
A family member or friend assists me with brushing my teeth and/or dentures	3
Unknown	7777
Refusal	8888
Not applicable (does not brush teeth and/or dentures)	9999

I will now ask you some questions about your teeth, mouth or dentures

	Over the past 12 months...	Very often	Fairly often	Occasionally	Hardly ever	Never	DK	N/A
*11	Have you had difficulty chewing any foods because of problems with your teeth, mouth or dentures?	4	3	2	1	0	7777	9999
12.	Have you had trouble pronouncing any words because of problems with your teeth, mouth or dentures?	4	3	2	1	0	7777	9999
13.	Have you felt that your sense of taste has worsened because of problems with your teeth, mouth, or dentures?	4	3	2	1	0	7777	9999
14.	Have you had food catching in your teeth or dentures?	4	3	2	1	0	7777	9999
15.	Have you felt that your digestion has worsened because of problems with your teeth, mouth or dentures?	4	3	2	1	0	7777	9999
16.	IF HAVE DENTURES: Have you felt that your dentures have not been fitting properly?	4	3	2	1	0	7777	9999
17.	Have you had painful aching in your mouth?	4	3	2	1	0	7777	9999
18.	Have you had a sore jaw?	4	3	2	1	0	7777	9999
19.	Have you had headaches because of problems with your teeth, mouth or dentures?	4	3	2	1	0	7777	9999
20.	IF HAVE TEETH: Have you had sensitive teeth, e.g. due to hot or cold foods or drinks?	4	3	2	1	0	7777	9999
21.	IF HAVE TEETH: Have you had toothache?	4	3	2	1	0	7777	9999
22.	Have you had painful gums?	4	3	2	1	0	7777	9999
*23	Have you found it uncomfortable to eat any foods because of problems with your teeth, mouth or dentures?	4	3	2	1	0	7777	9999
24.	Have you had sore spots in your mouth?	4	3	2	1	0	7777	9999
25.	IF HAVE DENTURES: Have you had uncomfortable dentures?	4	3	2	1	0	7777	9999
26.	Have you been self-conscious because of your teeth, mouth, or dentures?	4	3	2	1	0	7777	9999
27.	Have you felt tense because of problems with your teeth, mouth, or dentures?	4	3	2	1	0	7777	9999
28.	Have you felt that there has been less flavor in your food because of problems with your teeth, mouth, or dentures?	4	3	2	1	0	7777	9999
*29	Have you had to avoid eating some foods because of problems with your teeth, mouth or dentures?	4	3	2	1	0	7777	9999
30.	Has your diet been unsatisfactory because of problems with your teeth, mouth, or dentures?	4	3	2	1	0	7777	9999
31.	Have you had uncomfortable dentures?	4	3	2	1	0	7777	9999
32.	Have you had to interrupt meals because of problems with your teeth, mouth, or dentures?	4	3	2	1	0	7777	9999
33.	Have you found it difficult to relax because of problems with your teeth, mouth, or dentures?	4	3	2	1	0	7777	9999

34.	Have you been a bit embarrassed because of problems with your teeth, mouth, or dentures?	4	3	2	1	0	7777	9999
35.	Have you been a bit irritable with other people because of problems with your teeth, mouth, or dentures?	4	3	2	1	0	7777	9999
36.	Have you had difficulty doing your usual jobs because of problems with your teeth, mouth, or dentures?	4	3	2	1	0	7777	9999
37.	Have you felt that your general health has worsened because of problems with your teeth, mouth or dentures?	4	3	2	1	0	7777	9999
38.	Have you felt that life in general was less satisfying because of problems with your teeth, mouth, or dentures?	4	3	2	1	0	7777	9999
39.	Have you been totally unable to function because of problems with your teeth, mouth, or dentures?	4	3	2	1	0	7777	9999

Examiner: If respondent responds to items 11, 23 and/or 29 with 4 (very often), 3 (fairly often) or 2 (sometimes), ask the following items:

40. Do you have difficulty chewing fruits because of your teeth, mouth or dentures?

Yes	0 (go to 40a)
No	1 (go to 41)
Don't know	7777
Refusal	8888
Not applicable	9999

40a. If YES to 40 ASK: Have you also had trouble chewing fruits that come in your home delivered meal because of your teeth, mouth or dentures?

Yes	0 (ask 40b & c)
No	1 (go to 41)
Don't know	7777
Refusal	8888
Not applicable	9999

40b. If YES to 40a ASK: Which fruits in the home delivered meal have you had trouble chewing because of your teeth, mouth or dentures?

40c. If YES to 40a ASK: Have you ever had such difficulty chewing the fruit in your home delivered meal because of your teeth, mouth or dentures that you could not eat that part of the meal?

Yes	0 (ask 40d)
No	1 (go to 40e)
Don't know	7777
Refusal	8888
Not applicable	9999

40d. If YES to 40c ASK: How often in a typical week do you **not eat** the fruit in your home delivered meal due to difficulty chewing because of your teeth, mouth or dentures?

Almost every day (5-7 times a week)	3 (go to 40e)
Some of the time (3-4 days a week)	2 (go to 40e)
A little of the time (1-2 days a week)	1 (go to 40e)
Don't know	7777(go to 40e)
Refusal	8888(go to 40e)
Not applicable	9999(go to 40e)

40e. Ask of Everyone: When you have difficulty chewing fruits in your home delivered meal, do you or someone else modify or change the fruits in any way so you can eat them more easily?

Yes	0 (go to 40e)
No	1 (go to 40f)
Don't know	7777
Refusal	8888
Not applicable	9999

40e. If YES to 40e ask: How do you or someone else modify the fruits in your home delivered meal so you can eat them?

I cut up the food into small pieces	0
I puree the food using a blender	1
I boil or steam the food to soften it	2
Other (specify _____ _____)	3
Don't know	4
Refusal	8888
Not applicable	9999

41. Do you have difficulty chewing vegetables because of your teeth, mouth or dentures?

Yes	0 (go to 41a)
No	1 (go to 42)
Don't know	7777
Refusal	8888
Not applicable	9999

41a. If YES to 41 ASK: Have you also had trouble chewing vegetables that come in your home delivered meal because of your teeth, mouth or dentures?

Yes	0 (ask 41b & c)
No	1 (go to 42)
Don't know	7777
Refusal	8888
Not applicable	9999

41b. If YES to 41a ASK: Which vegetables in the home delivered meal have you had trouble chewing because of your teeth, mouth or dentures?

41c. If YES to 41a ASK: Have you ever had such difficulty chewing the vegetables in your home delivered meal because of your teeth, mouth or dentures that you could not eat that part of the meal?

Yes	0 (ask 41d)
No	1 (go to 41e)
Don't know	7777
Refusal	8888
Not applicable	9999

41d. If YES to 41c ASK: How often in a typical week do you **not eat** the vegetables in your home delivered meal due to difficulty chewing because of your teeth, mouth or dentures?

Almost every day (5-7 times a week)	3 (go to 41e)
Some of the time (3-4 days a week)	2 (go to 41e)
A little of the time (1-2 days a week)	1 (go to 41e)
Don't know	7777(go to 41e)
Refusal	8888(go to 41e)
Not applicable	9999(go to 41e)

41e. Ask of Everyone who had difficulty: When you have difficulty chewing vegetables in your home delivered meal, do you or someone else modify or change the vegetables in any way so you can eat them more easily?

Yes	0 (go to 41f)
No	1 (go to 42)
Don't know	7777
Refusal	8888
Not applicable	9999

41f. If YES to 41e ask: How do you or someone else modify the vegetables in your home delivered meal so you can eat them?

I cut up the food into small pieces	0
I puree the food using a blender	1
I boil or steam the food to soften it	2
Other (specify _____ _____)	3
Don't know	4
Refusal	8888
Not applicable	9999

42. Do have difficulty chewing meats because of your teeth, mouth or dentures?

Yes	0 (go to 42a)
No	1 (go to 43)
Don't know	7777
Refusal	8888
Not applicable	9999

42a. If YES to 42 ASK: Have you also had trouble chewing meats that come in your home delivered meal because of your teeth, mouth or dentures?

Yes	0 (ask 42b & c)
No	1 (go to 43)
Don't know	7777
Refusal	8888
Not applicable	9999

42b. If YES to 42a ASK: Which meats in the home delivered meal have you had trouble chewing because of your teeth, mouth or dentures?

42c. If YES to 42a ASK: Have you ever had such difficulty chewing the meats in your home delivered meal because of your teeth, mouth or dentures that you do not eat that part of the meal?

Yes	0 (ask 42d)
No	1 (go to 42e)
Don't know	7777
Refusal	8888
Not applicable	9999

42d. If YES to 41c ASK: How often in a typical week do you **not eat** the meats in your home delivered meal due to difficulty chewing because of your teeth, mouth or dentures?

Almost every day (5-7 times a week)	3 (go to 42e)
Some of the time (3-4 days a week)	2 (go to 42e)
A little of the time (1-2 days a week)	1 (go to 42e)
Don't know	7777(go to 42e)
Refusal	8888(go to 42e)
Not applicable	9999(go to 42e)

42e. Ask of Everyone who had difficulty: When you have difficulty chewing meats in your home delivered meal, do you or someone else modify or change the meats in any way so you can eat them more easily?

Yes	0 (go to 42f)
No	1 (go to 43)
Don't know	7777
Refusal	8888
Not applicable	9999

42f. If YES to 42e ask: How do you or someone else modify the meats in your home delivered meal so you can eat them?

I cut up the food into small pieces	0
I puree the food using a blender	1
I boil or steam the food to soften it	2
Other (specify _____ _____)	3
Don't know	4
Refusal	8888
Not applicable	9999

43. Do you have difficulty eating nuts because of your teeth, mouth or dentures?

Yes	0
No	1
Don't know	7777
Refusal	8888
Not applicable	9999

Next we want to ask you a general question about your home delivered meal.

44. On a typical day do you eat:

All of the home delivered meal	0 (go to 45)
At least half of the home delivered meal	1 (go to 45)
Less than half of the home delivered	2 (ask 44a)
Don't know	4(go to 45)
Refusal	8888(go to 45)

44a: Is this mainly due to difficulty chewing because of your teeth, mouth or dentures or other health related issues?

Oral health	0
Other Health related issues	1
Don't know	7777
Refusal	8888
Not applicable	9999

I am now going to ask you a few more questions about the last three months.

45. In the last three months did you have problems eating due to oral or other health problems?

Yes	0
No	1
Don't know	7777
Refusal	8888
Not applicable	9999

46. If yes, please indicate why you had problems eating (Examiner: select all that apply)

Allergies to certain foods	1
Dietary restrictions	2
General mouth pain and/or painful sores in the mouth	3
Illness causing pain when eating/digesting	4
Loose/ill fitting dentures	5
Missing teeth and no partial denture	6
No appetite due to medication or medication side effect	7
No teeth at all and no dentures	8
Problems swallowing	9
Don't know	7777
Refusal	8888
Not applicable	9999

47. In the last three months have you been able to brush your teeth and/or clean your dentures regularly (at least once a day)?

Yes	0
No	1
Don't know	7777
Refusal	8888
Not applicable	9999

48. If client answered No to question 47, Examiner ask: Why not?

Cannot hold toothbrush/denture brush	1
Trouble remembering	2
No toothbrush/.denture brush	3
No toothpaste/denture cleaner	4
Don't know	7777
Refusal	8888
Not applicable	9999

“We are almost finished, but now I have a few questions about you that we need for our records”

49. What is your date of birth?

dd/mm/yy

50. Examiner please record subject gender

Male	0
Female	1

51. How long have you been receiving Home Delivered Meals?

Months receiving HDM

52. Including yourself, how many people live in your household?

Number in household

53. Were you born in the United States?

54. If not born in the United States, where were you born?

Please specify _____

55. How long have you lived in the United States?

Number years in the US

56. What is your race?

White	1
African-American/Black	2
Asian or Pacific Islander	3
Native American/Alaskan Native	4
Other (specify)	5
Unknown	7777
Refusal	8888



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57. Are you of Spanish/Hispanic descent?

Yes	0
No	1

58. IF YES:

Do you consider yourself:

Puerto Rican	1
Cuban	2
Mexican	3
Dominican	4
Other (specify) _____	5
Not applicable (Not Hispanic)	9999

59. How many years of school were you able to complete? (**Prompt: “What was the last grade you completed?”**)

Record number of years:

For example:

- 0 No schooling
- 8 Completed 8th grade
- 12 Completed 12th grade
- 16 Completed college
- Code 7777 if Unknown
- Code 8888 if Refusal

60. What is the highest degree you have?

High School	1
Technical Degree	2
AA	3
BA/BS	4
MA/MS/MBA	5
Doctorate (PhD/MD/DDS/JD)	6
Other (specify) _____	7
Unknown	7777
Refusal	8888
Not applicable (less than high school)	9999

52. What type(s) of medical insurance do you have? **CODE ALL THAT APPLY**

Medicaid	1
Medicare	2
HMO	3
Private Health insurance	4
Don't know	5
Other (specify)	6
Unknown	7777
Refusal	8888
Not applicable (no medical insurance)	9999

53. Do you have dental insurance?

Yes	0
No	1
Don't know	2
Refusal	8888

54. **If Yes**, what type of dental insurance do you have?

Medicaid	1
Private dental insurance	2
Don't know	3
Other (specify)	4
Unknown	7777
Refusal	8888
Not applicable (no dental insurance)	9999



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