Interviewer Training Manual

for use in

Community health educators Assisting Latinos Manage Stress and Diabetes (CALMS-D)

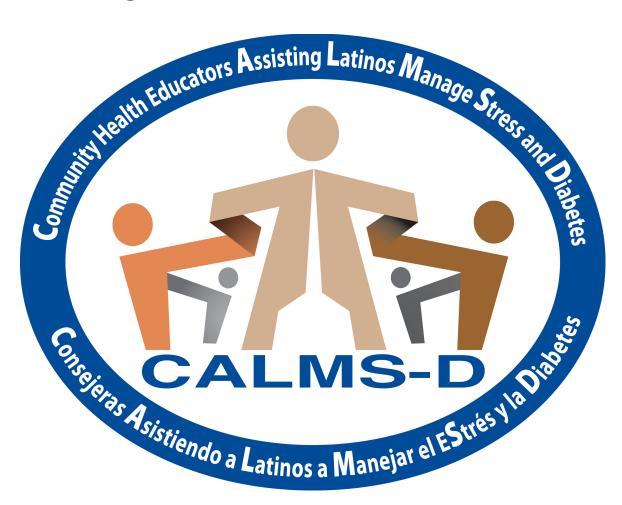


Table of Contents

PAGE NUMBER

ACKNOWLEDGEMENTS	1
CONTENT AND HOW TO USE THIS MANUAL	2
SECTION 1: INTRODUCTION TO CALMS-D STUY	
SECTION 1.1: OVERVIEW SECTION 1.2: PROEJCT DESCRIPTION AND ORGANIZATION SECTION 1.3: THE IMPORTANCE OF THE STUDY SECTION 1.4: STUDY AIMS SECTION 1.5: STUDY DESIGN SECTION 1.6: STUDY METHODS QUIZ YOURSELF SECTION 1	4 4 5 6 7 9
SECTION 2: THE WORK OF A FIELD INTERVIEWER	
SECTION 2.1: OVERVIEW SECTION 2.2: QUALITIES OF AN INTERVIEWER SECTION 2.3: GENERAL TAKS OF THE INTERVIEWER SECTION 2.4: SPECIFIC TASKS OF THE INTERVIEWER SECTION 2.5: SAFETY MEASURES SECTION 2.6: CRITERIA FOR DISMISSAL QUIZ YOURSELF SECTION 2	12 12 13 13 13 15 16
SECTION 3: THE IMPORTANCE OF INTERVIEWERS SECTION 3.1: OVERVIEW SECTION 3.2: YOUR JOB AS AN INTERVIEWER SECTION 3.3: THE IMPORTANCE OF THE STUDY QUIZ YOURSELF SECTION 3	17 17 18 21
SECTION 4: THE ROLE OF AN INTERVIEWER	
SECTION 4.1: OVERVIEW SECTION 4.2: THE FIVE PRIMARY INTERVIEWER RESPONSIBILITIES QUIZ YOURSELF SECTION 4	22 22 32
SECTION 5: THE INTERVIEWER PROCESS	
SECTION 5.1: OVERVIEW	34

SECTION 5.2: PROCESS	34
SECTION 5.3: QUALITY ASSURANCE	34
QUIZ YOURSELF SECTION 5	38
SECTION 6: INTERVIEWING TECHNIQUES	
SECTION 6.1: OVERVIEW	39
SECTION 6.2: READING QUESTIONS	39
SECTION 6.3: VOICE PERSONALITY	40
SECTION 6.4: ESTABLISHING RAPPORT	41
SECTION 6.5: BEING NON-JUDGEMENTAL	41
SECTION 6.6: PACING AN INTERVIEW	43
SECTION 6.7: PROBING TECHNIQUES	44
SECTION 6.8: SUMMARY: BASIC INTERVIEWING ROLES	48
SECTION 6.9: DIFFICULT SITUATIONS DURING FACE TO FACE INTERVIEWS	49
QUIZ YOURSELF SECTION 6	52
SECTION 7: USING PICTOGRAPHS	
Gramov 7.1. Oversymmy	<i>5</i> 4
SECTION 7.1: OVERVIEW	54
SECTION 7.2: WHAT IS A PICTOGRAPH	54
SECTION 7.3: WHY IS CALMS-D USING PICTOGRAPHS	54
SECTION 7.4: WHICH RESPONDENTS SHOULD SHOWN THE PICTOGRAPHS	55
SECTION 7.5: HOW DO I USE THE PICTOGRAPHS	55
QUIZ YOURSELF SECTION 7	58
SECTION 8: INTRODUCTION TO THE DAILY DIARY SUBSTUDY	
SECTION 8.1: OVERVIEW	59
SECTION 8.2: DAILY DIARY SUBSTUDY RATIONALE	59
SECTION 8.3: INTERACTIVE VOICE RESPONSE SYSTEM (IVR)	60
SECTION 8.4: CONTINUOUS GLUCOSE MONITORING (CGM)	61
SECTION 8.5: HOW TO TRAIN AND MOTIVATE PARTICIPATNS TO FOLLOW THE DAILY DIARY	
SUBSTUDY	61
QUIZ YOURSELF SECTION 8	63

ACKNOWLEDGMENTS

This manual was developed with funding from the National Institute of Minority Health and Health Disparities, 5 R01 MD005879-02, PIs Perez-Escamilla and Wagner

This manual was developed by:

Julie Wagner, PhD &

Angela Bermúdez-Millán, PhD, MPH

The following people also kindly contributed to the development of this manual:

Jessica DiGiovanna

This manual is based on The Centers for Disease Control and Prevention (CDC) Office of Surveillance, Epidemiology, and Laboratory Services:

Behavioral Risk Factor Surveillance System Interviewer Training Module.

Accessed on April 21, 2011 from:

http://www.cdc.gov/brfss/training/index.htm

Additional content was obtained from PROYECTO PREHCO. *Manual del Entrevistador*. 2/4/2003. Accessed on May, 2011 from: http://prehco.rcm.upr.edu/docs/en1.pdf

Content and How to Use this Manual

This manual was developed for the interviewers collecting data in the Community health educators Assisting Latinos Manage Stress and Diabetes (CALMS-D) research study. The purpose of this manual is to standardize the procedures during data collection. The manual was also developed to help and support the interviewers working in the field. This manual describes the objectives of the CALMS-D research study and the important concepts the field interviewer should know during data collection. This manual will help you learn the skills to be an effective interviewer for the CALMS-D research study.

The Main Objectives of this Manual are:

- To ensure standardized data collection across interviewers and within an interviewer across multiple interviews.
- For the interviewer (s) to learn and understand the general characteristics of the CALMS-D research study and the methodology used during the process of data collection.
- To inform the interviewer (s) of their important role/function, responsibilities and procedures to follow during field work.
- For the interviewer(s) to understand details of the surveys for the CALMS-D research study and the procedure to follow to complete the questions in the survey.
- The manual is divided into 8 sessions.
- The first section is an introduction to the CALMS-D research study, including the importance of the study, objectives, and methods, as well as characteristics of the people who will be interviewed.
- The second section is about the qualities of an interviewer, the tasks, safety measures and criteria for study dismissal.
- The third section is about the importance of interviewers, how the data you collect are used and can improve the health of Latinos in the future.
- The fourth section will detail interviewer responsibilities. These responsibilities should be met every single time you conduct an interview.
- In the fifth section you will learn about the interviewing process, the "nuts and bolts" of what you will be doing as a CALMS-D interviewer. You will first be

introduced to the entire CALMS-D process, from baseline to 6 months post-intervention to the time when the data you collect are published. Lastly, you will learn about the measures that are taken to assure the quality of CALMS-D data.

- The sixth section will provide tips and interviewer techniques about several aspects of conducting surveys in participants' homes.
- The seventh section provides guidelines for using pictographs the pictures that interviewers use to aid in data collection.
- The eighth section covers the details of the "daily diary sub study" that you will also be involved in.

Throughout the manual, you will see dialogue in italics. When the dialogue demonstrates an interviewer following the protocol correctly it is using *suggested language*, so it appears in **green for "go"**. When the dialogue is demonstrating an interviewer not following the protocol, it is giving an example of *language to avoid*, it **appears in red for "stop"**.

At the end of each section, you'll be testing your knowledge with a quick quiz.

SECTION 1 INTRODUCTION TO THE CALMS-D RESEARCH STUDY

1.1 Overview

This section offers general information about the CALMS-D research study: project description, general objectives, methods, description of study sample and the importance of collecting this data and the results obtained.

After completing Section 1, you will be able to do the following:

- Explain why the study is important to the health of Latinos
- List the members of the study team
- Describe the study design
- State the research question that the study will answer

1.2 Project Description and Organization

The CALMS-D study (<u>C</u>ommunity health educators <u>A</u>ssisting <u>L</u>atinos <u>M</u>anage <u>S</u>tress and <u>D</u>iabetes) is a research study funded by National Institute of Health (NIH- National Center on Minority Health and Health Disparities (NIMHD – 1 R01MD005879-01). The study personnel are listed below.

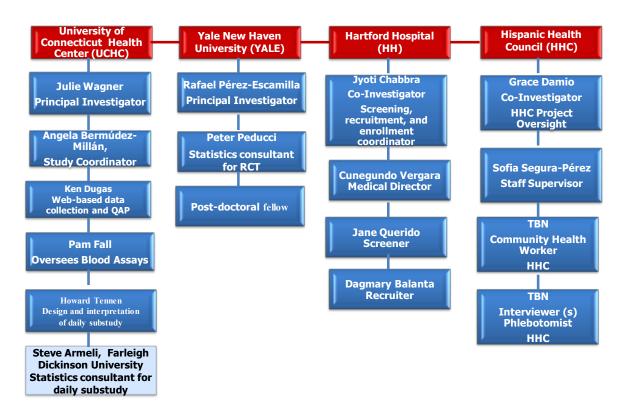


Figure 1. Study Personnel
Community health workers Assisting Latinos Manage Stress and Diabetes (CALMS-D)

As with any working group, the participation of each member is important. Each member has its specific responsibilities, and when part of a group, contributes significantly to achieving the main objectives for the study.

1.3 The Importance of the Study

Diabetes and Stress

- Latinos have elevated rates of type 2 diabetes and an increased risk for some of its disabling and life-threatening long-term complications.
- In order to prevent or delay these long term complications, *glycemic* control is crucial.
- Glycemic control is a medical term referring to the typical levels of blood sugar (glucose) in a person with diabetes. The test for glycemic control is called A1c (pronounced "A one c".
- Much evidence suggests that many of the long-term complications of diabetes, result from many years of elevated levels of glucose in the blood.

- Mental stress worsens glycemic control both directly through the release of stress hormones, and indirectly by disrupting diabetes self-care behaviors.
- The growing population of Latinos in the U.S. faces a unique constellation of political, sociocultural, and economic factors that predispose, cause, and exacerbate stress.
- They also experience more diabetes related distress than non-Hispanic Whites.
- The frequency, intensity, and chronicity of stressors faced by Latinos interfere with treatment seeking, treatment initiation, and treatment completion.
- Chronic stressors may affect basal biological and psychosocial functioning.
- Acute stressors may also activate acute physiological stress reactivity (i.e., glucose-stress reactivity).
- Extreme or repeated stress reactivity can alter the normal stress response and increase risk for disease.
- Glucose variability complicates treatment recommendations, increases the daily burden of living with diabetes, and may increase risk for long-term complications.

Stress Management and Diabetes

- Studies have demonstrated that stress management (SM) interventions improve A1c as well as psychosocial functioning.
- A1C is a blood assay that measures glycated hemoglobin, indicating the average blood glucose levels over the previous 120 days.
- To date, no SM intervention has been tested in Latinos with T2D.
- Studies have shown how community health educators (CHEs) help medically underserved communities overcome barriers to health care.
 - In a randomized, controlled trial, led by Dr. Pérez-Escamilla the CEHDL demonstrated that diabetes education delivered by CHEs substantially improves glycemic control among Latinos with T2D.
- To date, CHEs have delivered few psychosocial interventions. Demonstration of their ability to do so could increase access to psychosocial treatment.
- This study will test the effects of an empirically validated SM intervention on biological, behavioral, and psychosocial outcomes among underserved diabetic Latinos.

1.4 Study Aims

The primary aims of this study are to:

a) Tailor a diabetes stress management intervention for delivery by community health educators serving an urban Latino population.

b) Investigate the efficacy of the stress management intervention on glycemic control (A1c).

The secondary aims of this study are to:

• Investigate the efficacy of the stress management intervention on stress hormones, psychosocial functioning, stress-glucose reactivity, and heart rate variability.

1.5 Study design

The study is a randomized, controlled, clinical trial. The study will compare:

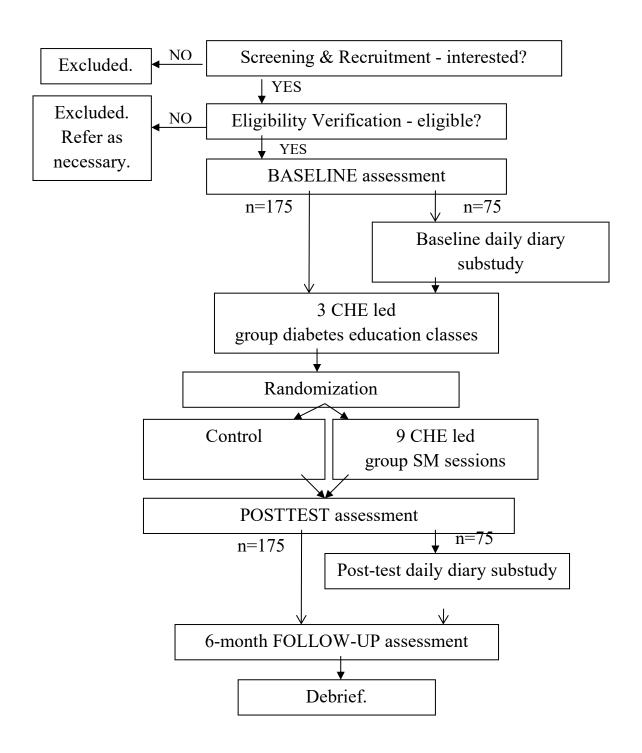
The effectiveness of CHE led diabetes education (3 sessions)

Versus

CHE led diabetes education (3 sessions) PLUS CHE led stress management education (9 sessions)

- Randomized means that a participant's chances of getting one treatment or the other are about 50-50, and up to chance like the toss of a coin. In this study, the decision about which treatment each participant gets will be made by a computer.
- The researchers are testing their belief that participants who participate in the diabetes education PLUS stress management will show more improvement in their diabetes control and quality of life than those who participate in the diabetes education only.

This diagram shows the study design:



1.6 Study Methods

The study will recruit 250 Latinos with type 2 diabetes from the 'Amigos en Salud' clinic at the outpatient Brownstone Clinic at Hartford Hospital.

Participants will be:

- Adult (18 years +)
- Latino/Hispanic
- Both male and female
- Spanish speaking
- Diagnosed with Type 2 diabetes for 1 year or longer
- With an A1c greater than 7

Based on previous work with Latino participants from the 'Amigos en Salud' clinic, we expect that many participants will have a low level of education, will have low literacy (not be able to read and write well), and low numeracy (not be able to do math well). Therefore, the research team has developed special instruments that will allow virtually all participants to answer the interview questions, regardless of their education, and their reading, writing, and math skills.

As an interviewer, you will be responsible for the assessments for the main study.

All participants will complete assessments for the main study at:

- Baseline (the beginning of the study before any treatment begins)
- Post treatment (9 weeks post-baseline), and
- 6 months follow-up (6 months post baseline).

In addition, a subset of 75 participants will also participate in a 'daily diary' substudy.

The substudy will determine if the intervention decreases glucose reactivity to stress. We will discuss the details of the daily diary study in a later section. For now, you should know that the daily diary study will collect real-time, ambulatory data on stressors, distress, and glucose. Participants will report these data themselves over the telephone. However, you will be very important to the daily diary substudy because you will train the participants how to use the telephone to report their data and how to collect their glucose. Those 75 participants will complete the daily diary substudy at:

- Baseline (the beginning of the study before any treatment begins)
- Post treatment (9 weeks post-baseline).

The study allows 2 years for recruitment, and an additional six months, or $2\frac{1}{2}$ years, to complete all data collection. $2\frac{1}{2}$ years is not a lot of time to interview 250 people multiple times! Therefore, it is important that the interviewers be extremely organized and efficient.

QUIZ YOURSELF ON SECTION 1

There are 5 questions for section 1.

1. The institutions involved in the study include:

- a) Yale University
- b) UConn Health Center
- c) Hartford Hospital
- d) Hispanic Health Council
- e) All of the above

2. One of the reasons for the study is that:

- a) Latinos have lower rates of diabetes than non-Hispanic Whites
- b) Stress has no effect on blood sugar
- c) There are already numerous studies of psychosocial treatments for Latinos with diabetes
- d) Community Health Educators have typically not been trained to delivere psychosocial treatments

3. The study is a randomized trial. This means that a person's likelihood of getting the diabetes education treatment or the diabetes education PLUS the stress management treatment is:

- a) Up to chance, like the toss of a coin
- b) Equal to that of winning the Connecticut state lottery
- c) Based on their income level
- d) Determined by a computer

4. The assessments for the main study will be performed at:

- a) Baseline
- b) Post-treatment
- c) Follow up
- d) All of the above

5. The study targets:

- a) Latinos
- b) Persons with type 1 diabetes
- c) Children
- d) Patients of St. Francis Hospital

SECTION 2 THE WORK OF A FIELD INTERVIEWER

2.1 Overview

This section highlights the qualities of an interviewer, the tasks, and safety measures.

After completing Section 2, you will be able to:

- Describe the qualities and tasks of an interviewer
- State specific measures an interviewer can take to stay safe in the field
- List some behaviors that are unacceptable for interviewers

2.2 Qualities of an Interviewer

The nature of your job as an interviewer allows for some flexibility regarding the organization of your job and the time you will need to spend to be able to accomplish it. However, the job of an interviewer requires a lot of effort since obtaining the information in the proper way can be more complicated than it appears. In order to make sure that the activities for data collection are done efficiently, a field work interviewer should possess the following qualities:

- Interest in the research project.
- Availability to complete the trainings.
- Availability to complete data collection.
- Skills of effective communication.
- Ability to work as a member of a team.
- Motivator, motivate the selected participants.
- Punctuality.
- Ability to maintain study information confidential.
- Responsibility with the management of monetary incentives, receipts, research equipment.
- Availability to work before and after hours, including weekends.
- A car to drive to participants home.
- Demonstrate ability to work with the field work supervisor, following instructions and meeting the deadlines of the work.
- Organization at work.
- Ability to attend to details without losing the larger perspective of the overall study.

2.3 General Tasks of the Interviewer

- Localize the home address.
- Make first contact with the participant.
- Complete the survey instrument, all parts as indicated in the manual and during training.
- Meet the established deadlines for data collection.
- Keep the field work supervisor informed of the work completed.
- Inform the field work supervisor the status of the assigned cases and notify her of any difficulties that affect data collection.
- Watch for the security of the equipment for data collection. For example, computer tablet, GPS, scales, and other work materials.

2.4 Specific Tasks of the Interviewer

- Complete the full training.
- Read the manual and complete any assigned tasks, such as practicing the surveys.
- Dedicate the required hours per week in data collection.
- Understand the study objectives.
- Thoroughly familiarize herself with the questionnaire. This does not require memorizing it, but rather comprehending what each instrument is assessing and what each question is asking.
- Plan workflow appropriately.
- Coordinate the interviews with the participant. The interview should be scheduled at the convenience of the participant, not the interviewer.
- Return to the home as necessary for data collection.
- Follow to the key the questions in the interview. The conceptual design of the questions is crucial. If the interviewer formulates the questions in a different way, the validity of the survey is lost.
- Train the participants in the daily diary sub study, ie, how to use the necessary equipment, and how to answer the telephone questions correctly.
- Motivate participants to complete the survey without coercion.
- Pay the monetary incentive to the participant.
- Complete required documentation.

2.5 Safety Measures

Participants will be given the option to complete interviews at their home, or at the Hispanic Health Council (HHC). Our past experience is that most participants will choose a home visit. Due to the nature of the job of an interviewer conducting interviews

in the field it is important to take into consideration several security measures. Some safety measures are:

- Always call the participant and make sure she willd be at the home for the visit.
- "Hi _____, this is [name] from the Hispanic Health Council. I am calling you to confirm our visit at . Is it still ok for us to do the home visit?"
- "Will anyone be at your household during our visit, so that we can bring enough information/handouts for family members, or coloring books and crayons to entertain children?"
- This can lead participant to let you know who will be there during the time of the visit.
- Prepare the materials needed for the home visit in advance and carry them with you.
- If possible put them in your back seat and avoid entering the trunk of a car.
- Dress modestly and professionally to protect yourself, wear shoes and clothes that make it easy for you to move quickly. No tank tops or flip flops, please.
- Leave jewelry at home.
- Leave purse at work if you can.
- Avoid areas with poor visibility.
- If you are entering a building with multiple units, make some noise (shake your keys) when walking in the hallway or the stairs. This prevents someone being startled or surprised by your presence.
- Check your surroundings. If something does not look right, come back later or on another day.
- Trust your instinct/judgement. If the actions of anyone in the home you are visiting set off alarm bells, believe your intuition and position yourself for an easy exit. Always respect your 'gut feelings'. Please note that this situation is most unlikely to arise, but it is better to err on the side of safety.
- Never assume the role of protector.
- If you have to, consider a neutral meeting location (e.g., HHC) if visit cannot be made at a safe environment.
- Report all incidents to your supervisor.
- Let her know the day, time and the location of your visit and she will call you at the cell phone to make sure you are fine while you are doing the visit.
- If you are worried about visiting the client on your own, or in the dark, or in a particular area, discuss your concerns as soon as possible with your supervisor. When needed, the study coordinator can do the home visit with you.
- Always remove yourself from dangerous situations.

• Conduct home visits during daylight hours. Never be at a participant's home past 8:00pm.

2.6 Criteria for Dismissal

You were selected as an interviewer based on your skills, abilities, and experience. Therefore, the study team is pleased that you will be performing interviews. We do not anticipate any problems. Nonetheless, it is helpful to review some criteria for removal from this research study. They include but are not limited to:

- Violating the confidentiality of the participant.
- Interviewing people that you know personally, such as friend, family members, neighbors.
- Submitting fraudulent information, false information in the interview.
- Failing to meet the number of working hours per week.
- Using your identification for other purposes that are not related to the research study.
- Submitting false receipts from monetary incentives paid to participants.
- Using the computer tablet for personal purposes.

As an interviewer you should know how important your job is and understand your role in the research project. The next two sections will discuss this in greater detail.

QUIZ YOURSELF ON SECTION 2

There are 3 questions on section 2.

1. If an interviewer feels unsafe, she should:

- a) Talk herself into feeling braver
- b) Ignore her gut feelings
- c) Stay in the home longer to see if things get better
- d) Follow her gut and remove herself from the situation

2. The main tasks for an interviewer include:

- a) Dedicate the required hours per week in data collection.
- b) Returning to the home as necessary for data collection.
- c) Motivate participants to complete the survey without coercion.
- d) Memorize the survey.
- e) A, B, and C only.

3. A cause for dismissal of an interviewer includes:

- a) Submitting false data
- b) Submitting false receipts
- c) Violating participant confidentiality
- d) Using the i-Tablet for personal use
- e) All of the above

SECTION 3 THE IMPORTANCE OF INTERVIEWERS

3.1 Overview

There is a saying, "What gets measured gets done." Research works this way, too. But before we can improve the community's health and save lives, we need information from patients—we need to collect it, analyze it, and measure it. Only then can we do something about it.

As a research interviewer, you will be on the front lines of the crusade to improve health because you are handling the first step: collecting information. This training module will show you how to do this and will help you improve your skills as an interviewer.

After completing Section 3, you will be able to:

- Give specific reasons that an interviewer's job is so important
- Describe several ways that the data you collect are used
- List positive changes that health data have made for the health of individuals and the nation

3.2 Your Job as an Interviewer

"As an interviewer, you could be considered the most important part of the entire research process. Because you are the one that scientists count on to collect accurate data. Crucial health decisions are made based on the information you collect."

Why is Your Work as an Interviewer Important?

When you perform an interview, you will be asking people about factors that affect health, some of which even contribute to the death of thousands of people each year.

The information gathered by interviewers is eventually used by many organizations to help persuade people to adopt healthier lifestyles. If you watch the evening news or read the daily newspaper, you probably hear this type of information, on a regular basis. This information comes from interviewers like you. Do these headlines sound familiar?



Your Role Is Critical

Because interviewing every person in your community is not possible, the people you will be interviewing are among a small, scientifically selected group called a sample. The information obtained from the sample can be used to generalize results to the larger community.

Numbers that have been collected and analyzed are called statistics. The most accurate health statistics come straight from the source—real people. Therefore, one of the most important jobs in helping the community process is yours—the interviewer. It is you, after all, who will play a pivotal role by recording information from the people you talk to during interviews.

3.3 How the Data Are Used

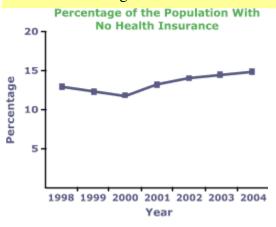
After you have collected information, your data are analyzed by health scientists. Your data will be used to help determine if the stress management treatment improves health, and whether it works better than diabetes education alone. Also, in addition to educating policymakers and the public, scientists can use the data, in many ways, including:

- Tracking trends over time
- Categorizing the data into subgroups

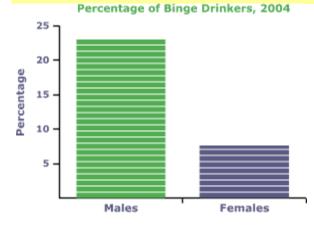
- Guiding state health policies
- Advocating for better services (health care) for your community
- Advocating for policies that would increase the use of CHEs

We know the following things because of the data collected by research interviewers like you:

In recent years the percentage of the population without heath insurance has been increasing (tracking trends over time). This type of data can be used to change policies so that more people have access to health insurance. The recent healthcare reform law, called the "Affordable Care Act", came about because of data like you are collecting.



Men are more likely to be binge drinkers than women (categorizing the data into subgroups—in this case, by gender). This type of data help healthcare workers target certain individuals for screening or specific treatments.



People who participated in an exercise program are less likely to develop diabetes than those who just got health education. This type of data let healthcare providers

know which treatments work best. Healthcare providers now know that education alone is not enough to change people's health behaviors.

Studies of interpreter services show that people who speak English as a second language get better health care when an interpreter helps doctors and patients understand each other. This type of data can be used to change laws. In the US, federally funded healthcare agencies now MUST provide interpreter services – and this law came about because of data like you are collecting.

Did You Know?

"Answers not recorded can't be analyzed, and that may mean people don't get the help they need. Answers recorded incorrectly will lead to incorrect data, and that may mean people will never hear the message that they need to hear to stay healthy. Incorrect data could lead to a waste of millions of dollars spent trying to solve the wrong problems. So, it's we, the interviewers, who have the awesome responsibility to do our best in getting the information the right way."

QUIZ YOURSELF ON SECTION 3

There are 5 questions for Section 3.

1. True or False? Major decisions are made based on the information interviewers collect.

- a) True
- b) False

2. Research interviewers are—

- a) The people in actual contact with the general public.
- b) The ones scientists count on to collect accurate data
- c) Could be considered the most important part of the entire research process.
- d) All of the above.

3. What is true about the people you interview?

- a) You can interview anyone. Just talk to any random person.
- b) The people you interview are part of a scientifically selected group called a sample.
- c) You try to interview everyone in your community.
- d) None of the above.

4. Which of the following is NOT a way collected research data are used?

- a) Tracking health trends over time.
- b) Categorizing health data by subgroups (male, female, etc.).
- c) Guiding state and national health policies.
- d) Following up with participants who said they were overweight with diet advice.

5. True or false: health research data collected by interviewers are used to gather statistics only.

- a) True
- b) False

SECTION 4 THE ROLE OF INTERVIEWERS

4.1 Overview

This section will detail the role and responsibilities of interviewers. These responsibilities should be upheld every single time you conduct an interview.

After completing Section 4, you will be able to:

- Describe the primary interviewer responsibilities
- List the 8 rules of "following the protocol"
- State specific steps to assure confidentiality and privacy
- Maintain quality data collection procedures
- List strategies for handling common interview problems

4.2 Your Responsibilities as an Interviewer

The five primary interviewer responsibilities are listed below, and will be discussed in detail over the next several pages:

- A. Follow the protocol
- B. Ensure participants' confidentiality
- C. Make quality a priority in all aspects of interviewing
- D. Maintain a courteous and friendly manner
- E. Manage interview problems appropriately

"Being an interviewer takes a lot of skill...it's a job full of responsibilities. You were chosen for this job not only because you can collect accurate data, but also because you're able to listen to people and deal with any questions and concerns they may have."

A. Follow the Protocol.

Following the protocol means doing things by the rules. There are 7 rules to remember.

Rule #1: All Interviewers Must Ask The Questions Exactly As They Are Written, Without Modification

One word can change the meaning of a question drastically. Trying to interpret a question for the participant can also have the same effect.

If the participant asks: "what does that mean?" you should point out that there is an "I don't know" response, if there is one.

Some other phrases that you can use to help you if the participant asks: "what does that mean?"

```
"What it means to you."
```

Additionally, the interviewer has the option to administer the survey in English or Spanish. The decision about which language to use is based solely on participant preference. If a participant does not understand a particular question or response option, the interviewer should ask the participant if she would like it read in the other language. The interviewer should avoid jumping back and forth too much, but should feel free to offer the other language if it enhances the participant's understanding.

Rule #2: Read the Whole Question.

It is your responsibility to expose the person that is being interviewed to each question exactly how it is written, even if the participant interrupts you. The objective of this is to harmonize the procedure of the interview for each participant.

Some phrases that you can use when the participant interrupts are:

"I apologize, I need to read the question to you one more time."

"I am sorry, I need to read the question one more time to make sure that the information I am collecting is correct."

"It is important that I read the full question so that you can answer completely and precisely."

"I would like to read to you the question again to make sure that we record it correctly."

[&]quot;Let me repeat the question for you.."

[&]quot;I apologize, but I am not allowed to interpret any question."

[&]quot;I will record the concerns you have expressed to me so that they take them into account during the analysis of the data."

[&]quot;I apologize; I do not have that information."

It is possible that at the beginning of the interview the participant interrupts you and/or elaborates when you are reading a question. As you obtain more experience you will notice that after making a few reminders to the participant about how important it is for you to read the question, the participant will cease from making interruptions and/or comments that are not relevant to the interview. This is called training the interviewee/participant.

Rule #3: Only Ask the Questions to the Recruited Participant.

If the participant decides that is ok to have someone else present while you conduct the interview, sometimes the participant might ask for advice about how to answer a question to the family member that is present. It is important that you interview the participant directly because this study does not use proxy interviews. A proxy interview is an interview where the participant has someone else answer the questions for them. Interviewing through a proxy can lead to inaccurate responses.

Rule #4: Keep the Question Neutral.

The questions in the interview were carefully selected for a neutral character: they do not suggest that one response is more probable or is preferable than the other. It is important that you read the question how is written, if you do not, you take the risk of losing neutrality.

Reading the question incorrectly, paraphrasing or interpreting the questions are several ways of putting at risk the neutrality of the interview process. You also need to watch for non verbal expressions, such as tone of voice or your face expression that can reveal:

- Surprise
- Approval or disapproval
- Amazement
- Worry
- Sadness or anger

Reacting to the living conditions of the participant and the surroundings is another way of losing neutrality. Both ways can result in incorrect data collection or incomplete data or refusal from the participant to participate in the research study.

Another way of losing the neutrality of the interview is how you react - positively or negatively - to the participants' answers with your own opinions, experiences or histories. You need to avoid judging or expressing your personal opinions with respect to any topic.

More of this is discussed in section 5.

Rule #5: Be Objective.

You need to be objective in what you say or do when you are in contact with a participant. This will help make sure that the information is reliable and impartial. Do not make suppositions about the participant's answers. For example, if a participant gives you an ambiguous or unclear answer, you need to solicit the participant to clarify this for you. You should not assume or infer the responses.

Rule #6: Read Slowly and Clearly.

Communicate effectively with the appropriate voice and tone. Use a normal tone of voice. Do not chew gum or any other food. Pronounce clearly. Read slowly and clearly making sure that each word is heard, but making sure that you are moving forward with the interview.

Rule #7: Stick to the Script.

It is good and even necessary to chat with participants before the survey begins in order to establish trust and build rapport. But, some participants like to talk, so they will try to engage you in conversation during the interview. This is a problem because it can change their answer to the question being asked, alter the flow of the interview, and take up time you should be spending on the interview.

If a patient wants to discuss a particular question, you might respond by saying:

"I see. Now let me repeat the question for you..."

"I understand. So for this question, would you say that your response is..."

If the participant is difficult to keep on track, you might like to say something like:

"I don't want to be rude or cut you off, but we have a lot of material to cover today and only a short time to do it. So I'm going to try to keep us on track. Therefore, I'm going to return our attention to the survey now."

Considering that the interviews will be conducted with older adults, there is a probability that some of them might ask you for advice or recommendations about medications that the participant is taking, or what to do about a particular ailment he/she is suffering with. It is important NOT to give advice about this. If there is a serious problem happening or a

cause of concern, you should recommend that the participant call the doctor and you should inform your supervisor about this case. Prescribing, advising or recommending what to do can lead to severe ethical and even legal problems for you and other members of the study team.

There's probably the chance that the participant might manifest complaints about a family situation or about a specific family member. She might ask your opinion or confirmation about it, for example: "My son never comes to visit, he is a bad son, don't you think?" or "Ddo you see how bad they treat me? What can I do?" These situations can place the interviewer in a delicate position, because you cannot ignore the participant or switch the subject very easily. You should avoid taking sides, making judgments, or give advice about it. Some ways to get out of those difficult situations are:

- "I understand that you feel bad about that situation."
- "It must worry you that your son does not come regularly."
- "Sometimes is difficult to know what to do in certain situations."

Your role as an interviewer is not to try to solve the problems of the participant, but rather to collect information that can contribute to the health of the whole community of Latinos with type 2 diabetes.

B: Ensure Participant Confidentiality

Some Interview Questions May Be Perceived as Sensitive or Highly Personal

Questions such as:

- How would you rate your reading ability?
- Have you ever gone hungry because you just couldn't get any food?
- How often do you pray?

Protecting confidentiality is of the utmost importance. Be careful what you say. You may be thinking that you would never violate a participant's confidentiality, even if you had the chance. But it's easy to slip.

Reasons for Confidentiality

It is essential to collect the most accurate data possible, so you want participants to give you truthful answers. The best way to ensure truthful answers is for you to guarantee that the information they provide will be kept completely confidential.

As you now know, gaining someone's trust by assuring confidentiality will improve the quality of the information you gather. However, violating a participant's confidentiality has serious consequences. Violating confidentiality could cause you to lose your job and may even lead to criminal charges being brought against you in a court of law.

How to Assure Confidentiality

Here are several ways you can guarantee your participants' confidentiality and help them understand that you won't misuse the information.

- 1. Assure the person that anything identifying them like their name is separated from the record of your interview. This includes any personal information like their telephone number.
- 2. Explain that the data you are collecting will be combined with information collected in interviews of other people. Individual information is further protected because the data are combined and reports only include aggregate figures. For example, a report might say that 10% of the population has a household income of less than \$10,000, not that Mr. Gonzalez earns less than \$10,000.
- 3. Don't discuss details of your interviews outside of the work environment. Although discussion of participant information among staff is a necessary part of the research process, do not disclose interview information with family, friends, or anyone else not involved with the study.
- 4. Store your materials in a locked (or secure) area when you aren't at work. Don't leave confidential materials on desks or tables overnight.

If you notice the participant is worried about how the information will be used, offer reassurance about the confidentiality for the study by saying: 'I assure you that all your answers will be treated with strict confidentiality. Your answers will be separated from any information that can identify you directly. The results from this study are presented as a summary and only the research team has access to the data."

Another way to assure confidentiality is to provide privacy. Privacy refers to the setting in which the data is collected. Sensitive questions are more likely to be answered honestly if the interview is conducted in a private setting.

How to Protect Privacy

It is important to tell the participant that the interview preferably should be conducted in private. If some else decide to stay, with respect, tact and ingenuity, you should try different ways for the other person to leave so that you can be alone with participant.

There are several other ways to protect privacy.

When calling to confirm your appointment, you can explain to the participant the necessity of conducting the interview in private, because some of the questions are personal.

The day of the interview, if someone else is there, you can ask the participant to support you and ask the other person to leave herself.

Another way is to explain the questions of one of the sections in the interview to the participant and the other curious person in the household, you can say: "Some of the questions require personal opinions, in order to express them honestly, it is necessary for the participant and me to be alone."

C. Make Quality a Priority

A lot of people are counting on you to do the best job you possibly can. These people include the participants, researchers, health professionals, the media, state and local health departments, and anyone whose health will benefit from the data you collect. Here are several ways you can be sure that you are making quality a priority in your work. Each will be discussed in detail in the next few pages.

- Understand the nature and content of the questions so you can be comfortable with the interview process
- Interview the correct participant
- Record responses and code dispositions properly
- Conduct interviews as efficiently as you can

How to Make Quality a Priority

One Way to Make Quality a Priority is to Understand The Questions

Obtain a copy of the questionnaire and read it thoroughly. Then discuss with your supervisor and other interviewers any topics or questions that make you uncomfortable or are unclear. Here are three reasons for discomfort with questions, and what you can do.

1. Unfamiliar terms

If you've never heard terms like "hemoglobin A one C" or "coronary artery disease," chances are good that some of your participants won't know those words either. When they ask you, "what does that mean?" it doesn't inspire much confidence if you say, "I don't know; I'm just an interviewer." Instead, ask a supervisor for guidance.

Along with your supervisor and other interviewers, go through the questionnaire and define any terms that might be unfamiliar or difficult for you to explain to a participant. Additionally, make sure you understand what each question means, not just the isolated words. If a participant asks you to explain the question, read any explanatory information shown on the questionnaire. If there is no explanatory information, simply say, "Let me repeat the question." Then if they still can't answer the question, select "Don't know/not sure" as their response. Be sure to document the questions you get from people that you interview and share this information with your supervisor so that any problems can be addressed in future versions of the questionnaire.

2. Sensitive questions

Sometimes participants believe interviewers are trained healthcare professionals, and they may ask for medical advice. Others may get very emotional describing events of their lives. For example, questions about diabetes may be difficult for someone who was recently diagnosed with the illness.

First, emphasize that you are not a healthcare professional and tell the participant to talk with their doctor. Second, acknowledge that the interview seems difficult for the person and ask them if they would like to continue or reschedule it. If the person decides to continue, remain as neutral as possible during the interview. It is certainly appropriate to express concern at the end of the interview, and to apologize for triggering the upset.

3. Intimidating question wording

Some participants may view the questions as some kind of test for which their answers are either right or wrong. For example, most people with diabetes know that they should take their medications regularly and test their blood sugar regularly, but don't always do so for one reason or another. Reassure them this is not a test, and there are no right or wrong answers.

Some participants, fearful about how the information will be used, may not give you an honest answer. For example, most people know that driving while under the influence of alcohol is illegal, so they might not want to admit to doing it. Reassure them the

information you collect is strictly confidential, and that their answers will be combined with thousands of others.

Another way to Make Quality a Priority is to Interview the Correct Participant

Always interview the person selected; this is the only way to ensure that the sample is correct. Often the person selected is hard to reach or isn't home, and another person suggests you simply conduct the interview with him or her instead. Don't be tempted by this "easy complete." Instead say something like, "No, I'm sorry. I have to interview the right person. The accuracy of the study depends on it."

Another way to to Make Quality a Priority is to Properly Record Responses

As with any type of science, some errors are an inevitable part of survey research. However, you can reduce or eliminate error in your data by being careful to choose the correct codes for responses.

The data for CALMS-D will be collected on a i-Tablet. Instructions for using the iTablet can be found in the tablet protocol.

This is is a small, touchscreen computer similar to an i-Phone. It uses cell phone waves to automatically transfer the data you enter from the i-Tablet to a database at UConn. The benefits of using the i-Tablet include: no need for paper and pencil assessment; no need for hand data entry; fewer data collection and data entry errors. However, the i-Tablets only work if you handle them correctly, and if there is cell phone service available. Cell phone service is very reliable in the city of Hartford. However, if you are inside an apartment building, the thick walls may prevent the cell phone waves from entering the room you are conducting the interview in.

For this reason, it is imperative that you ALWAYS carry a back-up paper copy of the interview. If there is any problem with the i-Tablet, you should spend only a minute or two trying to solve the problem, and then switch to the paper survey. Details of the i-Tablet protocol can be found in Section 9 of this manual.

D. Maintain a Courteous and Friendly Tone

You will soon learn more about putting "personality" in your voice and how to respond to unkind words. For now, here are a few tips about using your voice to encourage participants to participate in the interview:

- Practice reading all the questions. If you have questions about how to pronounce unfamiliar terms or how to emphasize particular words, ask your supervisor.
- Speak directly to the participant.
- Use a low pitch of your voice, and don't raise your voice unnecessarily.
- Speak at a moderate pace, deliberately and distinctly.
- Put a smile in your face.
- Put the participant at ease by reading the questions in a natural, calm, and friendly manner.

E. Deal Appropriately with Interview Problems

An entire section of this training is devoted to interviewing techniques, which includes dealing with difficult participants. You will be given a list of statements and questions that are common among people who participate, along with suggested responses. Here are some basic concepts to keep in mind:

- Be kind, no matter what a participant says to you.
- Emphasize the participant's importance to the study.
- Explain the reasons for the study.
- Find a convenient time to conduct the interview.
- Emphasize that the survey is completely confidential.

Did You Know?

"It takes a while to get the hang of being a good interviewer. At first it was a bit overwhelming, but you start to figure out why things need to be done a certain way. Then it just comes naturally, and it gets to be really fun and challenging."

QUIZ YOURSELF ON SECTION 4

There are 8 questions for Section 4.

- 1. A participant is cooperating and is quickly moving through the survey. On a question with several choices the participant says "That's the one," after you have read just two of six choices. You should
 - a) Go on to the next question after selecting the correct response.
 - b) Keep reading the remaining choices and ignore the participant's response until you have read all the choices.
 - c) Briefly explain to the participant that you have to read all the choices to make sure they are selecting the correct one. Then reread all the choices.
 - d) Ask the participant if they are sure their response is correct.

2. Why is it important to read all questions in the questionnaire as written (verbatim)?

- a) So the answer to the same questions can be compared between different participants.
- b) It is what the protocol that the scientists developed.
- c) The questions have been tested as written. Any change in the spoken text could change the meaning and therefore affect the answer to a question.
- d) There is no need to read the question the same every time. Improvise if you feel like it.
- e) A, B and C

3. A proxy interview means—

- a) An interview done with a British citizen.
- b) An interview done in a businesslike manner.
- c) An interview in which someone other than the participant answers for the participant (for example, if a daughter answered for her hard-of-hearing elderly father).
- d) An interview done quickly.

4. Are proxy interviews permitted by the CALMS-D?

- a) Yes
- b) No
- c) Sometimes

5. Confidentiality is important to the CALMS-D study. What scenario below could possibly violate the confidentiality with the participant? If you—

- a) Write down a participant's name and leave it on your desk in an open place when you are not there.
- b) Talk about what a participant said in a public place (like an elevator).
- c) Tell your family some of the strange things people say during interviews.
- d) Interview a participant who is a friend of yours.
- e) All of the above.

6. All of the following are true statements except one. Select the one incorrect statement.

- a) Don't change the questions.
- b) Don't shorten questions if participants have little time.
- c) Say "great" if they say they don't smoke.

7. What should you do when a participant is concerned with confidentiality?

- a) Say "Trust me" with a sincere voice.
- b) Assure them that their answers will be kept confidential and combined with hundreds of others.
- c) Tell them to stop being paranoid.
- d) Ignore them and just keep going.

8. It is important to interview the selected participant because—

- a) The validity of the whole study depends upon it.
- b) This is done just to cause you more work.
- c) There is no reason.
- d) None of the above.

SECTION 5 THE INTERVIEWING PROCESS

5.1 Overview

In this section, you will learn about the interviewing process, the "nuts and bolts" of what you will be doing as an interviewer.

After completing this section, you will be able to do the following:

- Understand how data collection fits into the entire research process.
- List and describe the measures taken to ensure quality and minimize error.

5.2 Process

"Many years of experience are incorporated into the interview and procedures. Understanding the process and why things are done a certain way should help interviewers properly handle any situation."

Although you as an interviewer are involved only in the data collection aspects of the survey, you should be familiar with all the steps in the process. The content and structure of the questionnaire is determined jointly by a group of researchers and are used without modification.

Here are the 3 steps of the process:

- 1. **Questionnaire construction.** A working group composed of a group of researchers develops the questionnaire.
- 2. **Sample selection and screening.** Sampling methodology is determined with a statistician to make sure data collection procedures are in place to follow the methodology. The sample is recruited from Hartford Hospital.
- 3. **Data collection.** You conduct interviews with a prescribed protocol into a computer tablet (ipad). The researchers receive, edit and correct the data on a regular basis.

5.3 Quality Assurance

A. Sources of Error

As you've learned, the goal is to collect information from a small group of people in order to learn more about the population as a whole. There would not be enough time or money to interview everyone. This is why it's very important that the small group of people

interviewed is representative of the larger group to which they belong. If we strictly apply the following procedures, it's more likely that the small group will truly reflect the entire population.

- Perform each interview well. Each one is very important.
- Interview the selected participant, not just the person who is available.
- Do what you can to encourage selected participants to participate in the survey. (See section 4 for ideas.)
- Ask each participant the questions exactly as written, including all the response choices (except as noted).
- Persuade as many people to cooperate as possible.
- Encourage participants to answer *every* question.
- Record the responses accurately.

When these measures aren't taken, it's easy for the survey to become *biased*. Bias is a systematic distortion of survey data. There are several different types of bias for which an interviewer could be responsible.

B. Bias from "cherry-picking"

You can bias the survey data if you don't follow the participant selection rules. For example, if you "cherry-pick" only the "easy" interviews--people who are comfortable to talk with, you will exclude an entire group of people. This excluded group probably has different characteristics than the "easy" group, which means you'll end up with interviews that aren't representative of the population as a whole.

The most common reason you will hear for a refused interview is lack of time. Busy people may have very different behaviors than people who agree to an interview the first time you ask. For example, they may be more "stressed-out" and therefore more prone to having health problems. On the other hand, they may be busy because they are working, and their employment might make them less prone to certain diseases and more likely to have healthcare. When a participant says they are too busy to complete the survey, you must try to change their mind. You should not view an initial refusal as a problem or a failure on your part. Instead, look at it as an opportunity to get more accurate data for the survey and don't give up!

"Completing interviews is not the most important thing for an interviewer; getting the correct answers from the right person is the most important thing. Hard-to-get people have different opinions than easy-to-get people and it's important to include them."

C. Bias from Your Tone of Voice

Another way your data can be biased is if you ask questions incorrectly.

Recall from the last section how important it is to read all the possible responses to each question. If a participant doesn't hear all the possible answers, you may not get an accurate response. Your tone of voice is also important for getting accurate responses. Participants should feel there is no wrong answer to your questions. If you sound judgmental or patronizing, participants may feel uncomfortable telling you the truth. Imagine asking the following question with a judgmental or patronizing tone:

"Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 or more drinks on an occasion?"

If the true answer is more than the participant feels would be acceptable to you because of your tone of voice, you may receive and record an inaccurate answer.

D. Interviewer Monitoring

Your supervisor occasionally will sit on your interviews. This procedure is called interviewer monitoring. The purpose of interviewer monitoring is to ensure the interviewer is not inadvertently introducing bias into the survey by tone of voice, not reading the question as written, or not completing a question. Having someone listen to the interviews you conduct is a valuable tool for your continued training and for achieving uniform questionnaire administration.

"I like to emphasize that interviewer monitoring is a two-way street. The supervisor learns about potential problems with the survey, and at the same time may be able to teach interviewers a few tricks to help with specific situations. Almost all interviewers have areas where they excel and areas where they could improve their skills...monitoring allows the sharing of good techniques across all the interviewers."

While monitoring, supervisors will be paying attention to the following things:

- Questions being asked as written and in the correct order
- Accurate coding of responses
- Professional attitude and a positive voice
- Participants' reactions

E. Conclusion

"Our emphasis is on following the protocol, not on completed interviews. This means the interviewers don't feel pressure, and they can focus on quality. We think this

differentiates us greatly from telemarketers and the negative perception people have of them."

QUIZ YOURSELF ABOUT SECTION 5

There are 3 questions for Section 5.

1. Error can occur if the interviewer:

- a) Asks each participant the questions exactly as written, including all the response choices.
- b) Encourages participants to answer every question.
- c) Records the responses accurately.
- d) Spends more time interviewing pleasant and agreeable participants.

2. Bias can occur because of:

- a) The interviewer's tone of voice
- b) Cherry picking
- c) Asking questions incorrectly
- d) All of the above

3. A sample is important because:

- a) It is a small group of people that lets us learn more about the community as a whole
- b) It costs more to interview a sample than the whole community
- c) Doctors know how to treat samples better than populations
- d) The sample is not important

SECTION 6 INTERVIEWING TECHNIQUES

6.1 Overview

Knowing how to conduct successful interviews doesn't happen overnight. It is something that you will get better and better at doing each time you try. The following section will provide tips and techniques about several aspects of interviewing.

After you finish this section, you should be able to do the following:

- Understand an interviewer's most important tasks
- Identify ways to establish rapport with participants
- Describe the meaning of voice personality and pacing within the context of interviewing technique
- Get more accurate answers using probing techniques
- Convince reluctant participants to complete an interview by using standard responses to refusals

6.2 Reading Questions to the Participant

Think of the survey as if it were a movie script. Movie actors with a very strict director stick to the script and say their lines exactly as the screenwriter wrote them. The dialogue seems so natural when we see the movie later, it's hard to believe it was scripted, and that the actors probably said those exact lines hundreds of times in rehearsal! The reason it seems so natural is because talented actors use *voice personality*, and they take advantage of techniques known as *rapport and pace*. You can use these same techniques to become a talented interviewer.

Adherence to the Questionnaire

There will be times when you can "improvise your lines," such as when you are answering common questions about the survey. However, when you are reading the actual questions on the questionnaire, you must use the exact wording provided for each question. The questionnaire has been carefully prepared, and each question has a specific purpose. Interviewers can't change or substitute any words, because even slight changes in wording can affect the answers given. If questions aren't read exactly as they are written, the integrity of the entire survey could come into question.

You must ask every question on the questionnaire that is appropriate for the participant. In answering one question, a participant may sometimes answer another question that appears later in the interview. If this happens, you still have to ask the

partially answered question. You can show the participant that you haven't forgotten what was said earlier by saying something like: "I know we touched on this a few minutes ago, but I'm required to ask this next question."

Questions must be read in the exact order in which they appear. Just as a movie script is structured to make each scene understandable to the audience and to foreshadow important events, the survey questions are ordered to achieve a desired effect. A question asked out of order can influence replies to the questions that follow.

- With the questionnaire, you can't skip questions, even if the answer seems obvious. The question may be intended to verify information. Also, an answer received in the context of one line of questioning may not be the same as an answer received in another group of questions.
- Pay close attention to the timeframe of the questions. Some questions refer to the past 2 weeks, while others refer to the past month, the past year, or the participant's entire lifetime. Clearly state the timeframe for the question, and repeat as necessary.

All Practice Questions should be administered. To make sure that the participant understands each question and the corresponding response options, the study team has created a Practice Question for each scale. Administering each Practice Question allows the interviewer to make sure that the participant understands the type of question being asked, and understands the response options. Faithfully administer ALL Practice Questions, even if you think the participant will understand how to response correctly.

Response options must be read exactly as they appear. All response options should be read at least once, before trying the practice question. They should also be re-read in their entirety if a participant is unclear about t the possible answers. See Section 7 for more about response options.

6.3 Voice Personality

"Any line can be said a thousand ways." This important acting advice is just as relevant for a interviewer. Your tone of voice, attentiveness, and receptive manner can make the difference between a participant completing the interview and one refusing to finish. Interviewers can put participants at ease by doing the following:

- reading the questions in a friendly, natural manner speaking at a moderate rate of speed, and sounding interested
- You should strive for appropriate eye contact, low-pitched voice, professional dress, professional relaxed posture. This will help you exude a sense of calmness

and authority. Elevating the voice tends to result in an irritating, sing-song delivery that seems to increase refusals. Lowering your head can help lower the pitch of your voice.

Don't let your voice trail off at the end of a sentence. Instead, speak clearly and deliberately. Complete all sentences.

6.4 Establishing Rapport

Rapport can be defined as a *harmonious relation*. To establish rapport, introduce yourself and emphasize that you are from the study and not from selling something. If the participant seems hesitant, you should 1) assure them their responses are completely anonymous, 2) take time to convince him or her of the importance of the study, and 3) project confidence and professionalism.

The full survey was designed to follow a particular pattern – a pattern that must not change. It was designed so that easy to answer questions are in the beginning, such as age, place of birth and marital status. These questions help to establish some rapport and put the participant at ease. The middle section asks more difficult questions, like stressful life events and emotional problems. By the time you reach this section, you will probably have established enough rapport with the participant that she feels okay – even if not totally comfortable – answering these questions. The final section asks about easier topics, such as social support and positive emotions, so that you can end the interview on a positive note.

Do not change the order of the questions unless you absolutely must. In that case, let your supervisor know about the change and why you made it.

6.5 Being Non-Judgmental

While you are "in character" as an interviewer, you are to be nonjudgmental, noncommittal, and objective. You should act neutral so that the participant feels comfortable answering the questions truthfully and completely. The questionnaire is designed to elicit a free flow of ideas and opinions. Participants need the freedom to say what they feel and think, without being influenced by anything the interviewers might say. Always avoid responses such as—

```
"Oh, really?"
"Wow!"
"Oh, boy."
"You've got me beat."
```

"Great answer."

Remember, nothing in your words or manner should imply criticism, surprise, approval, or disapproval of either the questions or the answers. Even positive reinforcements can seem judgmental, as you can see from this example:

Interviewer: "Have you smoked 100 cigarettes or more in your life?"

Participant: "No."

Interviewer: "Good for you!"

Similarly, avoid any response or even a sound that could be mistaken for a judgment call. For example:

Interviewer: "Do you now smoke cigarettes every day, some days, or not at all?"

Participant: "Every day."

Interviewer: "Hmmm..."

Responses such as these should not be used because they may influence the participant to answer questions in such a way as to meet the approval of the interviewer rather than in an honest way. If you feel you need to say something, use a nonjudgmental word like "okay." This can be used just to acknowledge you have received the answer and are ready to move on.

A really good strategy – and one that is recommended for CALMS-D - is to simply repeat the answer that the participant provides. This allows you to acknowledge that you heard and understood the participant's response, without any judgment. It also provides an opportunity for the respondent to change her answer, or to correct you if you misheard her.

For example:

Interviewer: "Do you now smoke cigarettes every day, some days, or not at all?"

Participant: "Every day."

Interviewer: "Every day."

Monitoring can also help identify if you are being judgmental with your reinforcements. If you have a chance to listen to other interviewers, note what reinforcements they use and decide if you feel they may imply approval or disapproval of a response.

6.6 Pacing an Interview

Pace, the mode or rate of progressing, can be a powerful tool. In general, you want an even pace throughout the interview. However, sometimes you will need to increase the pace while other times you'll want to decrease it. The overall pace has to match the needs of the participant. Some participants, like those who have difficulty hearing, need you to speak slowly. On the other hand, people in an active urban environment may become bored with a slower pace, and may want you to speak a little faster. You can usually get the sense of pace for the survey with the participant by the way they speak. If they seem impatient, try to speed it up.

Based on practice surveys that we conducted, we anticipate that the average interview should take no more than 2 hours.

A. When to Go Quickly:

There are some places in the survey where you will want to adjust your pace for maximum results. One effective interviewer technique involves reading the introduction section a little quicker. Never speak so fast that you may be misunderstood.

B. When to Go Slowly:

A mistake made by some interviewers is to speed up at the end of an interview because they are getting tired and no longer have the patience they had in the beginning. Participants can feel this and often interpret it as a lack of caring. They can feel your restlessness and will often just quit or simply go through the motions.

There are other times where you may ask the participant a question that needs some thought to give an answer. In this case you may need to slow it down to get a good response. Sometimes you simply need to wait for a response from the participant.

C. When to Take a Break:

The survey was designed with planned breaks. As the interviewer, you should be alert to signs that the respondent needs an additional break. Things to look for include the following respondent behaviors:

- Not paying attention
- Easily distracted
- Answering the phone or texting
- Appears tired or bored
- Agitated, frustrated, fidgeting, or angry
- Crying

6.7 Probing Techniques

Probing—using words and techniques to get more accurate information—is one of the most challenging and important aspects of interviewing. Probes are used in two situations:

- 1. A participant's answer is irrelevant.
- 2. A participant's answer is unclear.

Here are some examples of responses requiring probing:

Interviewer: "In general, do you eat meals and snacks on time?"

Irrelevant answer: "My husband is on a diet."

Unclear answer: "People are always telling me I need to eat better."

Probing Techniques: Use only neutral probes that provide the participant with the full range of response options

The most important thing to keep in mind when you are probing for answers is to use only neutral probes that don't suggest answers. Here are some examples of other neutral probes:

```
"I just need your opinion."
"If you had to choose, which would you pick?"
"So would you say...[list all response options]"
```

Never "lead" a participant to a particular answer. This is difficult because it would seem natural to do so in ordinary conversation. Consider this "leading" probe:

Interviewer: "In the last 12 months, how many times did you go to a doctor's office or clinic to get care for yourself? Would you say:"

- A. None
- B. Once
- C. Twice
- D. 3 times
- E. 4 times
- F. 5 to 9 times
- G. 10 times or more

Participant: "Oh, gosh, I don't go very often... in last year, just a few times."

Interviewer: "So, would you say twice, or three times?"

Participant: (Thinking to herself, "that must mean that 'a few' means only two or three times a year. I know I've gone more than four times, but I said I didn't go that often, and I don't want to sound stupid.") "I guess I'd say three times."

Rather than suggesting an actual number or numbers, the proper probe would be a neutral probe like the ones suggested above: "What's your best guess?" or "Which would you pick?"

Other leading probes to avoid are "Do you mean _____?" or "Then you feel ____?" Some people tend to say "yes" to any suggestion either because it's easy or because they think it's the "right" answer.

If you need to repeat any of the response options to the participant, make sure you repeat ALL the response options.

Interviewer: "In the last 2 weeks, how often did you cry? Would you say:"

- A. Never
- B. Once
- C. Twice
- D. 3 or more times

Participant: "I usually cry a lot. What were the possible answers?"

Interviewer: (thinking to herself "this person cries a lot, so I don't need to repeat the 'never' option) "Once, twice, or three or more times."

Participant: (thinking to herself that she did not cry this week, so listening for the lowest possible answer) "I guess I'd say once."

Instead, the interviewer should repeat ALL the possible answers.

Interviewer: "In the last 2 weeks, how often did you cry? Would you say:"

A. Never

B. Once

C. Twice

D. 3 or more times

Participant: "I usually cry a lot. What were the possible answers?"

Interviewer: "Never, once, twice, or three or more times."

Participant: "I've been feeling good lately, Never in the last 2 weeks."

Here are a few things that will help you master the art of probing:

A. Do not try to explain the question or define any terms. If a participant does not seem to understand a question, repeat it slowly and clearly. Give the participant time to think about the question. If different participants ask you to define the same term over and over, bring this to the attention of your supervisor.

B. Remind the participant that the questions and the response options are available in both Spanish and English. Ideally, the entire interview will be conducted in one language. However, if a respondent is struggling to understand a word or concept, offering the translated equivalent – which you can find directly on the i-Tablet and the pictographs – is acceptable. Try to avoid jumping back and forth between Spanish and English a lot.

C. Don't leave a question until you have an adequate answer, unless you realize the participant is getting very annoyed. Sometimes a participant will give a general answer instead of the specific one you need. Probing can help the participant give you an adequate answer, as in the following example:

Interviewer: "How much do you weigh without shoes?"

Participant: "I'm not sure."

Interviewer: "What's your best guess?"

Participant: "Somewhere between 180 and 190 pounds."

Interviewer: "What number between 180 and 190 would you like me to record as your weight?"

Participant: "I guess the last time I checked it was about 187."

- **D. Don't accept "I don't know" as an answer without probing at least once unless "I don't know" is one of the response options.** When you ask a question, people often say "I don't know" just to give themselves time to formulate their ideas. A good probe for this situation would be to say, "Well, what do you think?" or "What is your opinion?" If the question deals with facts, an approximation is better than no answer at all, so you might say, "What's your best guess?" or "Approximately...?" to convey the notion that 100% accuracy is not required.
- **E. Watch for irrelevant answers.** Some people talk a lot, but not about the topic at hand. Irrelevant answers can be interesting, but interviewers must make sure the participant deals with the question that was asked. Consider this example:

Interviewer: "How often do you eat green salad?"

Participant: "A lot. I used to hate salads, but I've learned to like them."

Interviewer: "Well, since you've learned to like them, how often do you eat green salad?"

F. Watch for vague answers. Some participants find it hard to verbalize and may have difficulty expressing their ideas. You can help them say what they mean with probes such as these:

"Tell me what you have in mind."
"Could you be a little more specific?"
"Can you tell me what you mean by that?"

- **G. Watch for ambiguous answers.** Certain terms may mean different things to different people. Always ask yourself whether you're sure what a participant meant by an answer. You could ask, "What do you have in mind when you say _____?" or "How are you defining the term ____?" In this situation, refer them back to the response options on the pictograph.
- **H. Give the participant the time they need.** There is great value in silence during an interview. You may find that by keeping quiet and letting the participant ramble, he or she will be able to think about the question longer and give a more accurate answer. That

period of silence may also allow the participant to expand upon or clarify a previously inadequate answer. Here is an example:

Interviewer: "About how long has it been since you last smoked cigarettes daily?"

Participant: "Well, let's see...it was my New Year's resolution, but I started smoking again in the spring...[Interviewer is silent] Then I decided to stop again on my son's birthday [silence continues while participant is searching his memory] I never really did start smoking on a daily basis again after that, and I haven't smoked at all in over a month."

Interviewer: "Let me repeat the question now that you've had time to think about it. About how long has it been since you last smoked cigarettes daily?"

Participant: "My son's birthday is in July, so it's been four months."

I. Know when to stop probing. You should stop probing when—

- You have obtained the necessary information
- You have encouraged the participant to clarify the meaning of his/her own words so that we know exactly what he/she had in mind
- The participant becomes irritated or annoyed
- The participant has nothing more to say

6.8 Summary: Basic Interviewing Rules

Here are the top interviewing rules:

- Be sure that you speak to the correct participant.
- Read all questions verbatim.
- Never explain, interpret, or add to a question.
- Always read all the available answers.
- Read all questions in the exact order in which they appear.
- Do not skip any questions even if you feel you know the answer.
- Never hurry an interview unless the participant is under time pressure—match your pace to the needs of the participant.
- Keep an even pace.
- Remain objective—do not indicate surprise, pleasure, or disapproval at any participant's answers.
- Be prepared to probe when necessary.
- Be courteous and polite, even if the participant is rude to you.
- Put a "smile" in your voice.

6.9 Difficult Situations during Face to Face Interviews

Although some of the interviews can be easy and they do not present any complication, the usual is that you encounter some problem or a complex situation during an interview. Usually, these problems are of minor character and they are easy to solve. Below, we will discuss some examples of these situations:

A. Questions that are misinterpreted

Interviewing a person is not just reading the questions and recording the participants' answers. There are occasions in which the question does not produce an immediate response; she answers don't know, gives you vague response, the answer does not make sense; or simply the participant says she already answered that question and refuses to answer it again.

Many of these difficult situations are about the question and its relationship with the private life of the person. If you perceive this is the case, the first thing to do is re-assure the participant about the confidentiality of the information and quickly establish an environment of trust.

It is very easy for the participant to miss one or two words which are crucial to the meaning of the question. Sometimes, a participant may feel embarrassed to admit that she did not understand the question. If you suspect that one of the questions was misinterpreted, do not tell the participant that he/she did not understand the question. Instead, use any of the following phrases or repeat the question in a clear manner and a slower pace.

- "I would like to read the question and the response I recorded just to make sure that I have everything and that I did not miss what you wanted to say."
- "I think that I read the question wrong, I would like to ask it again."

B. Answers that are NOT part of the response options

If the participant mentions something that is relevant to the question, you should record this. If the answer is different to the response options available and you have tried without any success for the participant to select from one of the response options available, write this as a comment in your hard copy of the interview. If the question has the option of other, please record the participants answer there. Make sure that you enter the information exactly how the participant is telling you.

If you find that different participants all have trouble understanding a given question or response option, tell your supervisor. The research team may need to find a better way to ask the question. However, do not alter how you ask the question yourself – this will lead to bad data.

C. Control over the interview

In some situations, it can happen that the participant is providing you with irrelevant responses or too much detail or gets diverted and start talking about past experiences or personal problems. This usually happens when interviewing older adults, because they usually have time to talk and may not have anyone else to talk to. If this happens to you, avoid interrupting the participant abruptly, try to briefly listen to what the participant is saying but find your way to the questions in the interview. The interviewer should be the one controlling the time and the course of the interview, otherwise there is the risk that the interview lasts longer than the expected time, that the participant gets tired and is unable to finish the interview, or that the length of time interferes with another scheduled interview.

Also, the stress management treatment that CALMS-D is testing includes group support. If participants receive support during their assessments – in addition to receiving support during the treatment – the results may be watered down. In this situation, statistical tests may indicate that the intervention is not effective even if it is. Remember, your job as an interviewer is to collect data in a friendly manner, not to provide emotional support to participants.

D. Participant with a difficult character

If the participant is upset, uses inappropriate vocabulary- be kind! Do not end the interview. Keep it calm. Imagine that the person might have had a bad day.

It is unlikely that you encounter this situation, but if it happens, be patient. Some responses that you can use depending in the situation are:

- "Yes, I see."
- "Yes, I understand that your opinion is strong about this, so we really need this information from you."

If this fails, wait for an opportunity and then say:

• "I am sorry but I have problems with the computer. I can visit you another time to finish the interview."

• "I understand how you feel and that you do not want to finish the interview. Thank you very much for your time."

E. Participant refuses to finish the interview

It's important to put attention to the participant from the start, middle or almost ending the interview. Stimulate the participant to finish the interview once it is initiated. If you are only half way in the interview and the participant tries to stop, you can say the following phrases:

- "I know this is long. You're doing great. Hang in there."
- "We can take a break right now."
- "If we don't finish the interview today, we would have to come back to finish it another day."
- "It's important to complete the full interview. It is the only way we can use the results. If we do not finish the interview, we can't use the results and we want to make sure that we have all your comments and worries and consider these in the study."
- "If we can't complete the interview now, with pleasure I can come back at a different date and time to finish it. Whenever is more convenient for you."

QUIZ YOURSELF ON SECTION 6

There are 7 questions for Section 6.

1. The participant interrupts and asks how long the survey will take. The interviewer explains it will take approximately 2 hours. The interviewer should then—

- A. Wait for a response by the participant
- B. Go on to say how she really needs to do the interview to make her quota.
- C. Take control of the interview and go on with the next survey question after her explanation.
- D. None of the above

2. When speaking with participants you should be—

- A. Slightly intimidating to try and get them to do the survey.
- B. A little assertive—without being rude.
- C. So polite that even at the hint of not wanting to do the survey you stop.
- D. None of the above

3. A participant says she is about to cook breakfast and does not have time to do the survey now. What is the best approach to use?

- A. Do the interview another time.
- B. Ask her if breakfast can wait.
- C. Ask her if she can at least start the interview now, and finish it later.
- D. Find out what's for breakfast.

4. When reading a question you should—

- A. Put the question in words the participant will understand.
- B. Use the exact wording provided for each question.
- C. Try different ways of asking the question to see which way will be most effective.
- D. Use a fake European accent to sound more distinguished.

5. Some mistakes interviewers sometimes make include—

- A. Letting their voice trail off at the end of a sentence.
- B. Speaking too fast.
- C. Sounding interested.

- D. Using a high pitched voice.
- E. A, B, and D.

6. You must be noncommittal in your comments to a participant. Which of the following is noncommittal?

- A. Wow!
- B. Great answer!
- C. OK.
- D. You've got me beat.

7. Probing is used when—

- A. A participant's answer is irrelevant
- B. A participant's answer is incomplete
- C. A participant's answer is unclear
- D. A, B, and C

SECTION 7 USING PICTOGRAPHS

7.1 Overview

This section offers tips and strategies for using pictographs during the interview.

After completing Section 7, you will be able to do the following:

- Explain why pictographs are important in this study
- Describe what pictographs are
- Follow strategies for the successful use of pictographs

7.2 What is a pictograph?

Pictographs are simple pictures that represent objects or ideas. Pictographs have been used throughout history across many civilizations. For example, you may be familiar with hieroglyphics of ancient Egypt.

Pictographs remain in common use today for signs, instructions, or diagrams. Pictographs can often transcend languages in that they can communicate to speakers of different languages and varying reading ability equally effectively. Because they are easy to understand by most people, they are widely used to indicate public toilets, no smoking allowed, and directional signs to important places like hospitals and airports.

7.3 Why is CALMS-D using pictographs?

There are 3 main reasons that CALMS-D is using pictographs, each of which will be discussed on the following pages:

- To assess participants from different Latino cultures
- To assess participants who speak/read/write different languages
- To assess participants with varying literacy and numeracy levels

CALM S-D is studying Latinos from a variety of backgrounds – Puerto Rico, Mexico, Central and South America. This mix of backgrounds requires that the questions in the survey be understandable to people from each culture. Pictographs will help to convey the researchers' intended meaning to participants from various cultures.

While the focus of the study is on Latinos, any given participant will vary in her degree of comfort with Spanish, English, or an indigenous language. Pictographs will help

convey meaning regardless of the participant's language.

Also, as discussed in Section 1, we expect that many participants will have a low level of education, will have low literacy (not be able to read and write well), and low numeracy (not be able to do math well). Therefore, the research team has developed pictographs that will allow virtually all participants to answer the interview questions, regardless of their education, and their reading, writing, and math skills.

This does not imply that the study team believes that the participants are 'dumb'. Rather, it acknowledges that the sample will be composed of many different people from many different backgrounds, some of whom have not experienced the benefits of a formal education.

7.4 Which respondents should shown the pictographs?

Every respondent should be shown the pictographs. Because every respondent should be counted equally, each respondent should have the opportunity to fully understand each question and each response option.

Even if a given participant has a high level of education, each pictograph should be presented to her. Even if a given participant appears to understand the questions and response options well, each pictograph should be presented to her.

You may worry that using the pictographs will insult a participant, because it could imply that you think they do not understand the survey. Your presentation of the pictographs will help determine participant responses. If you use them naturally, and are at ease with them yourself, the participants will also use them naturally and will be at ease with them. For this reason, it is important that you familiarize yourself with each one, and practice using it.

7.5 How do I use the pictographs?

Before your first interview

Review each pictograph, and make sure you understand which scale it will be used with. Make sure you understand what the response options mean. Practice using each pictograph. Practice the following:

- Holding the i-Tablet and manipulating the pictograph at the same time
- Coordinating each scale with its associated pictograph

- Pointing to the pictograph (upside down and sideways!)
- Stating succinctly what the pictograph represents
- Reciting the response options
- Flipping from one pictograph to the next

Before each interview

Make sure that you have with you all the pictographs you will need. If they are getting worn or discolored, report this to your supervisor, and more will be made for you.

During the interview

Every household is different, so when you are working in the field, you may need to be creative or improvise your technique. To the best of your ability given the situation, use the pictographs the same way each interview.

Try to sit across from the participant (face to face) or at a right angle to her (for example, at the corner of a table). If you sit right next to her (for example, thigh to thigh on a couch), the participant will be able to see your i-Tablet. This will make it difficult for you to use the pictographs. It will also make it impossible for you to see her face directly, and monitor her understanding, fatigue, etc. Finally, it will also distract the participant from the interview questions, and may also lead to unnecessary discussions about i-Phones, i-Pods, etc.

Some of the pictographs look the same. For example, several use clocks, and several use checkmarks. However, if you look closely you will notice that they are slightly different in important ways. Make sure that the name of the pictograph (printed on the top of the laminated pictograph) matches the name of the scale that you are administering.

What you should say to the participant for each pictograph is already entered on the i-Tablet. Following this script will ensure that each interviewer explains each pictograph the same way, and that there is not 'drift' in how you talk about each pictograph.

If the participant offers a response to the first question before you even get a chance to read all the response options, you might say:

[&]quot;Thank you. Just to be clear, your choices for this question are..."

[&]quot;Let me make sure you know all the possible answers."

[&]quot;I'm glad you're eager to work together. Let me just offer you all your choices before we move on."

As you are saying the script for a given pictograph, point to the respective picture on the pictograph. Make sure that the participant is following along with you. If you need to, refer back to the pictograph once or more during each scale. You will know you need to do this if the participant:

- States that she does not understand the response options
- Has difficulty choosing an answer
- Looks bored, tired, or agitated
- Responds impulsively
- Gives the same response to several questions in a row

Some participants may not be able to read well, and may be embarrassed by this. Emphasize that the pictographs are used with every participant as a standard part of the interview.

Some participants may have vision problems. Be sure that if a participant uses glasses, that they have them for the interview. Also, have two pairs of 'readers' for participants to borrow during the interview – one weak and one strong pair.

Other participants may be embarrassed and try to cover up the fact that they cannot read well by claiming that they have vision problems. If a participant refuses to go get their glasses, or refuses the glasses you offer, proceed without making a big deal of it.

If the participant wants to hold the pictograph, allow them to do so.

Any time that you refer back to the pictograph and response options, make sure that you repeat ALL the response options.

After the interview

If you find that different participants all have trouble understanding a given pictograph or response option, tell your supervisor. The research team may need to find a better pictograph. However, do not alter how you ask the question yourself – this will lead to unusable data which will make all the time you spent on the interviews wasted.

QUIZ YOURSELF ON SECTION 7

There are 4 questions for Section 7.

- 1. Why is CALMS-D using pictographs?
 - a) To assess people of different cultures
 - b) To assess people of different languages
 - c) To assess people with varying degrees of reading, writing and math skills
 - d) All of the above
- 2. True or False? When using the pictographs, you should read the response options that seem most likely for the participant.
 - a) True
 - b) False
- 3. True or False? If possible, the interviewer should sit right alongside the participant on the couch, so that they can both see the pictograph and i-Tablet easily.
 - a) True
 - b) False
- 4. When using pictographs, the interviewer should:
 - a) State the response options clearly at the outset and then not repeat them again
 - b) Never let the participant hold the pictograph
 - c) Use the right pictograph for the scale that is being administered
 - d) Use the pictographs only with those participants who have a 6th grade education or less

SECTION 8 INTRODUCTION TO THE DAILY DIARY SUBSTUDY

8.1 Overview

The first 7 sections of the manual described the interview process for the main CALMS-D study. This section offers general information about the CALMS-D daily diary substudy.

After completing Section 8, you will be able to do the following:

- Describe the goals of the daily diary substudy
- List the main types of data that will be collected in the substudy
- State the different aspects of the substudy that the interviewer will need to train the participant in.

8.2 Daily Diary Substudy Rationale

Researchers believe that one of the reasons that stress is bad for diabetes is because everyday stressors can cause glucose to go up. Stress can cause high glucose directly, by causing the release of stress hormones that affect the amount of glucose in the blood. Stress can also cause high glucose indirectly, by interfering with health behaviors. For example. People who are under stress may overeat or choose unhealthy food options, or they may skip their medication.

The CALMS-D researchers want to test whether a stress management intervention improves the direct, biological, and indirect, behavioral, responses to stress on glucose.

The very best way to study how stress affects glucose is to ask a participant what stressors they are experiencing and what behaviors they are doing while measuring their glucose. Usually, this 'real time' data can only be collected in a laboratory. But, what happens in a research laboratory does not always 'track' what happens in the real world.

Therefore, the daily diary substudy will collect data on stressors, health behaviors, and glucose in 'real time' directly from participants as they go through their day-to-day life in the 'real world'.

There are several technologies that will allow us to do this. One is an Interactive Voice Response system, or IVR. The other is Continuous Glucose Monitoring, or CGM. Both will be discussed in the next pages.

8.3 Interactive Voice Response System (IVR)

Even if you don't know it, you've probably used an IVR. When you call your credit card company or your bank or even your doctor, you may go through a 'phone tree'. A phone tree is a type of IVR. You answer one prerecorded question, which you answer by entering numbers on the keypad of your phone, leads the system to ask you another question, until the system you are calling has all the information it needs.

The CALMS-D IVR is similar. Participants are asked to call into a confidential system that asks them prerecorded questions which they answer by entering numbers on the keypad of their phone. That answer leads the system to ask another question and then another until all the data for that call are collected.

Participants are asked to call the toll free number twice per day, during two timewindows – 11:30am to 2pm, and 6-9pm. If they do not call the system, the system will call them twice during the timewindow to remind them. If the participant is busy when the phone rings for the reminder call, they can ignore it (like if they are driving), or they can delay it by pressing a certain number. Once in the system, the participant can also press certain buttons to skip a question, repeat a question, go back to an earlier question, etc.

Participants are asked to do this twice per day for 7 days. Each phone call takes about 5 minutes. However, in the beginning, as the participant is just learning how to use the system, it make take a little longer. Then as they learn the calls get quicker.

Although it is important for the study, we understand that making these phone calls is a burden and an annoyance for participants. So, we use several strategies to increase compliance with the protocol. One way we encourage participants to make the phone calls is to offer incentives for participants. Participants are paid \$5 for each phone call completed, and are paid an additional \$5 for each day when BOTH calls are completed. Participants who complete every single call over the 7 days are entered into a raffle for a prize worth approximately \$100. Also, if participants' telephones get disconnected and they are in need of a telephone to call, we will provide them with a pre-paid cell phone, programmed to call only the IVR.

However, the absolutely most important way that participants are encouraged to make the phone calls is from thorough training in how to use the IVR and a lot of motivation from the interviewer – you!

Details of how to train participants how to use the IVR are outlined in the IVR protocol.

8.4 Continuous Glucose Monitoring (CGM)

If you have diabetes, or know anyone who has diabetes, then you are probably familiar with a glucose meter, or glucometer. It is a machine that uses a small amount of blood from a finger prick to give a 'snapshot' of current blood sugar levels. The other main way that healthcare providers have measured glucose is through A1c, which is the average blood glucose over the past 6-10 weeks.

Both finger pricks and A1c are limited because they do not show moment by moment changes in glucose.

In the past 10 years or so, scientists have developed a *continuous* glucose monitor. It uses a sensor, which is injected into the fatty tissue just under the skin, to detect glucose levels every 5 minutes. The sensor is inserted into the abdomen with a needle, and then the needle is removed, leaving only a tiny flexible tube under the skin. The results are beamed to a glucose tracker, which is worn on a waistband like a pager. The tracker records and stores the glucose data. After several days of wearing the sensor, it is removed and disconnected from the tracker. The tracker can then be downloaded to a computer. A computer program can give a readout of that person's glucose level every 5 minutes over several days! That is like having someone prick their finger and check their blood sugar and write down the results every 5 minutes for 7 days – even overnight!

Obviously, we can get a lot more glucose data from a CGM than from regular finger prick blood testing. The other benefit is that by collecting CGM along with the self-report IVR data, we can begin to link stressors, health behaviors, and glucose. Then we can use linkages to determine whether the stress management treatment improves glucose reactivity to stress.

Details of how to insert the CGM sensor, calibrate the tracker, and train participants how to use CGM are outlined in the CGM protocol.

8.5 How to Train and Motivate Participants to Follow the Daily Diary Substudy Protocol

There are several things you can do to encourage participants to use the IVR faithfully. Make sure the participant is eligible for the substudy! To be eligible, the participant must:

- Be willing and available to make a 5-minute phone call twice a day for 7 straight days
- Be willing to wear a continuous glucose monitor
- Have access to a phone during the calling windows

- Call in during a 'typical week' if the participant is ill, traveling, or on vacation during the substudy, they cannot participate
- Explain the importance of the substudy it may provide important information that can be shared with their physician at the end of the study. It will also be used to improve the health of other Latinos with diabetes.
- Describe the monetary incentives tied to each phone call \$5 per phone call plus bonuses for each 'complete day' and a 'complete week'
- Explain that the calls are only about 5 minutes each, and get quicker over time
- Tell the participant that the phone survey is the same number of questions no matter what their response is to any given question saying 'no' to a question does not allow them to 'opt out' of later questions
- Thoroughly train the participant in how to use the IVR. This includes making practice phone calls with them until they understand the protocol, or you determine that they will be unable to do so. It also includes training the participant what to do and who to call if there is a problem with the IVR.
- Thoroughly train the participant in how to wear and use the CGM. This includes inserting the sensor, calibrating the tracker, and teaching the participant how to calibrate the tracker themselves. It also includes training the participant what to do and who to call if there is a problem with the CGM.
- Review the risks and benefits of participating. The most common concerns that participants have are that 1) the CGM will hurt, and 2) the phone calls are a nuisance. If inserted properly, the CGM sensor should not hurt, or should pinch only for a minute or two. There is no way to make the phone calls less of a nuisance, but participants should be reminded that they are quick and that there is a financial incentive for completing them.

QUIZ YOURSELF ON SECTION 8

There are 4 questions for section 8.

1. The daily diary substudy is important because:

- a) It will help show whether the stress management intervention improves glucose reactivity to stress
- b) It will help show whether CGM systems are accurate
- c) It will help show whether the IVR system works for people with diabetes
- d) The daily diary substudy is less important than the larger CALMS-D study

2. True or False. IVR systems are uncommon and most people have never used one.

- a) True
- b) False

3. Continuous Glucose Monitors:

- a) Produce less blood sugar data than a finger prick blood test or an A1c test
- b) Show moment to moment changes in glucose levels
- c) Do not require any calibration
- d) Are implanted in the eardrum

4. The best ways to improve participant compliance with the daily diary substudy include:

- a) Selecting eligible participants for the substudy
- b) Explaining the importance of the substudy for the participant and for the community
- c) Describing the financial incentives for participation
- d) Thoroughly training participants in the procedures
- e) All of the above

Thank you for completing the Interviewer Training Module

SECTION 9 PROTOCOLS FOR CALMS-D DATA COLLECTION