

INTRODUCTION

Thank you for your interest in taking our survey!

Before we begin, we'd like to answer some questions you might have about the survey.

What's the purpose of the survey? We want to learn people's thoughts on the use of mobile technologies in clinical research (clinical research focuses on ways to improve people's health). We will share what we learn with researchers who want to use mobile technologies in clinical research so they can make the research more acceptable to patients.

What do you mean by "mobile technologies?" Mobile technologies are:

- 1) Smartphones and their applications (otherwise known as "apps")
- 2) Devices people wear to monitor their physical activity (such as the number of steps they take each day) or body chemistry (such as the amount of blood sugar in their bodies)

How long will the survey take? About 1 hour.

Who can take the survey? People can take the survey if they are:

- Aged 18 years old or older, AND
- Have been diagnosed by a doctor with Parkinson's disease, arthritis, diabetes, or heart disease

Please DO NOT take this survey if:

- ***You are under the age of 18***
- ***You have not been diagnosed with one of these conditions***

What are the risks and benefits? We do not expect any risks or benefits from taking the survey. While we will do everything we can to keep your information confidential, there is a potential risk of loss of confidentiality of what you tell us. We will make every effort to prevent this. Also, we believe that it would be very difficult for you to be identified by others because we will 1) not collect your name or your computer's IP address (this is an identifier assigned to your computer), and 2) only ask very limited personal information about you.

What will be done with my data? All data will be stored on secure servers at Duke University. Your answers will not be linked to your name (which we will not collect) or other personal information that can easily identify you (such as your computer's IP address, which we also do not collect). We will group everyone's answers together when we present the data from the survey.

We will also make your individual answers available on our website (www.ctti-clinicaltrials.org) for others to use if they wish. We will not include information that can identify you.

Do I have to take the survey? No. Taking this survey is voluntary. You do not have to take it if you do not want to. If you decide to take the survey, you can choose not to respond to specific questions or to stop the survey at any time. If you stop, any answers you give up to that point will be used in the research.

Once you start this survey, you are agreeing for your data to be used for this research.

Do I get anything from taking the survey? Once you finish the survey, you can enter your name into a raffle to win 1) one of five \$50 visa gift cards, 2) one of three \$150.00 visa gift cards or fitness trackers, and 3) one of three \$250.00 visa gift card or smart watches. You can only enter your name into the raffle after you have completed the entire survey. If you choose to enter the raffle, your name and contact information will NOT be linked to your survey answers. All raffle winners must provide their Social Security number to receive the prize. You are not required to share your Social Security number with us to take part in the survey or to enter the raffle. But you cannot receive a prize if you are

selected without it. A representative of the study will contact you separately if you are selected to receive one of the prizes and you can provide your Social Security number at that time.

Who do I contact if I want to know more about the survey or have concerns? If you have questions about this study, please contact the study's Principal Investigator, Dr. Amy Corneli at amy.corneli@duke.edu. You may also contact the Research Assistant, [REDACTED] ([REDACTED]), or the Duke University Health System Institutional Review Board (IRB) Office at 919-668-5111, with any questions you may have.

Let's get started -- we look forward to learning from you!

VERIFY ELIGIBILITY

Var.	No.	Question	Response (variable)	
Q2	1.	<p>During the survey, you will be presented with two versions of a hypothetical (pretend) clinical trial on Parkinson’s disease, heart disease, diabetes, or arthritis.</p> <p><i>A clinical trial is a type of research study to find out if a drug works and is safe.</i></p> <p>One version will describe a “traditional clinical trial” scenario, where participants meet with trial staff, such as doctors and nurses, in-person at a clinic.</p> <p>The other version will describe a mobile trial scenario, where participants will be asked to use a mobile technology to collect trial-related information.</p> <p>These scenarios will be presented in a series of slides that will be read aloud to you. Once you hear each scenario, you will then be asked questions about what you think of that kind of trial.</p> <p>To make sure the trial applies to you, we need to know which condition you have been diagnosed with. <i>If you have been diagnosed with more than one of these conditions, please select one that you’d prefer to hear about in the pretend trial.</i></p>	<p>a. Heart disease (of any kind) (1) b. Parkinson’s disease (2) c. Diabetes (of any type) (3) d. Arthritis (of any type) (4) e. None of the above (5) f. I prefer not to respond (6)</p>	<p>If “e” or “f” skip to END</p>

Thank you.

Now, let’s continue!

FAMILIARITY AND EXPERIENCE WITH MOBILE TECHNOLOGIES

Var.	No.	Question	Response (variable)	Skip
Q6		<p>Before you hear about the different trial scenarios, we would like to know more about your familiarity and experience with using mobile technology.</p> <p>There are no right or wrong answers.</p> <p>Select only one response for each question.</p> <p>How often do you:</p>	<p>a. Never (1)</p> <p>b. Once a month or less (2)</p> <p>c. 2 to 3 times a month (3)</p> <p>d. Every week (4)</p> <p>e. Every day (5)</p> <p>f. I prefer not to respond (6)</p>	
Q6_4	2.	Use a smartphone?		
Q6_8	3.	Use a tablet, such as an iPad?		
Q6_9	4.	Use a mobile app on your phone or tablet to monitor your health in some way? For example, this could be to monitor your sleep, fitness, or nutrition.		
Q7	5.	In general, how comfortable or uncomfortable are you with <u>using apps</u> without assistance on your smartphone and/or tablet?	<p>a. Very uncomfortable (1)</p> <p>b. Uncomfortable (2)</p> <p>c. Comfortable (3)</p> <p>d. Very comfortable (4)</p> <p>e. I prefer not to respond (5)</p>	Skip if Q2 and Q3 = "a" or "f"
Q8	6.	<p>In the past year, how often did you use a wearable fitness monitor such as a Fitbit, Jawbone, Misfit, Garmin, or Apple watch?</p> <p><i>A wearable fitness monitor is a device that can automatically track the user's movement-related activity, such as distance walked or run, heart rate and in some cases sleep quality.</i></p>	<p>a. Never (1)</p> <p>b. Some of the year (2)</p> <p>c. Most of the year (3)</p> <p>d. All year long (4)</p> <p>e. I do not recall (5)</p> <p>f. I prefer not to respond (6)</p>	If "a," "e," or "f," skip to Q8
Q9	7.	<p>What did you use your wearable fitness monitor for?</p> <p><i>Select all that apply</i></p>	<p>a. To track my physical activity (1)</p> <p>b. To monitor my sleep (2)</p> <p>c. To monitor my heart rate (3)</p> <p>d. Other reason (4)</p> <p>e. No reason (5)</p> <p>f. I prefer not to respond (6)</p>	
Q10	8.	<p>In the past year, how often did you use some other form of wearable health monitor, such as a continuous glucose monitor, ambulatory blood pressure monitor, or electrocardiograph?</p> <p><i>A wearable health monitor is a device that can automatically track the user's health or wellbeing, often without the</i></p>	<p>a. Never (1)</p> <p>b. Some of the year (2)</p> <p>c. Most of the year (3)</p> <p>d. All year long (4)</p> <p>e. I do not recall (5)</p> <p>f. I prefer not to respond (6)</p>	If "a," "e" or "f", skip to Q11

		<i>user putting in information into the device themselves.</i>		
Q11	9.	What kind of wearable health monitor was it?	Name of health monitor: (1) _____ a. I do not recall (2) b. I prefer not to respond (3)	
Q12	10.	What did the health monitor do?	Use of health monitor: (1) _____ a. I do not recall (2) b. I prefer not to respond (3)	
Q13	11.	In general, how comfortable or uncomfortable are you with using wearable health monitors without assistance?	a. Very uncomfortable (1) b. Uncomfortable (2) c. Comfortable (3) d. Very comfortable (4) e. I prefer not to respond (5)	Skip if Q6 and Q8 = "a", "e" or "f"
Q14	12.	Have you ever been in a clinical trial to test a drug? <i>A clinical trial is a type of research study to find out if a drug works and is safe.</i>	a. Yes (1) b. No (2) c. I do not recall (3) d. I prefer not to respond (4)	If b-d, skip to Q15
Q15	13.	Did you use any kind of wearable health monitor as part of that clinical trial?	a. Yes (1) b. No (2) c. I do not recall (3) d. I prefer not to respond (4)	If b-d, skip to Q15
Q16	14.	What kind of wearable health monitor was it?	Name of wearable monitor: (1) _____ a. I do not recall (2) b. I prefer not to respond (3)	

DEMOGRAPHICS

Many people of all ages and backgrounds may answer the survey. We will now ask questions to get a better sense of who you are. When we report the survey's findings, we will combine your answers with answers from the other people who took the survey. We will not report individual answers.

Var.	No.	Question	Response (variable)	Skip
Q18	15.	What is your age today?	Age: (1) _____ a. I prefer not to respond (2)	
Q19	16.	What is your gender?	a. Male (1) b. Female (2) c. Transgender (3) d. Other (specify): (4) _____ e. I prefer not to respond (5)	
Q20	17.	What is your race? <i>Select all that apply</i>	a. American Indian or Alaska Native (1) b. Asian (2) c. Black or African American (3) d. Native Hawaiian or Other Pacific Islander (4) e. White (5) f. Other (specify): (6) _____ g. I prefer not to respond (7)	
Q21	18.	What is your ethnicity?	a. Hispanic or Latino (1) b. Not Hispanic or Latino (2) c. I prefer not to respond (3)	
Q22	19.	What is the highest degree or level of school you have completed?	a. 8 th grade or equivalent or less (1) b. Some high school (9 th to 12 th grade) (2) c. High school diploma or equivalent (3) d. Some college credit (4) e. Associate's degree (for example, AA, AS) (5) f. Bachelor's degree (for example, BA, BS) (6) g. Master's degree (for example, MBA, MA) (7) h. Doctorate or professional degree (for example, MD, PhD) (8) i. I prefer not to respond (9)	

Var.	No.	Question	Response (variable)	Skip
Q23	20.	How would you describe your employment status?	<ul style="list-style-type: none"> a. Employed full-time (1) b. Employed part-time (2) c. Out of work and looking for work (3) d. Out of work but not currently looking for work (4) e. A homemaker (5) f. A student (6) g. Military (7) h. Retired (8) i. Unable to work (9) j. I prefer not to respond (10) 	
Q24	21.	What is your marital status?	<ul style="list-style-type: none"> a. Single, never married (1) b. Married or domestic partnership (2) c. Widowed (3) d. Divorced (4) e. Separated (5) f. I prefer not to respond (6) 	
Q25	22.	How long ago were you told by a medical doctor that you have <i>[piped Q1 response]</i> ?	<ul style="list-style-type: none"> a. Less than one year ago (1) b. More than one year ago but less than 5 years ago (2) c. 5 or more years ago (3) d. I prefer not to respond (4) 	
Q26	23.	About how often do you visit a doctor or another medical provider for care related to <i>[piped Q1 response]</i> ?	<ul style="list-style-type: none"> a. Less than once a year (1) b. Once a year (2) c. 2 to 3 times a year (3) d. 4 to 6 times a year (4) e. 7 to 12 times a year (5) f. More than 12 times a year (6) 	
Q27	24.	How much does living with <i>[piped Q1 response]</i> currently impact how you feel day to day?	<ul style="list-style-type: none"> a. Not at all (1) b. Very little (2) c. Somewhat (3) d. A lot (4) e. I prefer not to respond (5) 	
Q28	25.	How do you rate your overall health?	<ul style="list-style-type: none"> a. Very poor (1) b. Poor (2) c. Fair (3) d. Good (4) e. Very good (5) f. I prefer not to respond (6) 	

WILLINGNESS TO JOIN CLINICAL TRIALS USING MOBILE TECHNOLOGY

Slide 1	<p>You will now hear information about a hypothetical (pretend) clinical trial. Then you will be asked how willing you would be to join this hypothetical (pretend) trial. Please note, that this is a hypothetical or pretend conversation a patient may have with his/her doctor about the trial. You will not be asked to actually join a clinical trial at any time in this survey.</p>
Slide 2	<p>Imagine your doctor tells you...</p> <p>“We are doing a clinical trial to learn more about an experimental drug for people who have <i>[piped Q1 response]</i>. This drug is not approved by the Food and Drug Administration for use in treating the symptoms of <i>[piped Q1 response]</i>. We are doing the trial to find out if this new drug works for this purpose.</p> <p>We have studied this drug in two earlier clinical trials, but the number of people in these trials were small. These trials helped us to figure out the dose of the drug that people should take. They also helped us learn about the safety of the drug.</p> <p>Because the results of those trials were promising, we are now asking men and women with <i>[piped Q1 response]</i> to be in the first large trial of the drug. We plan to enroll up to 2,000 patients in the trial.</p> <p>This clinical trial will help us learn if the drug works to help reduce <i>[piped Q1 response]</i> symptoms. It will also help us learn more about the safety of the drug. This mostly includes documenting how often side effects happen.</p> <p>I would like you to think about whether or not you would like to join this clinical trial.”</p>
Slide 3	<p>Your doctor continues...</p> <p>“If you decide to join, you will be in the trial for 12 months.</p> <p>About half of the people in the trial will take the experimental drug throughout the trial. The other half will take a different drug throughout the trial that doctors already prescribe for people who have <i>[piped Q1 response]</i>. Both drugs are pills. You would take one pill, one time per day, for one year.</p> <p>Patients and study staff, such as doctors and nurses, will not know which drug patients are taking. Neither drug will impact your current medication regimen.</p> <p>A computer program will be used to identify which drug each person gets. The process is called randomization and is like flipping a coin.”</p>

	<p>Your doctor continues by telling you about the specific things you will be asked to do during the trial.</p> <p>For the purpose of this survey, we will present two different versions of this clinical trial – a “Traditional” trial and a “Mobile” trial. The “mobile” trial uses mobile technology to collect data about you. The “traditional” trial uses traditional methods to collect data about you. Very similar types of information will be collected in both versions of the clinical trial.</p> <p>Later, you will be asked which trial version you prefer. You will also be asked whether the use of a mobile technology to collect information impacts your decision to join the trial or not.</p> <p>As a reminder, the two scenarios you will be presented describe a pretend clinical trial. We are not asking you to join a real trial as part of this survey.</p>
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RANDOMIZE PARTICIPANTS to hear the description about the “Traditional” trial or the “Mobile” trial

Slide #	Traditional scenario	Mobile scenario
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<p>Slide 4</p>	<p>TRADITIONAL SCENARIO</p> <p>Your doctor continues...</p> <p>“If you join this trial, you will be asked to come to my office 13 times during the year. This is one visit every 4 weeks.</p> <p>Each visit will last between 1 and 3 hours. Visits will be between 8am to 6pm, Monday through Friday.</p> <p>During each visit, you will:</p> <ul style="list-style-type: none"> • Do movement tests related to your condition. • Have standard physical examinations for your condition. • Have your vital signs recorded. This includes your blood pressure, heart rate, height and weight. • Complete questionnaires. The questions will ask about your condition and your quality of life. • Get the study drug. <p>At home, you will be asked to fill out a diary every day about your condition and quality of life, your activity level, and your sleep patterns.</p> <p>During your first and last clinic visits, you will also have your blood drawn and give a urine sample.”</p> <p>[If Q1 = “c”, Diabetes patients]: “You will also be asked to take your usual blood glucose measurements through finger pricks. You will add this information in the diary.”</p>	<p>MOBILE TRIAL SCENARIO</p> <p>Your doctor continues...</p> <p>“If you join this trial, you will be asked to visit my office 3 times during the year. The first visit is when you start the trial. The second visit is midway through the trial. The last visit is when you finish the trial. A nurse will also call you during the months that you do not come to the clinic to see how you are doing.</p> <p>Each visit will last between 1 and 3 hours. Visits will be between 8am to 6pm, Monday through Friday. You will get the study drug at these visits.</p> <p>Also, for the entire year that you are in the trial, you will be asked to wear a health monitor on your wrist. It is like a smart watch or a Fitbit. You should wear the health monitor all day and night, even when you are sleeping. However, you will need to remove the monitor when you bathe or while swimming. You will also need to charge the monitor once per week for 2 hours by plugging it into a wall outlet using a cord we will provide. You do not need to wear the device while it is charging.</p> <p>You will be asked to use your own smartphone or tablet and install an app on it. The app will work with all kinds of smartphones. If you do not have a smartphone or tablet, or do not want to use your own, we can give you a smartphone to use in the trial. If we provide you with the smartphone, you will only be able to use the app that will come on the device. You will not be able to place phone calls, use the Internet, or upload other apps. You will need to keep the smartphone charged throughout the trial. You will return the device after the trial is over.</p> <p>Using the app on the smartphone or tablet, you will answer 3 questions daily about your condition and your quality of life.</p> <p>By wearing the health monitor every day, you will have information recorded automatically about how much you move, such as the number of steps you take each day. Your sleep patterns and your heart rate will also be automatically recorded by the monitor. This information will be automatically sent from the health monitor to your smartphone app.</p>
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Slide #	Traditional scenario	Mobile scenario
		<p>You will also be asked to measure your blood pressure and weight one time each week. We will give you a blood pressure cuff and bodyweight scale to use at home during the trial. Your blood pressure and weight will be automatically sent from these devices to your app when you use them.</p> <p>The data that is collected through the app will be automatically uploaded to a secure database when your smartphone or tablet is connected to a wireless network. The data will be encrypted to limit access by others who are not part of the study. You must connect to a wireless network at least one time per day.</p> <p>During your first and last clinic visits, you will have your blood drawn and give a urine sample.”</p> <p>[If Q1 = “c”, Diabetes patients]: “You will also be asked to take your usual blood glucose measurements through finger pricks. You will then record your glucose measurements on the app on the smartphone or tablet.”</p>
Slide 5	<p>Imagine that your doctor tells you...</p> <p>“You should know that all clinical trials have risks.</p> <p>Both of the drugs used in this trial can have side effects. Some side effects can be serious but these are likely rare. For the experimental drug, some patients could have side effects that we do not know about yet.</p> <p>If you experience any serious side effects, you should call me and you will likely stop taking the drug.</p> <p>There will be no cost to you or your insurance for the drug that you get in this clinical trial.</p> <p>You should also know that your <i>[piped Q1 response]</i> symptoms may or may not improve if you join this clinical trial. But what we learn might help other people with <i>[piped Q1 response]</i> in the future.”</p>	
Slide 6	<p>“We will protect your privacy and work to ensure that your information is kept confidential.</p> <p>After the clinical trial ends, a summary of the overall results will be shared with you. You will also be told which drug you were taking.”</p>	

Willingness question (Scenario #1):

Var.	No.	Question	Response (variable)	Skip
Q38	26.	Based on what you just heard, would you take part in the trial?	a. Definitely no (1) b. Probably no (2) c. I am not sure (3) d. Probably yes (4) e. Definitely yes (5) f. I prefer not to respond (6)	

You will now hear the other way of doing this hypothetical (pretend) trial. Then you will be asked how willing you would be to join that trial.

Present alternate scenario	Traditional scenario	Mobile scenario
Slide 4	REPEAT SLIDE #4 ABOVE	REPEAT SLIDE #4 ABOVE

Willingness question (Scenario #2):

Var.	No.	Question	Response (variable)	Skip
Q44	27.	Based on what you just heard, would you take part in the trial?	<ul style="list-style-type: none"> a. Definitely no (1) b. Probably no (2) c. I am not sure (3) d. Probably yes (4) e. Definitely yes (5) f. I prefer not to respond (6) 	
Q45	28.	How does the use of a health monitor worn on your wrist affect your willingness to take part?	<ul style="list-style-type: none"> a. I am less likely to take part (1) b. I am equally as likely to take part (2) c. I am more likely to take part (3) d. I prefer not to respond (4) 	

Confirmation question (after both scenarios are reviewed and follow-up question answered):

Var.	No.	Question	Response (variable)	Skip
Q47	29.	If you had the option to take part in either of these trials (traditional or mobile), which would you be more likely to join?	<ul style="list-style-type: none"> a. Either trial (1) b. The trial that used the health monitor (mobile) (2) c. The trial that did NOT use the health monitor (traditional) (3) d. Neither trial (4) e. I prefer not to respond (5) f. I would like to review the scenario presentations again before answering this question (6) 	If F branch to traditional then mobile scenario presentation, then loop back to this question.
Q48	30.	Why was this your choice?		

Additional questions on wearable health monitors:

Q49	31.	Let's say you own a wearable health monitor that will be used in a clinical trial. If you joined that trial, would you want to use your own wearable health monitor or a health monitor provided by the trial?	<ul style="list-style-type: none"> a. My own wearable health monitor (1) b. A wearable health monitor provided by the trial (2) c. It does not matter (3) d. I don't know (4) e. I prefer not to respond (5) 	
Q50	32.	If the trial asked that you use the wearable health monitor they give you, would you:	<ul style="list-style-type: none"> a. Wear the trial's health monitor instead of your own health monitor (1) b. Wear both your own health monitor and the trial's health monitor at the same time (2) c. Not participate in the trial (3) d. I prefer not to respond (4) 	

[Branch if Q1= "a", For Heart disease patients only]

Var.	No.	Question	Response (variable)	Skip
		<p>Now we will tell you about an additional part of the <u>mobile</u> clinical trial Imagine you were asked to join the <u>mobile clinical trial</u> described earlier that used the wearable health monitor worn on your wrist. This was the trial where you were asked to return to the clinic 3 times in the year.</p>		<p>Skip if say “definitely no” or “probably no” to joining the mobile clinical trial</p>
	Slide 7	<p>Imagine your doctor now tells you: “We would also like you to use a small wearable technology that records the rate and rhythm of your heartbeat. It is called a Holter monitor.</p> <p>This device can record the electrical activity of your heart while you move around to do your usual activities. The monitor is lightweight and is about the size of a small camera. You can wear it on a strap over your shoulder. Or you can wear it around your waist. It is battery operated.</p> <p>The monitor is connected by wires to silver dollar-sized pads or patches (electrodes) that stick to your chest. A trial staff member will show you how to put the electrodes on your chest. If you have a hairy chest, the staff member may have to shave some hair off to firmly put on the electrodes.</p> <p>The monitor has no physical risks and wearing it isn’t painful. Because the electrodes are attached with tape or adhesives, they may cause mild skin irritation.</p> <p>You will be asked to wear the monitor all day and night for up to 48 hours. You can take off the monitor when you bathe or shower or have an x-ray. You should also stay away from high-voltage areas, metal detectors, and large magnets. You will also be asked to keep a diary of your activities and symptoms. Your diary will be compared to the changes in the electrical activity of your heart recorded by the monitor.</p> <p>A trial staff member will meet with you once a week to collect the monitor and review your diary. We can meet at the research center, at your home, or another place that you choose. At this time you will be given a new monitor so you do not need to recharge the monitor.”</p>		
Q53	33.	How does the use of the Holter monitor in the trial affect your willingness to take part?	<ul style="list-style-type: none"> a. I am less likely to take part (1) b. I am equally likely to take part (2) c. I am more likely to take part (3) d. I prefer not to respond (4) 	
Q54	34.	How does the use of two devices (the wearable health monitor and the Holter monitor) in the trial affect your willingness to take part?	<ul style="list-style-type: none"> a. I am less likely to take part (1) b. I am equally likely to take part (2) c. I am more likely to take part (3) d. I prefer not to respond (4) 	

[Branch if Q1= "b", for Parkinson's disease patient only]

Var.	No.	Question	Response (variable)	Skip
		<p>Now we will tell you about an additional part of the <u>mobile</u> clinic trial.</p> <p>Imagine you were asked to join the <u>mobile clinical trial</u> described earlier that used the wearable health monitor worn on your wrist. This was the trial where you were asked to return to the clinic 3 times in the year.</p>		Skip if say "definitely no" or "probably no" to joining the mobile clinical trial
	Slide 7	<p>Imagine your doctor now tells you:</p> <p>"We would also like you to use an additional health monitor as part of the trial. This monitor records other physical movements. You will wear this monitor at home while you do specific tasks such as moving from a seated position to a standing position or holding your arms out in front of you for an extended time.</p> <p>You will attach the monitor to the tip of your index finger and then do the movement tasks.</p> <p>It will take roughly 10 minutes to perform the movement tasks. You will do these tasks three times a week for one year. You will need to recharge the device at least one time each month. You will be given instructions on how to do this. It may take up to 4 hours to fully charge the monitor.</p> <p>The information from the monitor will be automatically sent to the app on your smartphone or tablet. The data will be sent to trial staff when connected to a wireless network."</p>		
Q57	35.	How does the use of this monitor in the trial affect your willingness to take part?	<p>a. I am less likely to take part (1)</p> <p>b. I am equally likely to take part (2)</p> <p>c. I am more likely to take part (3)</p> <p>d. I prefer not to respond (4)</p>	
Q58	36.	How does the use of two devices (a wearable health monitor and a monitor attached to your finger) in the trial affect your willingness to take part?	<p>a. I am less likely to take part (1)</p> <p>b. I am equally likely to take part (2)</p> <p>c. I am more likely to take part (3)</p> <p>d. I prefer not to respond (4)</p>	

[Branch if Q1 = “c”, Diabetes patients only]


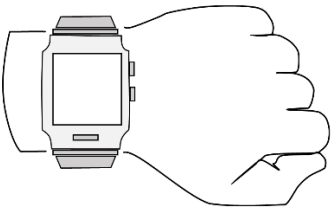
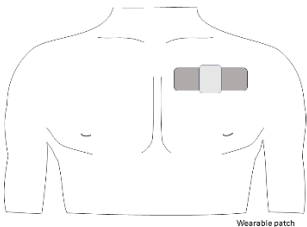
Var.	No.	Question	Response (variable)	Skip
		<p>Now we will tell you about an additional part of the <u>mobile</u> clinical trial.</p> <p>Imagine you were asked to join the <u>mobile clinical trial</u> described earlier that used the wearable health monitor worn on your wrist. This was the trial where you were asked to return to the clinic 3 times in the year.</p>		Skip if say “definitely no” or “probably no” to joining the mobile clinical trial
	Slide 7	<p>Imagine your doctor now tells you:</p> <p>“We would also like you to use a continuous glucose monitor as part of the trial.</p> <p>To use this monitor, you would insert a small sensor the size of a small needle under your skin. This sensor sends information about your glucose levels to a patch that sticks on your belly. This patch sends the information to your smartphone, tablet, or computer through a wireless connection.</p> <p>I will give you the monitor and patches and show you how to insert the sensor during your first trial visit at my office. You would be asked to wear the monitor and patch all day and night. You would need to change the sensor every three days. Because the patch is stuck to you with adhesive, it may cause mild skin irritation. You should change where the patch is put each time it is replaced.</p> <p>If you already have a continuous glucose monitor, you will be asked to use the monitor provided by the trial instead of your own.”</p>		
Q61	37.	How does the use of a continuous glucose monitor in the trial affect your willingness to take part?	<ul style="list-style-type: none"> a. I am less likely to take part (1) b. I am equally likely to take part (2) c. I am more likely to take part (3) d. I prefer not to respond (4) 	
Q62	38.	How does the use of two devices (a wearable health monitor and a continuous glucose monitor) in the trial affect your willingness to take part?	<ul style="list-style-type: none"> a. I am less likely to take part (1) b. I am equally likely to take part (2) c. I am more likely to take part (3) d. I prefer not to respond (4) 	
Q63	39.	If you could use the continuous glucose monitor <i>instead of</i> pricking your finger multiple times a day, how likely would you be to take part in the trial?	<ul style="list-style-type: none"> a. I am less likely to take part (1) b. I am equally likely to take part (2) c. I am more likely to take part (3) d. I prefer not to respond (4) 	

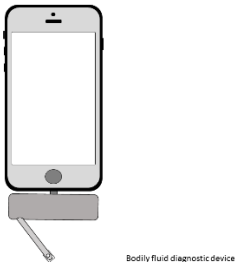
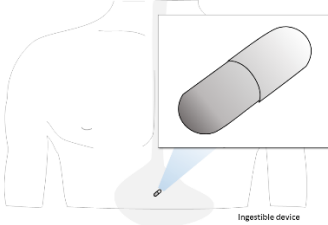
[Branch if Q1= “d”, for arthritis patient only]

Var.	No.	Question	Response (variable)	Skip
		<p>Now we will tell you about an additional part of the <u>mobile</u> clinical trial.</p> <p>Imagine you were asked to join the <u>mobile clinical trial</u> described earlier that used the wearable health monitor worn on your wrist. This was the trial where you were asked to return to the clinic 3 times in the year.</p>		<p>Skip if say “definitely no” or “probably no” to joining the mobile clinical trial</p>
	Slide 7	<p>Imagine your doctor now tells you:</p> <p>“We would also like you to use additional motion and balance monitors as part of the trial. These monitors record your range of motion and balance while you perform specific tasks. You will wear these monitors at home while you do specific tasks such as moving from a seated to standing position, walking across the room, swinging your arm at your shoulder or elbow, or bending forward at the hip.</p> <p>You will attach the monitors on different parts of your body using Velcro straps. One monitor will go on your leg, another will go on your waist, and a third will go on your forearm. You will then be asked to perform the specific movements. You only need to wear the monitors while you perform the tasks.</p> <p>It will take roughly 10 minutes to perform the movement tasks. You will do these tasks three times a week for one year. Unlike the earlier mentioned health monitor, you only need to wear these additional monitors when you are performing the movement tasks; otherwise, you do not need to wear these additional monitors throughout the day. You will need to recharge the batteries on the monitors at least one time each month. You will be given instructions on how to do this. It may take up to 4 hours to fully charge the monitors.</p> <p>The information from the monitors will be automatically sent to the app on your smartphone or tablet using a Bluetooth (wireless) connection. The data will be sent automatically to trial staff when your smartphone is connected to a wireless network.”</p>		
Q66	40.	How does the use of these monitors in the trial affect your willingness to take part?	<p>a. I am less likely to take part (1)</p> <p>b. I am equally likely to take part (2)</p> <p>c. I am more likely to take part (3)</p> <p>d. I prefer not to respond (4)</p>	
Q67	41.	How does the use of multiple devices (a continuous health monitor and monitors worn while performing specific movement tasks) in the trial affect your willingness to take part?	<p>a. I am less likely to take part (1)</p> <p>b. I am equally likely to take part (2)</p> <p>c. I am more likely to take part (3)</p> <p>d. I prefer not to respond (4)</p>	

That was the last question about the traditional and mobile clinical scenarios.

Now, we would like your opinion on other kinds of mobile technology that can be used in any kind of clinical trial. For example, devices can be worn on your ankle or belt to monitor your movement. Other devices can measure your body chemistry, such as your cholesterol. All of the following questions are related to the use of mobile technology in clinical trials. All of these devices have been shown to be safe to use.

Below is a list of mobile technologies that have been used in clinical trials to collect information from participants. If you were asked to join a trial, would you be willing to use:								
Var.	No.	Question			Response (variable)			
Q69_3	42.		<p>...a smartphone or tablet app where you enter information about yourself? For example, the time you went to bed.</p>			Yes (1)	No (2)	I prefer not to respond (3)
Q69_4	43.		<p>...a wearable health monitor that you could wear around your wrist, ankle or waist?</p> <p>These devices typically collect information about fitness and mobility. Some monitors send the information wirelessly to an app on your smartphone or tablet. The app then sends the information to trial staff. Other monitors store the information until the monitor is returned to trial staff. Staff then download the information to their computers.</p>			Yes (1)	No (2)	I prefer not to respond (3)
Q69_5	44.		<p>...a patch that adheres to your skin?</p> <p>These patches stick to your skin, like a Band-Aid. They are usually placed somewhere on your torso. They can collect vital signs such as heart rate, blood pressure, breathing rate and body temperature. In the future, some patches may collect information about cholesterol or bodily nutrients. The patch sends the information wirelessly to an app on your smartphone or tablet. The app then sends the information to trial staff. The battery on the patch will last up to four days and can be disposed of in the trash after use. The patch will need to be replaced every three days. You can do all your normal daily activities, such as showering, while wearing the patch.</p>			Yes (1)	No (2)	I prefer not to respond (3)

Q69_6	45.		<p>...a bodily-fluid diagnostic device that measures chemicals and nutrients in the body?</p> <p>These devices measure body chemistry that is found in bodily fluids, such as blood, saliva, sweat or urine. Body chemistry are blood glucose, cholesterol, bodily nutrients, or toxins, drugs or alcohol. Some devices can detect pregnancy. The device requires users to place the bodily fluid on a test strip, which is then put in a device attached to a smartphone or tablet. The sample of the test strip is analyzed by the device. The results are automatically sent to trial staff when you have a wireless signal by an app on the smartphone or tablet.</p>	Yes (1)	No (2)	I prefer not to respond (3)
Q69_8	46.		<p>...a device that is swallowed (ingested)?</p> <p>Ingestible technologies are sensors that are often put on a pill that is swallowed by a patient. The sensor remains in the stomach and/or digestive track for about a day. It can measure the presence of medication and vital signs, such as heart rate and breathing. Some sensors can also take pictures. The information gathered from the sensor is sent wirelessly to a patch the patient wears on the skin. Then the information is sent directly to trial staff. Sometimes it is sent to an app on the patient's smartphone and then sent to trial staff. The sensor will be disposed of in the toilet after use.</p>	Yes (1)	No (2)	I prefer not to respond (3)

Var.	No.	Question	Response (variable)	Skip
Q70	47.	<p>What would be best way for you to learn how to use a new mobile technology?</p> <p><i>Select all that apply</i></p>	<p>a. In person training by trial staff, such as a study coordinator (1)</p> <p>b. Written step-by-step instructions (2)</p> <p>c. A short video (3)</p> <p>d. Hearing instructions over the phone (4)</p> <p>e. Another way (specify): (5) _____</p> <p>f. I prefer not to respond (6)</p>	
Q71	48.	<p>Who would you most want to contact to fix the mobile technology if it stopped working?</p>	<p>a. Trial staff, such as a study coordinator (1)</p> <p>b. The company who made the mobile technology (2)</p> <p>c. Someone else (specify): (3) _____</p> <p>d. No one. I would stop using it if it stopped working (4)</p> <p>e. I prefer not to respond (5)</p>	

Q72	49.	How important or not important is it that you are shown the information collected about you by the mobile technology?	a. Not important (1) b. Somewhat important (2) c. Important (3) d. Very important (4) e. I prefer not to respond (5)	If “a” or “e” skip to Q51
Q73	50.	How would you want to be given the information about you collected by the mobile technology? <i>Select all that apply</i>	a. Displayed on the technology itself, such as on the smartphone app (1) b. Through a website page designed just for you that summarizes your information (2) c. Printouts of your information that are sent to you (3) d. In a one-on-one meeting with trial staff, such as a study coordinator (4) e. Another way (specify): (5) _____ f. I prefer not to respond (6)	
Q74	51.	How often would you want to see your information collected from the mobile technology?	a. Instantly (1) b. Every day (2) c. Every week (3) d. 2 to 3 times per month (4) e. Once per month or less (5) f. After the trial is over (6) g. I prefer not to respond (7)	
Q75	52.	Some clinical trials last for a few months. Others can last for over a year. For how long would you be willing to spend a short amount of time every day entering information about yourself into an app as part of a clinical trial?	a. For one day only (1) b. One week (2) c. One month (3) d. 2 to 5 months (4) e. 6 to 11 months (5) f. One year (6) g. More than a year (7) h. As long as the trial lasts (8) i. I prefer not to respond (9)	Display if Q41 = “Yes”

Wearable health monitor

Var.	No.	Question	Response (variable)	Skip
		These questions are about wearable health monitors.		Display if Q42 = “Yes”
Q77	53.	For how long would you be willing to wear a monitor every day as part of a trial?	a. For one day only (1) b. One week (2) c. One month (3) d. 2 to 5 months (4) e. 6 to 11 months (5) f. One year (6) g. More than a year (7) h. As long as the trial lasts (8) i. I prefer not to respond (9)	Display if Q42 = “Yes”
Q78	54.	If you joined a trial that used a wearable monitor, how important or not important is it to you that the monitor:	a. Not important (1) b. Somewhat important (2) c. Important (3)	Display if Q42 = “Yes”

		<ul style="list-style-type: none"> a. Be easy to learn how to use b. Be simple to use c. Be convenient to use d. Be fun to use e. Be physically comfortable f. Be attractive g. Be small in size h. Be light weight i. Not be easily noticed or seen j. Not take a lot of your time to use k. Not interfere with your normal daily activities l. Is waterproof m. Has a long battery life n. Displays your data on your smartphone, tablet or computer o. Has a password that you enter before you view your data p. Has tech support available if there is a problem q. Collect data on its own (so you don't have to enter it yourself) 	<ul style="list-style-type: none"> d. Very important (4) e. Not sure (5) f. I prefer not to respond (6) 	
Q79	55.	<p>How important or not important is it to you that:</p> <ul style="list-style-type: none"> a. Your spouse or partner is okay with you using a wearable monitor b. Your friends are okay with you using a wearable monitor c. Your doctor(s) is okay with you using a wearable monitor 	<ul style="list-style-type: none"> a. Not important (1) b. Somewhat important (2) c. Important (3) d. Very important (4) e. Not sure (5) f. I prefer not to respond (6) 	Display if Q42 = "Yes"
Q80	56.	<p>How comfortable or uncomfortable are you with:</p> <ul style="list-style-type: none"> a. Your fitness and mobility data being stored on the wearable monitor or app? b. Your fitness and mobility data being sent electronically from the wearable monitor to the trial database? The data would be hidden (encrypted) to limit access by others who are not part of the trial. c. Your fitness and mobility data being stored by the company who made the monitor? The data would be stored using a code rather than your name. 	<ul style="list-style-type: none"> a. Very uncomfortable (1) b. Uncomfortable (2) c. Comfortable (3) d. Very comfortable (4) e. Not sure (5) f. I prefer not to respond (6) 	Display if Q42 = "Yes"

Wearable patch

Var.	No.	Question	Response (variable)	Skip
		These questions are about wearable patches that are placed on your skin.		Display if Q43 = "Yes"

Q82	57.	For how long would you be willing to wear a patch every day that adheres to your skin as part of a trial?	<ul style="list-style-type: none"> a. For one day only (1) b. One week (2) c. One month (3) d. 2 to 5 months (4) e. 6 to 11 months (5) f. One year (6) g. More than a year (7) h. As long as the trial lasts (8) i. I prefer not to respond (9) 	Display if Q43 = "Yes"
Q83	58.	<p>If you joined a trial that used a wearable patch, how important or not important is it to you that the patch:</p> <ul style="list-style-type: none"> a. Be easy to learn how to use b. Be simple to apply to the skin and use c. Be physically comfortable d. Be attractive e. Be small in size f. Not be easily noticed or seen g. Not take a lot of your time to apply or use h. Not interfere with your normal daily activities i. Is waterproof j. Displays your data on your smartphone, tablet or computer k. Has tech support available if there is a problem 	<ul style="list-style-type: none"> a. Not important (1) b. Somewhat important (2) c. Important (3) d. Very important (4) e. Not sure (5) f. I prefer not to respond (6) 	Display if Q43 = "Yes"
Q84	59.	<p>How important or not important is it to you that:</p> <ul style="list-style-type: none"> a. Your spouse or partner is okay with you wearing the patch b. Your friends are okay with you wearing the patch c. Your doctor(s) is okay with you wearing the patch 	<ul style="list-style-type: none"> a. Not important (1) b. Somewhat important (2) c. Important (3) d. Very important (4) e. Not sure (5) f. I prefer not to respond (6) 	Display if Q43 = "Yes"
Q85	60.	<p>How comfortable or uncomfortable are you with:</p> <ul style="list-style-type: none"> a. Your data being stored on the app on your smartphone or tablet? b. Your data being sent electronically from the patch to the trial database? The data would be hidden (encrypted) to limit access by others who are not part of the trial. c. Your data being stored by the company who made the patch and app? The data would be stored using a code rather than your name. 	<ul style="list-style-type: none"> a. Very uncomfortable (1) b. Uncomfortable (2) c. Comfortable (3) d. Very comfortable (4) e. Not sure (5) f. I prefer not to respond (6) 	Display if Q43 = "Yes"

Bodily fluid diagnostic device

Var.	No.	Question	Response (variable)	Skip
		These questions are on bodily fluid diagnostic devices.		Display if Q44 = "Yes"
Q87	61.	For how long would you be willing to use a device every day that measures your body chemistry through bodily fluids as part of a trial?	<ul style="list-style-type: none"> a. For one day only (1) b. One week (2) c. One month (3) d. 2 to 5 months (4) e. 6 to 11 months (5) f. One year (6) g. More than a year (7) h. As long as the trial lasts (8) i. I prefer not to respond (9) 	Display if Q44 = "Yes"
Q88	62.	<p>If you joined a trial that used a bodily fluid diagnostic device, how important or not important is it to you that the device:</p> <ul style="list-style-type: none"> a. Be easy to learn how to use b. Be simple to use c. Be convenient to use d. Be fun to use e. Be physically comfortable f. Be attractive g. Be small in size h. Be light weight i. Not be easily noticed or seen j. Not take a lot of your time to use k. Not interfere with your normal daily activities l. Displays your data on your smartphone, tablet or computer m. Has a password on the app that you enter before you view your data n. Has tech support available if there is a problem 	<ul style="list-style-type: none"> a. Not important (1) b. Somewhat important (2) c. Important (3) d. Very important (4) e. Not sure (5) f. I prefer not to respond (6) 	Display if Q44 = "Yes"
Q89	63.	<p>How important or not important is it to you that:</p> <ul style="list-style-type: none"> a. Your spouse or partner is okay with you using a bodily fluid diagnostic device b. Your friends are okay with you using a bodily fluid diagnostic device c. Your doctor(s) is okay with you using a bodily fluid diagnostic device 	<ul style="list-style-type: none"> a. Not important (1) b. Somewhat important (2) c. Important (3) d. Very important (4) e. Not sure (5) f. I prefer not to respond (6) 	Display if Q44 = "Yes"

Q90	64.	How comfortable or uncomfortable are you with: <ul style="list-style-type: none"> a. Your bodily fluid diagnostic data being stored on the mobile device? b. Your bodily fluid diagnostic data being sent electronically from the device to the trial database? The data would be hidden (encrypted) to limit access by others who are not part of the trial. c. Your bodily fluid diagnostic data being stored by the company who made the mobile device? The data would be stored using a code rather than your name. 	<ul style="list-style-type: none"> a. Very uncomfortable (1) b. Uncomfortable (2) c. Comfortable (3) d. Very comfortable (4) e. Not sure (5) f. I prefer not to respond (6) 	Display if Q44 = "Yes"
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Ingestible technology

Var.	No.	Question	Response (variable)	Skip	
		These questions are on ingestible technology.			Display if Q45 = "Yes"
Q92	65.	For how long would you be willing to use an ingestible sensor every day as part of a trial?	<ul style="list-style-type: none"> a. For one day only (1) b. One week (2) c. One month (3) d. 2 to 5 months (4) e. 6 to 11 months (5) f. One year (6) g. More than a year (7) h. As long as the trial lasts (8) i. I prefer not to respond (9) 	Display if Q45 = "Yes"	
Q93	66.	If you joined a trial that used an ingestible sensor, how important or not important is it to you that the sensor: <ul style="list-style-type: none"> a. Be convenient to use b. Be physically comfortable to swallow c. Be small in size d. Not take a lot of your time to use e. Not interfere with your normal daily activities f. Displays your data on your smartphone, tablet or computer 	<ul style="list-style-type: none"> a. Not important (1) b. Somewhat important (2) c. Important (3) d. Very important (4) e. Not sure (5) f. I prefer not to respond (6) 	Display if Q45 = "Yes"	
Q94	67.	How important or not important is it to you that: <ul style="list-style-type: none"> a. Your spouse or partner is okay with you using an ingestible sensor b. Your friends are okay with you using an ingestible sensor c. Your doctor(s) is okay with you using an ingestible sensor 	<ul style="list-style-type: none"> a. Not important (1) b. Somewhat important (2) c. Important (3) d. Very important (4) e. Not sure (5) f. I prefer not to respond (6) 	Display if Q45 = "Yes"	

Q95	68.	How comfortable or uncomfortable are you with: <ul style="list-style-type: none"> a. Your data being stored on the app on your smartphone or tablet? b. Your data being sent electronically from the ingestible sensor to the trial database? The data would be hidden (encrypted) to limit access by others not part of the trial. c. Your data being stored by the company who made the ingestible sensor? The data would be stored using a code rather than your name. 	<ul style="list-style-type: none"> a. Very uncomfortable (1) b. Uncomfortable (2) c. Comfortable (3) d. Very comfortable (4) e. Not sure (5) f. I prefer not to respond (6) 	Display if Q45 = "Yes"
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Var.	No.	Question	Response (variable)	Skip
Q96	69.	How important or not important is it to you that the mobile technology used in a trial does not use personal data minutes that you pay for when sharing information with trial staff?	<ul style="list-style-type: none"> a. Not important (1) b. Somewhat important (2) c. Important (3) d. Very important (4) e. Not sure (5) f. I prefer not to respond (6) 	
Q97	70.	Overall, how worried or not worried are you that others, besides the research team, would be able to see your data collected by mobile technology?	<ul style="list-style-type: none"> a. Extremely worried (1) b. Worried (2) c. A little worried (3) d. Not worried (4) e. Not sure (5) f. I prefer not to respond (6) 	
Q98	71.	Some mobile technologies include location monitoring by GPS. How comfortable or uncomfortable are you with using mobile technology in a clinical trial that tracks your location?	<ul style="list-style-type: none"> a. Very uncomfortable (1) b. Uncomfortable (2) c. Comfortable (3) d. Very comfortable (4) e. Not sure (5) f. I prefer not to respond (6) 	
Q99	72.	Would you take part in a trial that used mobile technology if you were uncertain that your information would remain confidential?	<ul style="list-style-type: none"> a. Definitely no (1) b. Probably no (2) c. I am not sure (3) d. Probably yes (4) e. Definitely yes (5) f. I prefer not to respond (6) 	

We are almost at the end of our survey, we just have a few more general questions about trial procedures.

Var.	No.	Question	Response (variable)	Skip
Q101	73.	One reason to use mobile technologies in clinical trials is to reduce the number of times patients must come to for study visits. This means that participants see the trial doctor less often than they would in trials that do not use mobile technologies.	<ul style="list-style-type: none"> a. I would prefer to never have to see the trial doctor (1) b. I would prefer to see the trial doctor at the beginning and end of the trial (2) c. I would prefer to see the trial doctor numerous times during the trial (3) d. It doesn't matter to me how often I see the trial doctor (4) e. I prefer not to respond (5) 	Skip to Q76 is Q73 = "a"

		How often would you prefer to see the trial doctor if you took part in a clinical trial that used a mobile technology?		
Q102	74.	Would you need to see the trial doctor in person or would you be willing to talk with the trial doctor using another form of communication, such as over the telephone, through email, or online video conferencing?	<ul style="list-style-type: none"> a. I would need to meet in person (1) b. I would be willing and able to use another form of communication (2) c. I don't know (3) d. I prefer not to respond (4) 	
Q103	75.	<p>What other forms of communication would you be willing to use to talk with the trial doctor?</p> <p><i>Select all that apply</i></p>	<ul style="list-style-type: none"> a. Telephone (1) b. Text message (2) c. Email (3) d. Online live chat (4) e. Online video conferencing (5) f. I don't know (6) g. I prefer not to respond (7) 	Display if Q74 = "b"

WRAP UP QUESTIONS

Var.	No.	Question	Response (variable)	Skip
Q104	76.	<p>That's the last question!</p> <p>Thank you for taking this survey. Your answers will help us to understand how patients view the use of mobile technologies in clinical trials.</p>	<ul style="list-style-type: none"> a. Click here if you would like to enter your name into a raffle to win prizes. (1) b. Click here if you do not want to enter your name into a raffle to win prizes. (2) <p>Note: You will only be contacted if you win a prize.</p>	If a, redirect to additional survey
	END	Thank you for your time participating in our survey.		