



# Enrollment Form

## Visit 4 Repeat

Office Use Only-- MrOS ID#					Acrostic			Staff ID#			



1 Is participant willing to come in for repeat Visit 4?

1  Yes

0  No

V4R4FUTM  
V4R4FYTM

Reason for refusal:

- 1  Not interested/Too busy
- 2  Health Problems
- 3  Out of Area
- 4  Too many contacts from study
- 5  Caregiver responsibilities
- 6  Other \_\_\_\_\_

### SCREENING QUESTIONS:

A. Does the participant have a new fracture at the same side and at the site where he was scanned at Visit 4 (for HRpQCT)? 1  Yes 0  No

Site of new fracture: 1  Wrist/Forearm 2  Ankle/Tibia 3  Both  
NOT ELIGIBLE FOR REPEAT VISIT. SKIP TO QUESTION D.

B. Did the participant have any new non-removable hardware or jewelry introduced into the site where he was scanned at Visit 4 (for HRpQCT)? 1  Yes 0  No

Site of new hardware: 1  Wrist/Forearm 2  Ankle/Tibia 3  Both  
NOT ELIGIBLE FOR REPEAT VISIT. SKIP TO QUESTION D.

C. Has the participant been subject to non-weight bearing of the side he was scanned at Visit 4 (for HRpQCT) for 6 weeks or more in the past 12 months?

1  Yes 0  No

NOT ELIGIBLE FOR REPEAT VISIT. SKIP TO QUESTION D.

D. Did the participant complete repeat Visit 4? 1  Yes 0  Not eligible

a. Date of visit:  /  /  V4RDATE  
Month Day Year

b. Who completed the majority of the questionnaires (Who provided the answers for the majority of questions)? 1  Participant 2  Spouse 3  Other family 4  Clinic 5  Other V4RQUES

c. Were there any changes to the list of medications since the Visit 4 MIF was completed?

1  Yes 0  No

d. Were any medications listed on the MIF worksheet taken in the past 2 weeks?

1  Yes 0  No

Draft





# Physical Activity

Visit 4 Repeat

Office Use Only--  
MrOS ID#

MISSING  
Acrostic

--	--	--	--	--	--	--	--

--	--	--	--	--	--



The next few questions ask about your physical activity during the last 7 days. If the last 7 days have not been typical because of illness or bad weather, please estimate based on two or three weeks ago.

1 Over the past 7 days, how often did you participate in sitting activities such as reading, watching TV or doing handcrafts? **PASIT**

0  Never 1  Seldom (1-2 days) 2  Sometimes (3-4 days) 3  Often (5-7 days)



Go to  
Question 2

What were these activities? \_\_\_\_\_

On average, how many hours per day did you engage in these sitting activities?

1  Less than 1 hour 2  Between 1 and 2 hours 3  2-4 hours 4  More than 4 hours **PASITT**

2 Over the past 7 days, how often did you take a walk outside your home or yard for any reason? For example, for fun or exercise, walking to work, walking the dog, etc.? **PAWALK**

0  Never 1  Seldom (1-2 days) 2  Sometimes (3-4 days) 3  Often (5-7 days)



**PAWALKW**

Go to  
Question 3

What were these activities? \_\_\_\_\_

On average, how many hours per day did you spend walking? **PAWALKT**

1  Less than 1 hour 2  Between 1 and 2 hours 3  2-4 hours 4  More than 4 hours

3 Over the past 7 days, how often did you engage in light sport or recreational activities such as bowling, golf with a cart, shuffleboard, fishing from a boat or pier, or other similar activities? **PALTE**

0  Never 1  Seldom (1-2 days) 2  Sometimes (3-4 days) 3  Often (5-7 days)



**PALTEW**

Go to  
Question 4

What were these activities? \_\_\_\_\_

On average, how many hours per day did you engage in these light sport or recreational activities? **PALTET**

1  Less than 1 hour 2  Between 1 and 2 hours 3  2-4 hours 4  More than 4 hours

Draft





# Physical Activity

Visit 4 Repeat

Office Use Only--  
MrOS ID#

MISSING  
Acrostic

--	--	--	--	--	--

--	--	--	--



4 Over the past 7 days, how often did you engage in moderate sport and recreational activities such as doubles tennis, ballroom dancing, hunting, ice skating, golf without a cart, softball or other similar activities?

- 0  Never 1  Seldom (1-2 days) 2  Sometimes (3-4 days) 3  Often (5-7 days) **PAMOD**

**PAMODW**

Go to  
Question 5

What were these activities? \_\_\_\_\_

On average, how many hours per day did you engage in these moderate sport or recreational activities? **PAMODT**

- 1  Less than 1 hour 2  Between 1 and 2 hours 3  2-4 hours 4  More than 4 hours

5 Over the past 7 days, how often did you engage in strenuous sport and recreational activities such as jogging, swimming, cycling, singles tennis, aerobic exercise, skiing (downhill or cross country) or other similar activities?

- 0  Never 1  Seldom (1-2 days) 2  Sometimes (3-4 days) 3  Often (5-7 days) **PASTR**

**PASTRW**

Go to  
Question 6

What were these activities? \_\_\_\_\_

On average, how many hours per day did you engage in these strenuous sport or recreational activities? **PASTRT**

- 1  Less than 1 hour 2  Between 1 and 2 hours 3  2-4 hours 4  More than 4 hours

6 Over the past 7 days, how often did you do any exercise specifically to increase muscle strength and endurance, such as lifting weights or pushups, etc.?

- 0  Never 1  Seldom (1-2 days) 2  Sometimes (3-4 days) 3  Often (5-7 days) **PAWGT**

**PAWGTW**

Go to  
Question 7

What were these activities? \_\_\_\_\_

On average, how many hours per day did you engage in exercises to increase muscle strength and endurance? **PAWGTT**

- 1  Less than 1 hour 2  Between 1 and 2 hours 3  2-4 hours 4  More than 4 hours

Draft





# Physical Activity

Visit 4 Repeat

Office Use Only-- MrOS ID#	<input type="radio"/> MISSING Acrostic
<input type="text"/>	<input type="text"/>

7 During the past 7 days, have you done any light housework, such as dusting or washing dishes?

1  Yes 0  No PALHW

PALHWW

8 During the past 7 days, have you done any heavy housework or chores, such as vacuuming, scrubbing floors, washing windows or carrying wood?

1  Yes 0  No PAHHW

PAHHWW

9 During the past 7 days, did you engage in any of the following activities? (Please answer yes or no for each item.)

PAHOMEW

Home repairs, like painting, wallpapering, electrical work, etc.? 1  Yes 0  No PAHOME

Lawn work or yard care, including snow or leaf removal, wood chopping, etc.?

1  Yes 0  No PALAWN

PALAWNW

Outdoor gardening?

1  Yes 0  No PAGARDEN

PAGARDNW

Caring for another person, such as children, dependent spouse, or another adult?

1  Yes 0  No PACARE

PACAREW

10 During the past 7 days did you work either for pay or as a volunteer?

1  Yes 0  No PAWK

PAWKW

a. How many hours in the past week did you work for pay and/or as a volunteer?

<input type="text"/>	<input type="text"/>
----------------------	----------------------

PAWKHR  
hours

b. Which of the following categories best describes the amount of physical activity required on your job and/or volunteer work? Please mark only one option.

1  Mainly sitting with slight arm movements PAWKPA

Examples: office worker, watchmaker, seated assembly line worker, bus driver, etc.

2  Sitting or standing with some walking

Examples: cashier, general office worker, light tool and machinery worker

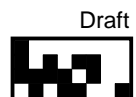
3  Walking, with some handling of materials generally weighing less than 50 pounds

Examples: mailman, waiter/waitress, construction worker, heavy tool and machinery worker

4  Walking and heavy manual work often requiring handling material weighing more than 50 pounds

Examples: lumberjack, stone mason, farm or general laborer.

PASCORE  
PASELEIS  
PASEHOUS  
PASEOCC





# General Information

## Visit 4 Repeat

Office Use Only--											
MrOS ID#					Acrostic				Staff ID#		

① Since your last visit, have you, because of illness or injury, cut down on the things that you usually do, such as going to work or working around the house?  Yes  No *MHRESTR*



a. Since your last visit, how many days did you cut down on the things that you usually do, because of illness or injury?

days *MHRESDR*

b. Since your last visit, of the number of days that you cut down on the things you usually do, for how many days did you stay in bed for more than half the day, because of illness or injury? (Include any days you spent in bed at home, in a nursing facility or as an overnight hospital patient.)

days *MHRESBR*





# DXA

## Bone Density Form

### Visit 4 Repeat

Office Use Only-  
MrOS ID#

Acrostic

**DXSTAFF**  
Staff ID#

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------

1 Which hip was scanned at Visit 4?

- 1  Right   2  Left   3  No V4 Scan   *DXHPSRI*

**DXDATA**

Go to next measure

2 Can the same hip be scanned at repeat Visit 4?

- 1  Yes   0  No   *DXSAMER*

Record reason:

- 1  Fracture                      4  Refused Radiation  
 2  Hip replacement              5  Unable to lie on table  
 3  Other \_\_\_\_\_                      *DXWHYNO*

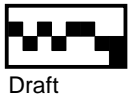
Last 2 characters of scan ID #:

Date of scan(s):

/  /   
 Month                      Day                      Year

Temperature of room during scan:

*DXQDTEMP*  
degrees Celsius



# Height & Weight

Visit 4 Repeat

HWSTAFF

Office Use Only--

MrOS ID#

Acrostic

Staff ID#

--	--	--	--	--	--

--	--	--	--

--	--	--	--	--



1 Was STANDING HEIGHT measured? *HWHEIGHT*  Yes  No → Explain: \_\_\_\_\_

*HWKYPH*

a. Is the participant standing sideways due to kyphosis?  Yes  No

Measurement 1: 

--	--	--	--

 mm

Measurement 2: 

--	--	--	--

 mm

*HWHGT*

b. Do Measurement 1 and Measurement 2 differ by 4 or more mm?  Yes  No

Complete Measurements 3 & 4

Measurement 3: 

--	--	--	--

 mm

Measurement 4: 

--	--	--	--

 mm

2 Was WEIGHT measured? *HWWEIGHT*  Yes  No → Explain: \_\_\_\_\_

*HWWGT*

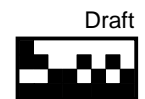
--	--	--

 . 

--

 kg

*HW44RWPC*  
*HW44RWT*  
*HW44RBMI*  
*HW44RHT*





# Chair Stands

Visit 4 Repeat

Office Use Only-- MrOS ID#					Acrostic			NFCSTAFF Staff ID#		

## INTRODUCTION/SCREENING QUESTIONS

- ① Ask the participant: **Do you use any walking aids, such as a cane?** *NFAIDS*  
 1  No aids 2  Cane or quad cane 3  Walker, wheelchair, leg brace, crutches
- ② Does the participant have any of the following? If you are uncertain about one of following conditions, ask the participant. (Mark all that apply)  
 1  Orthosis *NFLIMB* 1  Missing limbs *NFORTH* 1  Prosthesis *NFPROTHE* 1  Paralysis of extremity or side of body *NFPARAL*
- ③ Ask the participant: **Do you have any problems from recent surgery, injury or other health conditions that might prevent you from standing straight up from a chair or walking quickly?**

*NFPROB*

- 1  Yes →  
 0  No

Tell the participant: "Before we do each test, I'll describe it to you. Please tell me if you think that you shouldn't attempt the test because of the problems you described."

## SINGLE CHAIR STAND

- ④ Could the participant stand up one time unassisted? *NFSTAND1*  
 1  Yes 2  No, unable to stand 3  No, rises using arms 7  Did not attempt/Refused

Do **NOT** perform Repeat Chair Stands. Go on to Six Meter Usual Pace

## REPEATED CHAIR STANDS

- ⑤ Did the participant complete all 5 stands? *NF5STAND*

- 1  Yes 0  No

*NFARMU5A*

Time to complete stands? *NFTIME5*     seconds

Record arm use: 1  Did not use arms  
 2  Used arms part of the time 3  Used arms all of the time

*NFSTDARM*

How many chair stands were completed?  *NF5MANY* stands

Why weren't 5 chair stands completed?  
 4  Attempted, but unable to stand once without help  
 5  Completed at least 1 stand, but unable to complete 5 without help *NFARMU5B*  
 7  Did not attempt/refused





# Six Meter Walk

Visit 4 Repeat

Office Use Only--  
MrOS ID#

Acrostic

*NFWSTAFF*  
Staff ID#

--	--	--	--	--	--	--	--	--	--	--	--	--	--

## SIX METER USUAL PACE

1 Did the participant complete Trial 1? *NFWLKNA1*

1  Yes 2  No, participant attempted but unable 3  No, unable to assess



Record time and number of steps: *NFWLKTM1* seconds *NFWLKST1* steps

Aid used: 0  No aid 1  Straight cane 2  Quad cane 3  Walker 4  Crutch  
*NFWLKAD1*

2 Did the participant complete Trial 2?

*NFWLKNA2*

1  Yes 2  No, participant attempted but unable 3  No, unable to assess



Record time and number of steps: *NFWLKTM2* seconds *NFWLKST2* steps

Aid used: 0  No aid 1  Straight cane 2  Quad cane 3  Walker 4  Crutch  
*NFWLKAD2*

*NFSTPLGT*  
*NFWLKSPD*  
*NF6MWTM*  
*NF6MPACE*  
  
*NF6MPACA*  
*NF6MABLE*

*NF44RSTL*  
*NF44RWKS*  
*NF44RMT*  
*NF44RMP*



# Blood Collection & Processing

Visit 4 Repeat

Office Use Only--

MrOS ID#	Acrostic	SCSTAFF Staff ID#
<input type="text"/>	<input type="text"/>	<input type="text"/>

1 Was any blood drawn?<sup>1</sup>  Yes  No →

*SCBLOOD1*

Reason: *SCWHYN*

1  Refused, did not provide consent 3  Unable  
 2  Refused, other 4  Other: \_\_\_\_\_

2 Was a fasting sample collected?  
 Yes  No *SCFAST*

4 Time of blood draw:  :   am  pm  
 Hours Minutes

3 Time of last meal:  :   am  pm  
 Hours Minutes

5 Date of Lab Processing:  
 /  /   
 Month Day Year

Vial #1:(Clear/0.5 mL serum)	<input type="radio"/> Complete <input type="radio"/> Hemolyzed <input type="radio"/> Partial <input type="radio"/> Hemolyzed/partial <input type="radio"/> Not filled
Vial #2:(Clear/0.5 mL serum)	<input type="radio"/> Complete <input type="radio"/> Hemolyzed <input type="radio"/> Partial <input type="radio"/> Hemolyzed/partial <input type="radio"/> Not filled
Vial #3:(Clear/0.5 mL serum)	<input type="radio"/> Complete <input type="radio"/> Hemolyzed <input type="radio"/> Partial <input type="radio"/> Hemolyzed/partial <input type="radio"/> Not filled
Vial #4:(Clear/0.5 mL serum)	<input type="radio"/> Complete <input type="radio"/> Hemolyzed <input type="radio"/> Partial <input type="radio"/> Hemolyzed/partial <input type="radio"/> Not filled
Vial #5:(Clear/0.5 mL serum)	<input type="radio"/> Complete <input type="radio"/> Hemolyzed <input type="radio"/> Partial <input type="radio"/> Hemolyzed/partial <input type="radio"/> Not filled
Vial #6:(Clear/0.5 mL serum)	<input type="radio"/> Complete <input type="radio"/> Hemolyzed <input type="radio"/> Partial <input type="radio"/> Hemolyzed/partial <input type="radio"/> Not filled
Vial #7:(Clear/0.5 mL serum)	<input type="radio"/> Complete <input type="radio"/> Hemolyzed <input type="radio"/> Partial <input type="radio"/> Hemolyzed/partial <input type="radio"/> Not filled
Vial #8:(Clear/0.5 mL serum)	<input type="radio"/> Complete <input type="radio"/> Hemolyzed <input type="radio"/> Partial <input type="radio"/> Hemolyzed/partial <input type="radio"/> Not filled
Vial #9:(Clear/0.5 mL serum)	<input type="radio"/> Complete <input type="radio"/> Hemolyzed <input type="radio"/> Partial <input type="radio"/> Hemolyzed/partial <input type="radio"/> Not filled
Vial #10:(Clear/0.5 mL serum)	<input type="radio"/> Complete <input type="radio"/> Hemolyzed <input type="radio"/> Partial <input type="radio"/> Hemolyzed/partial <input type="radio"/> Not filled

6 Ending time of laboratory processing:  :   am  pm  
 Hours Minutes

8 Did participant provide consent for future genetics studies?  
 Yes  No





# Grip Strength

Visit 4 Repeat

Office Use Only--									
MrOS ID#					Acrostic			Staff ID#	



### EXCLUSION CRITERIA:

① Has any pain or arthritis in your hands gotten worse recently? **GSWEAK**

1  Yes    0  No    7  Refused    8  Don't Know

Which side? 1  Left    2  Right    3  Both

DO NOT TEST LEFT	DO NOT TEST RIGHT	DO NOT TEST EITHER SIDE
------------------	-------------------	-------------------------

**GSSDWEAK**

② Have you had any surgery on your hands or wrists in the past 3 months (12 weeks)?

1  Yes    0  No    **GSSURG**

Which side? 1  Left    2  Right    3  Both    **GSSDSUR**

DO NOT TEST LEFT	DO NOT TEST RIGHT	DO NOT TEST EITHER SIDE
------------------	-------------------	-------------------------

**GSFLAGEX**

③ **RIGHT SIDE**

**GSRT1**  
Trial 1   kg

**GSRTAB1**    8  Refused  
                  2  Unable, did not attempt

**GSRT2**  
Trial 2   kg

**GSRTAB2**    8  Refused  
                  2  Unable, did not attempt

**GSGRPRAV**

**GSGRPAVG**  
**GSGRPMAX**

**GSUNABLE**

**GS44RAVS**  
**GS44RGSP**

④ **LEFT SIDE**

**GSLF1**  
Trial 1   kg

8  Refused **GSLFAB1**  
2  Unable, did not attempt

**GSLF2**  
Trial 2   kg

8  Refused **GSLFAB2**  
2  Unable, did not attempt

**GSGRPLAV**





# HRpQCT

Office Use Only--  
MrOS ID#

Acrostic

**HQSTAFF**  
Staff ID#

Were any of the HRpQCT scans obtained for this participant? **HQWHY**

**HQSCAN**

Yes  No Reason:  1 Unable  2 Refused  3 Scanner Unavailable  4 Other: \_\_\_\_\_

1 Patient Number/Sample Number:

2 Was a DISTAL RADIUS scan obtained?

Yes  No, refused  No, unable

**HQRAD**

Mark all that apply:

History of fracture on both sides **HQRADUF**  
 Hardware on both sides **HQRADUH**  
 Other: \_\_\_\_\_ **HQRADUO**

A. Ulnar length:

B. Participant's dominant hand:

Left  Right

C. Date of distal radius scan:

D. Which side was scanned?  Left  Right

E. Was the non-dominant side scanned?  Yes  No

F. Measurement Number:

Mark all that apply:

History of fracture  Hardware  Other: \_\_\_\_\_

G. Image Quality:  1  2  3  4  5

Comments: \_\_\_\_\_

**REPEAT SCAN #1**

Refused

H. Measurement Number:

I. Image Quality:

1  2  3  4  5

Comments: \_\_\_\_\_

**REPEAT SCAN #2**

Refused

J. Measurement Number:

K. Image Quality:

1  2  3  4  5

Comments: \_\_\_\_\_

Draft





# HRpQCT

Office Use Only--  
MrOS ID#

MISSING  
Acrostic

--	--	--	--	--	--	--	--	--	--	--	--

3 Were any of the TIBIA scans obtained?

1  Yes 7  No, refused 0  No, unable

↓ **HQTIB**

Mark all that apply:

- History of fracture on both sides
- Injury or surgery related non-weight bearing for 6 weeks or more in past 12 months (both sides)
- Hardware on both sides
- Other:

**HQTIBUF** **HQTIBUH**  
**HQTIBUO**  
**HQTIBUS**

A. Tibia length:

--	--	--

 mm

B. Participant's dominant foot:

Left  Right

C. Which side was scanned?

Left  Right

D. Was the non-dominant side scanned?  Yes  No

E. Was a DISTAL TIBIA scan obtained?

1  Yes 7  No, refused 2  No, other: \_\_\_\_\_

↓ **HQTID**

Mark all that apply:

- History of fracture
- Injury or surgery related non-weight bearing for 6 weeks or more in past 12 months
- Hardware
- Other:

**HQTIBDF** **HQTIBDO**  
**HQTIBDS**

1. Date of distal tibia scan:

		/			/					
Month			Day			Year				

2. Measurement Number:

--	--	--	--	--	--	--	--	--	--

3. Image Quality:

1  2  3  4  5

Comments: \_\_\_\_\_

**REPEAT SCAN #1**

Refused

Comments: \_\_\_\_\_

4. Measurement Number:

--	--	--	--	--	--	--	--	--	--

5. Image Quality:

1  2  3  4  5

**REPEAT SCAN #2**

Refused

Comments: \_\_\_\_\_

6. Measurement Number:

--	--	--	--	--	--	--	--	--	--

7. Image Quality:

1  2  3  4  5

F. Was a PROXIMAL TIBIA scan obtained?

Yes  No, refused  No, software/cast unavailable  No, other: \_\_\_\_\_

1. Date of proximal tibia scan:

		/			/					
Month			Day			Year				

2. Measurement Number:

--	--	--	--	--	--	--	--	--	--

3. Image Quality:

1  2  3  4  5

Comments: \_\_\_\_\_

**REPEAT SCAN #1**

Refused

Comments: \_\_\_\_\_

4. Measurement Number:

--	--	--	--	--	--	--	--	--	--

5. Image Quality:

1  2  3  4  5

**REPEAT SCAN #2**

Refused

Comments: \_\_\_\_\_

6. Measurement Number:

--	--	--	--	--	--	--	--	--	--

7. Image Quality:

1  2  3  4  5

Draft

