THE NATIONAL
CHILDREN'S
STUDY
HEALTH GROWTH ENVIRONMENT

Child Anthropometry Instrument

Event Category:	Time-Based
Event:	6M, 12M, 24M, 36M, 48M, 60M
Administration:	N/A
Instrument Target:	Child
Instrument Respondent:	Primary Caregiver
Domain:	Physical Measures
Document Category:	Physical Measures
Method:	Data Collector Administered
Mode (for this instrument*):	In-Person, CAI
OMB Approved Modes:	In-Person, CAI
Estimated Administration Time:	17 minutes
Multiple Child/Sibling Consideration:	Per Child
Special Considerations:	N/A
Version:	3.0
MDES Release:	4.0

*This instrument is OMB-approved for multi-mode administration but this version of the instrument is designed for administration in this/these mode(s) only.

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Child Anthropometry Instrument

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APPENDICES

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Child Anthropometry Instrument

GENERAL PROGRAMMER INSTRUCTIONS:

WHEN PROGRAMMING INSTRUMENTS, VALIDATE FIELD LENGTHS AND TYPES AGAINST THE MDES TO ENSURE DATA COLLECTION RESPONSES DO NOT EXCEED THOSE OF THE MDES. SOME GENERAL ITEM LIMITS USED ARE AS FOLLOWS:

DATA ELEMENT FIELDS	MAXIMUM CHARACTERS PERMITTED	DATA TYPE	PROGRAMMER INSTRUCTIONS
ADDRESS AND EMAIL FIELDS	100	CHARACTER	
UNIT AND PHONE FIELDS	10	CHARACTER	
_OTH AND COMMENT FIELDS	255	CHARACTER	• Limit text to 255 characters
FIRST NAME AND LAST NAME	30	CHARACTER	• Limit text to 30 characters
ALL ID FIELDS	36	CHARACTER	
ZIP CODE	5	NUMERIC	
ZIP CODE LAST FOUR	4	NUMERIC	
CITY	50	CHARACTER	
DOB AND ALL OTHER DATE FIELDS (E.G., DT, DATE, ETC.)	10	NUMERIC CHARACTER	• DISPLAY AS MM/DD/YYYY • STORE AS YYYY-MM-DD • HARD EDITS: MM MUST EQUAL 01 TO 12 DD MUST EQUAL 01 TO 31 YYYY MUST BE BETWEEN 1900 AND CURRENT YEAR.
TIME VARIABLES	TWO-DIGIT HOUR AND TWO-DIGIT MINUTE, AM/PM DESIGNATION	NUMERIC	• HARD EDITS: HOURS MUST BE BETWEEN 00 AND 12; MINUTES MUST BE BETWEEN 00 AND 59

<u>Instrument Guidelines for Participant and Respondent IDs:</u>

PRENATALLY, THE **P_ID** IN THE MDES HEADER IS THAT OF THE PARTICIPANT (E.G. THE NON-PREGNANT WOMAN, PREGNANT WOMAN, OR THE FATHER).

POSTNATALLY, A RESPONDENT ID WILL BE USED IN ADDITION TO THE PARTICIPANT ID BECAUSE SOMEBODY OTHER THAN THE PARTICIPANT MAY BE COMPLETING THE INTERVIEW. FOR EXAMPLE, THE PARTICIPANT MAY BE THE CHILD AND THE RESPONDENT MAY BE THE MOTHER, FATHER, OR ANOTHER CAREGIVER.

THEREFORE, MDES VERSION 2.2 AND ALL FUTURE VERSIONS CONTAIN A **R_P_ID** (RESPONDENT PARTICIPANT ID) HEADER FIELD FOR EACH POST-BIRTH INSTRUMENT. THIS WILL ALLOW ROCs TO INDICATE WHETHER THE RESPONDENT IS SOMEBODY OTHER THAN THE PARTICIPANT ABOUT WHOM THE QUESTIONS ARE BEING ASKED.

A REMINDER:
ALL RESPONDENTS MUST BE CONSENTED AND HAVE RECORDS IN THE PERSON, PARTICIPANT, PARTICIPANT_CONSENT AND LINK_PERSON_PARTICIPANT TABLES, WHICH CAN BE PRELOADED INTO EACH INSTRUMENT. ADDITIONALLY, IN POST-BIRTH QUESTIONNAIRES WHERE THERE IS THE ABILITY TO LOOP THROUGH A SET OF QUESTIONS FOR MULTIPLE CHILDREN, IT IS IMPORTANT TO CAPTURE AND STORE THE CORRECT CHILD **P_ID** ALONG WITH THE LOOP INFORMATION. IN THE MDES VARIABLE LABEL/DEFINITION COLUMN, THIS IS INDICATED AS FOLLOWS: **EXTERNAL IDENTIFIER: PARTICIPANT ID FOR CHILD DETAIL.**

PHYSICAL MEASURES CHILD ANTHROPOMETRY INSTRUMENT (6-MONTH, 12-MONTH, 24-MONTH, 36-MONTH, 48-MONTH, AND 60-MONTH)

(TIME_STAMP_PMC_ST).

PROGRAMMER INSTRUCTIONS
• INSERT DATE/TIME STAMP • IF **C_FNAME** COLLECTED DURING PVST INSTRUMENT AND RESPONSE ≠ -1, -2 OR -4, PRELOAD **C_FNAME**. • OTHERWISE, IF **C_FNAME** NOT COLLECTED DURING PVST INSTRUMENT OR RESPONSE = -1, -2 OR -4, DISPLAY "the child". • PRELOAD **CHILD_SEX** FROM PVST INSTRUMENT.

PMC01000/(ANTHRO_INTRO).

DATA COLLECTOR INSTRUCTIONS
• EXPLAIN THE ANTHROPOMETRY PROTOCOL FOR THE EVENT TO THE PARENT OR CAREGIVER. • IF THE PARENT OR CAREGIVER REFUSED THE MEASUREMENTS, SELECT REFUSED. • OTHERWISE, SELECT CONTINUE.

Label	Code	Go To
CONTINUE	1	AN_WT_MEAS1
REFUSED	-1	

PMC02000/(AN_REF_REASON). I am sorry that you have chosen not to participate in this activity. Can you please tell me why?

DATA COLLECTOR INSTRUCTIONS
• SELECT ALL THAT APPLY.

Label	Code	Go To
CONCERN ABOUT DISCOMFORT	1	
CHILD SICK	2	
CHILD TIRED/UNHAPPY	3	
OTHER	-5	
NONE GIVEN	-7	

PROGRAMMER INSTRUCTIONS
• IF **AN_REF_REASON** = ANY COMBINATION OF RESPONSE CODES 1 - 3, GO TO **AN_END_REF**. • IF **AN_REF_REASON** = -5, OR ANY COMBINATION OF RESPONSE CODES 1 -3 AND -5, GO TO **AN_REF_REASON_OTH**.

PMC03000/(AN_REF_REASON_OTH). SPECIFY: _____

SOURCE
National Children's Study, Vanguard Phase (Child Anthropometry)

PMC06000/(AN_END_REF). That's fine. Thank you for your time.

PROGRAMMER INSTRUCTIONS
• GO TO **TIME_STAMP_PMC_ET.**

PMC07000/(AN_WT_MEAS1). WEIGHT MEASUREMENT 1.

MEASURED WEIGHT |___|___|___| . |___| kg

DATA COLLECTOR INSTRUCTIONS
• OBTAIN WEIGHT MEASURE.

Label	Code	Go To
REFUSED	-1	AN_WT_MEAS_CNO_REASON
COULD NOT OBTAIN	-8	AN_WT_MEAS_CNO_REASON

SOURCE

PROGRAMMER INSTRUCTIONS
• IF MEASUREMENT IS < 0 OR > 200 KG, DISPLAY HARD EDIT.
• GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.

PMC08000/(AN_WT_MEAS2). WEIGHT MEASUREMENT 2.

MEASURED WEIGHT |___|___|___| . |___| kg

DATA COLLECTOR INSTRUCTIONS
• OBTAIN WEIGHT MEASURE.

Label	Code	Go To
REFUSED	-1	
COULD NOT OBTAIN	-8	

PROGRAMMER INSTRUCTIONS
- IF MEASUREMENT IS < 0 OR > 200 KG, DISPLAY HARD EDIT.   - GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.   - IF **AN_WT_MEAS1** ≠ -1, -8 OR -4 AND **AN_WT_MEAS2** ≠ -1, -8 OR -4, CALCULATE THE ABSOLUTE VALUE OF THE DIFFERENCE BETWEEN **AN_WT_MEAS1** AND **AN_WT_MEAS2**:   - IF **AN_WT_MEAS1** AND **AN_WT_MEAS2** DIFFER BY ≤ 0.3 KG: - CALCULATE THE MEAN OF **AN_WT_MEAS1** AND **AN_WT_MEAS2** AND SAVE AS **AN_WT_MEAS_MEAN**   - GO TO **AN_WT_MEAS_COM**.   - IF **AN_WT_MEAS1** AND **AN_WT_MEAS2** DIFFER BY > 0.3 KG, GO TO **AN_WT_MEAS3**.   - OTHERWISE, IF **AN_WT_MEAS2** = -1 OR -8:   - SAVE **AN_WT_MEAS1** AS **AN_WT_MEAS_MEAN**   - GO TO **AN_WT_MEAS_CNO_REASON**

PMC09000/(AN_WT_MEAS3). WEIGHT MEASUREMENT 3

MEASURED WEIGHT |___|___|___| . |___| kg

DATA COLLECTOR INSTRUCTIONS
OBTAIN WEIGHT MEASURE.

Label	Code	Go To
REFUSED	**-1**	
COULD NOT OBTAIN	**-8**	

PROGRAMMER INSTRUCTIONS
- IF MEASUREMENT IS < 0 OR > 200 KG, DISPLAY HARD EDIT.   - GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.   - IF **AN_WT_MEAS1** ≠ -1, -8 OR -4, **AN_WT_MEAS2** ≠ -1, -8 OR -4, AND **AN_WT_MEAS3** ≠ -1, -8 OR -4:   - IF THE HIGHEST AND LOWEST MEASUREMENTS ARE EQUIDISTANT FROM THE MIDDLE MEASURE, THEN: - SAVE THE MIDDLE MEASURE AS **AN_WT_MEAS_MEAN**   - GO TO **AN_WT_MEAS_COM**   - IF THE HIGHEST AND LOWEST MEASUREMENTS ARE NOT EQUIDISTANT FROM THE MIDDLE MEASURE: - CALCULATE THE MEAN OF THE TWO CLOSEST MEASUREMENTS OF **AN_WT_MEAS1**, **AN_WT_MEAS2**, AND **AN_WT_MEAS3** AND SAVE AS **AN_WT_MEAS_MEAN**   - GO TO **AN_WT_MEAS_COM**.   - OTHERWISE, IF **AN_WT_MEAS3** = -1 OR -8:   - CALCULATE THE MEAN OF **AN_WT_MEAS1** AND **AN_WT_MEAS2**, SAVE

PMC10000/(AN_WT_MEAS_CNO_REASON).

DATA COLLECTOR INSTRUCTIONS
• ENTER REASON(S) YOU COULD NOT OBTAIN THE WEIGHT MEASUREMENT(S).
• SELECT ALL THAT APPLY.

Label	Code	Go To
PARENT/CAREGIVER REFUSAL	1	
CHILD REFUSAL	2	
COMMUNICATION ISSUES	3	
PARENT/CAREGIVER ILL/EMERGENCY	4	
CHILD ILL/EMERGENCY	5	
NO TIME	6	
EQUIPMENT FAILURE	7	
SAFETY EXCLUSION	8	
PHYSICAL LIMITATION	9	
DATA COLLECTOR ERROR	10	
OTHER	-5	
NONE GIVEN	-7	

PROGRAMMER INSTRUCTIONS
• IF **AN_WT_MEAS_CNO_REASON** = ANY COMBINATION OF RESPONSES 1 - 10, GO TO **AN_WT_MEAS_COM**.
• IF **AN_WT_MEAS_CNO_REASON** = -5 OR ANY COMBINATION OF RESPONSES 1 - 10 AND -5, GO TO **AN_WT_MEAS_CNO_REASON_OTH**.
• OTHERWISE, IF **AN_WT_MEAS_CNO_REASON** = -7:
o   DO NOT ALLOW SELECTION OF ADDITIONAL RESPONSES
o   GO TO **AN_WT_MEAS_COM**.

PMC11000/(AN_WT_MEAS_CNO_REASON_OTH).
SPECIFY: _____

PMC12000/(AN_ WT_MEAS_COM).

DATA COLLECTOR INSTRUCTIONS
• ENTER COMMENTS ABOUT WEIGHT MEASUREMENTS.
• SELECT ALL THAT APPLY.

Label	Code	Go To
NONE	1	
DIAPER NOT CLEAN	2	
CHILD WEARING	3	

Label	Code	Go To
CLOTHES		
CHILD WEARING SHOES	4	
OTHER	-5	

PMC13000/(AN_MEAS_WT_COM_OTH). SPECIFY: _____

PMC14000/(CHILD_STANDING). IS THE CHILD ABLE TO STAND?

Label	Code	Go To
YES	1	AN_STAND_HEIGHT1
NO	2	AN_STAND_HEIGHT1

PMC15000/(AN_RECUMB_LENGTH1). FIRST RECUMBENT LENGTH.

MEASURED RECUMBENT LENGTH |___|___|___| . |___| cm

DATA COLLECTOR INSTRUCTIONS
- OBTAIN RECUMBENT LENGTH.

Label	Code	Go To
EXCEEDS CAPACITY	-9	AN_RECUMB_LENGTH_CNO_REASON
REFUSED	-1	AN_RECUMB_LENGTH_CNO_REASON
COULD NOT OBTAIN	-8	AN_RECUMB_LENGTH_CNO_REASON

PROGRAMMER INSTRUCTIONS
USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.

PMC16000/(AN_RECUMB_LENGTH2). SECOND RECUMBENT LENGTH.

MEASURED RECUMBENT LENGTH |___|___|___| . |___| cm

DATA COLLECTOR INSTRUCTIONS
• OBTAIN RECUMBENT LENGTH.

Label	Code	Go To
REFUSED	**-1**	
COULD NOT OBTAIN	**-8**	

PROGRAMMER INSTRUCTIONS

• IF MEASUREMENT IS < 16 OR > 197.5 CM, DISPLAY HARD EDIT.
• GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.
• IF **AN_RECUMB_LENGTH1** ≠ -1, -8 OR -4 AND **AN_RECUMB_LENGTH2** ≠ -1, -8 OR -4, CALCULATE THE ABSOLUTE VALUE OF THE DIFFERENCE BETWEEN **AN_RECUMB_LENGTH1** AND **AN_RECUMB_LENGTH2**:
   o IF **AN_RECUMB_LENGTH1** AND **AN_RECUMB_LENGTH2** DIFFER BY ≤ 1.0 CM:
      ▪ CALCULATE THE MEAN OF **AN_RECUMB_LENGTH1** AND **AN_RECUMB_LENGTH2** AND SAVE AS **AN_RECUMB_LENGTH_MEAN**
      ▪ GO TO **AN_ABOVE_WAIST_ADJ_RECUMB**.
   o IF **AN_RECUMB_LENGTH1** AND **AN_RECUMB_LENGTH2** DIFFER BY > 1.0 CM, GO TO **AN_RECUMB_LENGTH3**.
• OTHERWISE, IF **AN_RECUMB_LENGTH2** = -1 OR -8:
   o SAVE **AN_RECUMB_LENGTH1** AS **AN_RECUMB_LENGTH_MEAN**
   o GO TO **AN_ABOVE_WAIST_ADJ_RECUMB**.

PMC17000/(AN_RECUMB_LENGTH3). THIRD RECUMBENT LENGTH.

MEASURED RECUMBENT LENGTH |___|___|___| . |___| cm

DATA COLLECTOR INSTRUCTIONS
• OBTAIN RECUMBENT LENGTH.

Label	Code	Go To
REFUSED	**-1**	
COULD NOT OBTAIN	**-8**	

PROGRAMMER INSTRUCTIONS
• IF MEASUREMENT IS < 16 OR > 197.5 CM, DISPLAY HARD EDIT. • GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE

AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.
- IF **AN_RECUMB_LENGTH1** ≠ -1, -8 OR -4, **AN_RECUMB_LENGTH2** ≠ -1, -8 OR -4, AND **AN_RECUMB_LENGTH3** ≠ -1, -8 OR -4:
  o IF THE HIGHEST AND LOWEST MEASUREMENTS ARE EQUIDISTANT FROM THE MIDDLE MEASURE, THEN SAVE THE MIDDLE MEASURE AS **AN_RECUMB_LENGTH_MEAN**.
  o IF THE HIGHEST AND LOWEST MEASUREMENTS ARE NOT EQUIDISTANT FROM THE MIDDLE MEASURE, CALCULATE THE MEAN OF THE TWO CLOSEST MEASUREMENTS OF **AN_RECUMB_LENGTH1**, **AN_RECUMB_LENGTH2**, AND **AN_RECUMB_LENGTH3** AND SAVE AS **AN_RECUMB_LENGTH_MEAN**.
- OTHERWISE, IF **AN_RECUMB_LENGTH3** = -1 OR -8, CALCULATE THE MEAN OF **AN_RECUMB_LENGTH1** AND **AN_RECUMB_LENGTH2**, AND SAVE AS **AN_RECUMB_LENGTH_MEAN**.

PMC18000/(AN_ABOVE_WAIST_ADJ_RECUMB). ABOVE WAIST ADJUSTMENT (RECUMBENT).

ABOVE WAIST ADJUSTMENT |___|___| . |___| cm

| DATA COLLECTOR INSTRUCTIONS |
- ENTER "00.0" IF NO ADJUSTMENT IS NEEDED.

| PROGRAMMER INSTRUCTIONS |
- DISPLAY HARD EDIT IF WAIST ADJUSTMENT IS < 0 OR >15.2 CM.

PMC19000/(AN_BELOW_WAIST_ADJ_RECUMB). BELOW WAIST ADJUSTMENT (RECUMBENT).

BELOW WAIST ADJUSTMENT |___|___| . |___| cm

| DATA COLLECTOR INSTRUCTIONS |
- ENTER "00.0" IF NO ADJUSTMENT IS NEEDED.

| PROGRAMMER INSTRUCTIONS |
- DISPLAY HARD EDIT IF WAIST ADJUSTMENT IS < 0 OR >15.2 CM.
- SUBTRACT **AN_ABOVE_WAIST_ADJ_RECUMB** AND **AN_BELOW_WAIST_ADJ_RECUMB** FROM **AN_RECUMB_LENGTH_MEAN** AND SAVE AS **AN_ADJ_RECUMB_LENGTH**.
- IF EITHER **AN_RECUMB_LENGTH2** OR **AN_RECUMB_LENGTH3** = -1 OR -8, GO TO **AN_RECUMB_LENGTH_CNO_REASON**.
- OTHERWISE, GO TO **AN_MEAS_WT_LENGTH_COM**.

PMC21000/(AN_RECUMB_LENGTH_CNO_REASON).

| DATA COLLECTOR INSTRUCTIONS |
- ENTER REASON(S) YOU COULD NOT OBTAIN THE LENGTH MEASUREMENT(S).
- SELECT ALL THAT APPLY.

Label	Code	Go To
PARENT/CAREGIVER REFUSAL	1	
CHILD REFUSAL	2	
COMMUNICATION ISSUES	3	
PARENT/CAREGIVER ILL/EMERGENCY	4	
CHILD ILL/EMERGENCY	5	
NO TIME	6	
EQUIPMENT FAILURE	7	
SAFETY EXCLUSION	8	
PHYSICAL LIMITATION	9	
DATA COLLECTOR ERROR	10	
OTHER	-5	
NONE GIVEN	-7	

PROGRAMMER INSTRUCTIONS

• IF **AN_RECUMB_LENGTH_CNO_REASON** = ANY COMBINATION OF 1 - 10, GO TO **AN_MEAS_LENGTH_COM**.
 • IF **AN_RECUMB_LENGTH_CNO_REASON** = -5 OR ANY COMBINATION OF 1 - 10 AND -5, GO TO **AN_RECUMB_LENGTH_CNO_REASON_OTH**.
 • OTHERWISE, IF **AN_RECUMB_LENGTH_CNO_REASON** = -7:
      o DO NOT ALLOW SELECTION OF ADDITIONAL RESPONSES
      o GO TO **AN_MEAS_LENGTH_COM**.

PMC22000/(AN_RECUMB_LENGTH_CNO_REASON_OTH).
SPECIFY: _____

PMC23000/(AN_MEAS_LENGTH_COM).

DATA COLLECTOR INSTRUCTIONS
• ENTER COMMENTS ABOUT LENGTH MEASUREMENTS AND ABOVE/BELOW WAIST ADJUSTMENTS.   • SELECT ALL THAT APPLY.

Label	Code	Go To
NONE	1	
POSITION NOT STRAIGHT FOR LENGTH	2	
MEDICAL APPLIANCE/CAST NOT REMOVED	3	
AMPUTATION – LEG	4	
OTHER	-5	

PROGRAMMER INSTRUCTIONS
• IF **AN_MEAS _LENGTH_COM** = 1:

PMC24000/(AN_MEAS_LENGTH_COM_OTH). SPECIFY: _____

PROGRAMMER INSTRUCTIONS
• IF EVENT = 6-MONTH EVENT (**EVENT_TYPE** = 24) OR 12-MONTH EVENT   (**EVENT_TYPE** = 27), GO TO **AN_THIGH_LENGTH**.

PMC25000/(AN_STAND_HEIGHT1). FIRST STANDING HEIGHT.

MEASURED STANDING HEIGHT |___|___|___| . |___| cm

DATA COLLECTOR INSTRUCTIONS
• OBTAIN STANDING HEIGHT.

Label	Code	Go To
CHILD UNABLE TO STAND	-7	AN_STAND_HEIGHT_CNO_REASON
EXCEEDS CAPACITY	-9	AN_STAND_HEIGHT_CNO_REASON
REFUSED	-1	AN_STAND_HEIGHT_CNO_REASON
COULD NOT OBTAIN	-8	AN_STAND_HEIGHT_CNO_REASON

PROGRAMMER INSTRUCTIONS

• IF MEASUREMENT IS < 20 OR > 205 CM, DISPLAY HARD EDIT.
 • GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT
  EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE
  AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND
  VISIT_DATE, DISPLAY SOFT EDIT.

PMC26000/(AN_STAND_HEIGHT2). SECOND STANDING HEIGHT.

MEASURED STANDING HEIGHT |___|___|___| . |___| cm

DATA COLLECTOR INSTRUCTIONS
• OBTAIN STANDING HEIGHT.

Label	Code	Go To
REFUSED	-1	
COULD NOT OBTAIN	-8	

PROGRAMMER INSTRUCTIONS

- IF MEASUREMENT IS < 20 OR > 205 CM, DISPLAY HARD EDIT.
- GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS
  CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.
- IF **AN_STAND_HEIGHT1** ≠ -1, -8 OR -4 AND **AN_STAND_HEIGHT2** ≠ -1, -8 OR -4, CALCULATE THE ABSOLUTE VALUE OF THE DIFFERENCE BETWEEN **AN_STAND_HEIGHT1** AND **AN_STAND_HEIGHT2**:
  - o IF **AN_STAND_HEIGHT1** AND **AN_STAND_HEIGHT2** DIFFER BY ≤ 1.0 CM:
    - ▪ CALCULATE THE MEAN OF **AN_STAND_HEIGHT1** AND **AN_STAND_HEIGHT2**, SAVE AS **AN_STAND_HEIGHT_MEAN**
    - ▪ GO TO **AN_ABOVE_WAIST_ADJ_STAND**.
  - o IF **AN_STAND_HEIGHT1** AND **AN_STAND_HEIGHT2** DIFFER BY > 1.0 CM, GO TO **AN_STAND_HEIGHT3**.
- OTHERWISE, IF **AN_STAND_HEIGHT2** = -1 OR -8:
  - o SAVE **AN_STAND_HEIGHT1** AS **AN_STAND_HEIGHT_MEAN**
  - o GO TO **AN_ABOVE_WAIST_ADJ_STAND**.

PMC27000/(AN_STAND_HEIGHT3). THIRD STANDING HEIGHT.

MEASURED STANDING HEIGHT |___|___|___| . |___| cm

DATA COLLECTOR INSTRUCTIONS

- OBTAIN STANDING HEIGHT.

Label	Code	Go To
REFUSED	**-1**	
COULD NOT OBTAIN	**-8**	

PROGRAMMER INSTRUCTIONS

- IF MEASUREMENT IS < 20 OR > 205 CM, DISPLAY HARD EDIT.
- GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS
  CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.
- IF **AN_STAND_HEIGHT1** ≠ -1, -8 OR -4, **AN_STAND_HEIGHT2** ≠ -1, -8 OR -4, AND **AN_STAND_HEIGHT3** ≠ -1, -8 OR -4:
  - o IF THE HIGHEST AND LOWEST MEASUREMENTS ARE EQUIDISTANT FROM THE MIDDLE MEASURE, THEN SAVE THE MIDDLE MEASURE AS **AN_STAND_HEIGHT_MEAN**.
  - o IF THE HIGHEST AND LOWEST MEASUREMENTS ARE NOT EQUIDISTANT FROM THE MIDDLE MEASURE, CALCULATE THE MEAN OF THE TWO CLOSEST MEASUREMENTS OF **AN_STAND_HEIGHT1**, **AN_STAND_HEIGHT2**, AND **AN_STAND_HEIGHT3** AND SAVE AS **AN_STAND_HEIGHT_MEAN**.
- OTHERWISE, IF **AN_STAND_HEIGHT3** = -1 OR -8, CALCULATE THE MEAN OF **AN_STAND_HEIGHT1** AND **AN_STAND_HEIGHT2**, AND SAVE AS **AN_STAND_HEIGHT_MEAN**.

PMC28000/(AN_ABOVE_WAIST_ADJ_STAND). ABOVE WAIST ADJUSTMENT (STANDING HEIGHT).

ABOVE WAIST ADJUSTMENT |___|___| . |___| cm

DATA COLLECTOR INSTRUCTIONS
• ENTER "00.0" IF NO ADJUSTMENT IS NEEDED.

PROGRAMMER INSTRUCTIONS
• DISPLAY HARD EDIT IF WAIST ADJUSTMENT IS < 0 OR >15.2 CM.

PMC29000/(AN_BELOW_WAIST_ADJ_STAND). BELOW WAIST ADJUSTMENT (STANDING HEIGHT).

BELOW WAIST ADJUSTMENT |___|___| . |___| cm

PROGRAMMER INSTRUCTIONS
• DISPLAY HARD EDIT IF WAIST ADJUSTMENT IS < 0 OR >15.2 CM.
• SUBTRACT **AN_ABOVE_WAIST_ADJ_STAND** AND **AN_BELOW_WAIST_ADJ_ST AND** FROM **AN_STAND_HEIGHT_MEAN** AND SAVE AS **AN_ADJ_STAND_HEIGHT**.
• IF EITHER **AN_STAND_HEIGHT2** OR **AN_STAND_HEIGHT3** = -1 OR -8, GO TO **AN_STAND_HEIGHT_CNO_REASON.**
• OTHERWISE, GO TO **AN_MEAS_STAND_HEIGHT_COM.**

PMC31000/(AN_STAND_HEIGHT_CNO_REASON).

DATA COLLECTOR INSTRUCTIONS
• ENTER REASON(S) YOU COULD NOT OBTAIN THE HEIGHT MEASUREMENT(S).
• SELECT ALL THAT APPLY.

Label	Code	Go To
PARENT/CAREGIVER REFUSAL	1	
CHILD REFUSAL	2	
COMMUNICATION ISSUES	3	
PARENT/CAREGIVER ILL/EMERGENCY	4	
CHILD ILL/EMERGENCY	5	
NO TIME	6	
EQUIPMENT FAILURE	7	
SAFETY EXCLUSION	8	
PHYSICAL LIMITATION	9	
DATA COLLECTOR ERROR	10	
OTHER	-5	
NONE GIVEN	-7	

PROGRAMMER INSTRUCTIONS
• IF **AN_ STAND_HEIGHT_CNO_REASON** = ANY COMBINATION OF 1 - 10, GO TO **AN_MEAS_STAND_HEIGHT_COM**.

- IF **AN_STAND_HEIGHT_CNO_REASON** = -5 OR ANY COMBINATION OF 1 - 10 AND -5, GO TO **AN_ STAND_HEIGHT_CNO_REASON_OTH**.
- OTHERWISE, IF **AN_STAND_HEIGHT_CNO_REASON** = -7:

  o DO NOT ALLOW SELECTION OF ADDITIONAL RESPONSES
  o GO TO **AN_MEAS_STAND_HEIGHT_COM**.

PMC32000/(AN_STAND_HEIGHT_CNO_REASON_OTH).
SPECIFY: _____

PMC33000/(AN_MEAS_STAND_HEIGHT_COM).

DATA COLLECTOR INSTRUCTIONS

- ENTER COMMENTS ABOUT STANDING HEIGHT MEASUREMENTS AND ABOVE/BELOW WAIST ADJUSTMENTS.
- SELECT ALL THAT APPLY.

Label	Code	Go To
NONE	1	
POSITION NOT STRAIGHT FOR HEIGHT	2	
MEDICAL APPLIANCE/CAST NOT REMOVED	3	
AMPUTATION – LEG	4	
OTHER	-5	

PROGRAMMER INSTRUCTIONS

- IF **AN_MEAS_STAND_HEIGHT_COM** = 1:
  o DO NOT ALLOW SELECTION OF ADDITIONAL RESPONSES
  o GO TO PROGRAMMER INSTRUCTION FOLLOWING **AN_MEAS_STAND_HEIGHT_COM_OTH**.
- IF **AN_MEAS_STAND_HEIGHT_COM** = ANY COMBINATION OF 2 - 4, GO TO PROGRAMMER INSTRUCTION FOLLOWING **AN_MEAS_STAND_HEIGHT_COM_OTH**.
- IF **AN_MEAS_STAND_HEIGHT_COM** = -5 OR ANY COMBINATION OF 2 - 4 AND -5, GO TO **AN_MEAS_STAND_HEIGHT_COM_OTH**.

PMC34000/(AN_MEAS_STAND_HEIGHT_COM_OTH).
SPECIFY: _____

PROGRAMMER INSTRUCTIONS

- IF 24-MONTH EVENT (**EVENT_TYPE** = 31), GO TO **AN_THIGH_LENGTH**.
- IF 36-MONTH EVENT (**EVENT_TYPE** = 37) OR GREATER, GO TO **AN_WAIST_CIRC1**.

PMC35000/(AN_THIGH_LENGTH). THIGH (FEMUR) LENGTH

MEASURED THIGH (FEMUR) LENGTH |___|___|___| . |___| cm.

DATA COLLECTOR INSTRUCTIONS
• OBTAIN THIGH (FEMUR) LENGTH.

Label	Code	Go To
REFUSED	-1	AN_MID_THIGH_MEAS_CNO_REASON
COULD NOT OBTAIN	-8	AN_MID_THIGH_MEAS_CNO_REASON

PROGRAMMER INSTRUCTIONS
• IF MEASUREMENT IS < 0 OR > 200 CM, DISPLAY HARD EDIT. • IF **AN_THIGH_LENGTH** ≠ -1, -8 OR -4, CREATE DERIVED VARIABLE, **AN_MID_THIGH_LENGTH**, WHERE **AN_MID_THIGH_LENGTH** = **AN_THIGH_LENGTH**/2, THEN GO TO **AN_MID_THIGH_CIRC1**. • OTHERWISE, GO TO **AN_MID_THIGH_MEAS_CNO_REASON.**

PMC36000/(AN_MID_THIGH_CIRC1). MID THIGH CIRCUMFERENCE 1 MEASURED AT {**AN_MID_THIGH_LENGTH**}.

MEASURED MID THIGH CIRCUMFERENCE |___|___|___| . |___| cm.

DATA COLLECTOR INSTRUCTIONS
• TAKE THIGH CIRCUMFERENCE AT THE MIDPOINT OF THIGH LENGTH.

Label	Code	Go To
REFUSED	-1	AN_MID_THIGH_MEAS_CNO_REASON
COULD NOT OBTAIN	-8	AN_MID_THIGH_MEAS_CNO_REASON

PROGRAMMER INSTRUCTIONS
• IF MEASUREMENT IS < 0 OR > 200 CM, DISPLAY HARD EDIT. • GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT. • DISPLAY **AN_MID_THIGH_LENGTH**.

PMC37000/(AN_MID_THIGH_CIRC2). MID THIGH CIRCUMFERENCE 2 MEASURED AT {**AN_MID_THIGH_LENGTH**}.

MEASURED MID THIGH CIRCUMFERENCE |___|___|___| . |___| cm.

DATA COLLECTOR INSTRUCTIONS
• TAKE THIGH CIRCUMFERENCE AT THE MIDPOINT OF THIGH LENGTH.

Label	Code	Go To
REFUSED	-1	
COULD NOT OBTAIN	-8	

PROGRAMMER INSTRUCTIONS

- IF MEASUREMENT IS < 0 OR > 200 CM, DISPLAY HARD EDIT.
- GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS
  CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.
- DISPLAY **AN_MID_THIGH_LENGTH**.
- IF **AN_MID_THIGH_CIRC1** ≠ -1, -8 OR -4 AND **AN_MID_THIGH_CIRC2** ?≠ -1, -8 OR -4, CALCULATE THE ABSOLUTE VALUE OF THE DIFFERENCE BETWEEN **AN_MID_THIGH_CIRC1** AND **AN_MID_THIGH_CIRC2**:
  - o IF **AN_MID_THIGH_CIRC1** AND **AN_MID_THIGH_CIRC2** DIFFER BY ≤ 0.5 CM:
    - ▪ CALCULATE THE MEAN OF **AN_MID_THIGH_CIRC1** AND **AN_MID_THIGH_CIRC2**, SAVE AS **AN_MID_THIGH_CIRC_MEAN**
    - ▪ GO TO **AN_MEAS_MID_THIGH_COM**.
  - o IF **AN_MID_THIGH_CIRC1** AND **AN_MID_THIGH_CIRC2** DIFFER BY > 0.5 CM, GO TO **AN_MID_THIGH_CIRC3**.
- OTHERWISE, IF **AN_MID_THIGH_CIRC2** = -1 OR -8:
  - o SAVE **AN_MID_THIGH_CIRC1** AS **AN_MID_THIGH_CIRC_MEAN**
  - o GO TO **AN_MID_THIGH_MEAS_CNO_REASON**.

PMC38000/(AN_MID_THIGH_CIRC3). MID THIGH CIRCUMFERENCE 3 MEASURED AT {**AN_MID_THIGH_LENGTH**}.

MEASURED MID THIGH CIRCUMFERENCE |___|___|___| . |___| cm.

DATA COLLECTOR INSTRUCTIONS

- TAKE THIGH CIRCUMFERENCE AT THE MIDPOINT OF THIGH LENGTH.

Label	Code	Go To
REFUSED	**-1**	
COULD NOT OBTAIN	**-8**	

PROGRAMMER INSTRUCTIONS

- IF MEASUREMENT IS < 0 OR > 200 CM, DISPLAY HARD EDIT.
- GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS
  CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.
- DISPLAY **AN_MID_THIGH_LENGTH**.
- IF **AN_MID_THIGH_CIRC1** ≠ -1, -8 OR -4, **AN_MID_THIGH_CIRC2** ≠ -1, -8 OR -4, AND **AN_MID_THIGH_CIRC3** ?≠ -1, -8 OR -4:
  - o IF THE HIGHEST AND LOWEST MEASUREMENTS ARE EQUIDISTANT FROM THE MIDDLE MEASURE:
    - ▪ SAVE THE MIDDLE MEASURE AS **AN_MID_THIGH_CIRC_MEAN**
    - ▪ GO TO **AN_MEAS_MID_THIGH_COM**.
  - o IF THE HIGHEST AND LOWEST MEASUREMENTS ARE NOT EQUIDISTANT FROM THE MIDDLE MEASURE:
    - ▪ CALCULATE THE MEAN OF THE TWO CLOSEST MEASUREMENTS

PROGRAMMER INSTRUCTIONS

OF **AN_MID_THIGH_CIRC1**, **AN_MID_THIGH_CIRC2**, AND
            AN_MID_THIGH_CIRC3, SAVE THE VALUE AS
            AN_MID_THIGH_CIRC_MEAN
        ▪ GO TO **AN_MEAS_MID_THIGH_COM**.
• OTHERWISE, IF **AN_MID_THIGH_CIRC3** = -1 OR -8:
    o CALCULATE THE MEAN OF **AN_MID_THIGH_CIRC1** AND
        AN_MID_THIGH_CIRC2, SAVE AS **AN_MID_THIGH_CIRC_MEAN**
    o GO TO **AN_MID_THIGH_MEAS_CNO_REASON**.

PMC39000/(AN_MID_THIGH_MEAS_CNO_REASON).

DATA COLLECTOR INSTRUCTIONS
• ENTER REASON(S) YOU COULD NOT OBTAIN THE THIGH (FEMUR) LENGTH   AND/OR CIRCUMFERENCE MEASUREMENT(S). • SELECT ALL THAT APPLY.

Label	Code	Go To
PARENT/CAREGIVER REFUSAL	1	
CHILD REFUSAL	2	
COMMUNICATION ISSUES	3	
PARENT/CAREGIVER ILL/EMERGENCY	4	
CHILD ILL/EMERGENCY	5	
NO TIME	6	
EQUIPMENT FAILURE	7	
SAFETY EXCLUSION	8	
PHYSICAL LIMITATION	9	
DATA COLLECTOR ERROR	10	
OTHER	-5	
NONE GIVEN	-7	

PROGRAMMER INSTRUCTIONS

• IF **AN_MID_THIGH_MEAS_CNO_REASON** = ANY COMBINATION OF
    RESPONSES 1 - 10, GO TO **AN_MEAS_MID_THIGH_COM**.
• IF **AN_MID_THIGH_MEAS_CNO_REASON** = -5 OR ANY COMBINATION OF
    RESPONSES 1 - 10 AND -5, GO TO **AN_MID_THIGH_MEAS_CNO_REASON_OTH**.
• OTHERWISE, IF **AN_MID_THIGH_MEAS_CNO_REASON** = -7:
 	
    o DO NOT ALLOW SELECTION OF ADDITIONAL RESPONSES
    o GO TO **AN_MEAS_MID_THIGH_COM**.

PMC40000/(AN_MID_THIGH_MEAS_CNO_REASON_OTH).
SPECIFY: _____

PMC41000/(AN_MEAS_MID_THIGH_COM).

- ENTER COMMENT(S) ABOUT THIGH (FEMUR) LENGTH AND THIGH CIRCUMFERENCE MEASUREMENTS.
- SELECT ALL THAT APPLY.

Label	Code	Go To
NONE	1	
MEASUREMENT TAKEN OVER THICK CLOTHING	2	
MEASUREMENT TAKEN ON LEFT THIGH	3	
MEDICAL APPLIANCE/CAST NOT REMOVED	4	
AMPUTATION – LEG	5	
OTHER	-5	

PROGRAMMER INSTRUCTIONS

- IF **AN_MEAS_MID_THIGH_COM** = 1:

  - DO NOT ALLOW SELECTION OF ADDITIONAL RESPONSES
  - GO TO **AN_WAIST_CIRC1**.
- IF **AN_MEAS_MID_THIGH_COM** = ANY COMBINATION OF RESPONSES 2 - 5, GO TO **AN_WAIST_CIRC1**.
- IF **AN_MEAS_MID_THIGH_COM** = -5 OR ANY COMBINATION OF RESPONSES 2 – 5 AND -5, GO TO **AN_MEAS_MID_THIGH_COM_OTH**.

PMC42000/(AN_MEAS_MID_THIGH_COM_OTH). SPECIFY: _____

PMC43000/(AN_WAIST_CIRC1). WAIST CIRCUMFERENCE 1

MEASURED WAIST CIRCUMFERENCE |___|___|___| . |___| cm.

DATA COLLECTOR INSTRUCTIONS

- OBTAIN WAIST CIRCUMFERENCE.

Label	Code	Go To
REFUSED	-1	AN_WAIST_CIRC_CNO_REASON
COULD NOT OBTAIN	-8	AN_WAIST_CIRC_CNO_REASON

PROGRAMMER INSTRUCTIONS

- IF MEASUREMENT IS < 0 OR > 200 CM, DISPLAY HARD EDIT.
- GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.

PMC44000/(AN_WAIST_CIRC2). WAIST CIRCUMFERENCE 2

MEASURED WAIST CIRCUMFERENCE |___|___|___| . |___| cm.

Label	Code	Go To
REFUSED	**-1**	
COULD NOT OBTAIN	**-8**	

PROGRAMMER INSTRUCTIONS

• IF MEASUREMENT IS < 0 OR > 200 CM, DISPLAY HARD EDIT.
• GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS
CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.
• IF **AN_WAIST_CIRC1** ≠ -1, -8 OR -4 AND **AN_WAIST_CIRC2** ?≠ -1, -8 OR -4, CALCULATE THE ABSOLUTE VALUE OF THE DIFFERENCE BETWEEN **AN_WAIST_CIRC1** AND **AN_WAIST_CIRC2**:
    o IF **AN_WAIST_CIRC1** AND **AN_WAIST_CIRC2** DIFFER BY ≤ 1.0 CM:
        ▪ CALCULATE THE MEAN OF **AN_WAIST_CIRC1** AND **AN_WAIST_CIRC2**, SAVE AS **AN_WAIST_CIRC_MEAN**
        ▪ GO TO **AN_MEAS_WAIST_CIRC_COM**.
    o IF **AN_WAIST_CIRC1** AND **AN_WAIST_CIRC2** DIFFER BY > 1.0 CM, GO TO **AN_WAIST_CIRC3**.
• OTHERWISE, IF **AN_WAIST_CIRC2** =-1 OR -8:
    o SAVE **AN_WAIST_CIRC1** AS **AN_WAIST_CIRC_MEAN**
    o GO TO **AN_MEAS_WAIST_CIRC_CNO_REASON**.

PMC45000/(AN_WAIST_CIRC3). WAIST CIRCUMFERENCE 3

MEASURED WAIST CIRCUMFERENCE |___|___|___| . |___| cm.

Label	Code	Go To
REFUSED	**-1**	
COULD NOT OBTAIN	**-8**	

PROGRAMMER INSTRUCTIONS
• IF MEASUREMENT IS < 0 OR > 200 CM, DISPLAY HARD EDIT. • GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.   o DIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT. • IF **AN_WAIST_CIRC1** ≠ -1, -8 OR -4, **AN_WAIST_CIRC2** ≠ -1, -8 OR -4, AND

PROGRAMMER INSTRUCTIONS

AN_WAIST_CIRC3 ?≠ -1, -8 OR -4:
    o IF THE HIGHEST AND LOWEST MEASUREMENTS ARE EQUIDISTANT FROM THE MIDDLE MEASURE:
        ▪ SAVE THE MIDDLE MEASURE AS **AN_WAIST_CIRC_MEAN**
        ▪ GO TO **AN_MEAS_WAIST_CIRC_COM**.
    o IF THE HIGHEST AND LOWEST MEASUREMENTS ARE NOT EQUIDISTANT FROM THE MIDDLE MEASURE:
        ▪ CALCULATE THE MEAN OF THE TWO CLOSEST MEASUREMENTS OF **AN_WAIST_CIRC1**, **AN_WAIST_CIRC2**, AND **AN_WAIST_CIRC3**, SAVE THE VALUE AS **AN_WAIST_CIRC_MEAN**
        ▪ GO TO **AN_MEAS_WAIST_CIRC_COM**.
  • OTHERWISE, IF **AN_WAIST_CIRC3** = -1 OR -8:
    o CALCULATE THE MEAN OF **AN_WAIST_CIRC1** AND **AN_WAIST_CIRC2**, SAVE AS **AN_WAIST_CIRC_MEAN**
    o GO TO **AN_WAIST_CIRC_CNO_REASON**.

PMC46000/(AN_WAIST_CIRC_CNO_REASON).

DATA COLLECTOR INSTRUCTIONS
• ENTER REASON(S) THAT YOU COULD NOT OBTAIN THE WAIST CIRCUMFERENCE MEASURE(S). • SELECT ALL THAT APPLY.

Label	Code	Go To
PARENT/CAREGIVER REFUSAL	1	
CHILD REFUSAL	2	
COMMUNICATION ISSUES	3	
PARENT/CAREGIVER ILL/EMERGENCY	4	
CHILD ILL/EMERGENCY	5	
NO TIME	6	
EQUIPMENT FAILURE	7	
SAFETY EXCLUSION	8	
PHYSICAL LIMITATION	9	
DATA COLLECTOR ERROR	10	
OTHER	-5	
NONE GIVEN	-7	

PROGRAMMER INSTRUCTIONS

• IF **AN_WAIST_CIRC_CNO_REASON** = ANY COMBINATION OF RESPONSES 1 - 10, GO TO **AN_MEAS_WAIST_CIRC_COM**.
• IF **AN_WAIST_CIRC_CNO_REASON** = -5 OR ANY COMBINATION OF RESPONSES 1 - 10 AND -5, GO TO **AN_WAIST_CIRC_CNO_REASON_OTH**.
• OTHERWISE, IF **AN_WAIST_CIRC_CNO_REASON** = -7:
 	
    o DO NOT ALLOW SELECTION OF ADDITIONAL RESPONSES
    o GO TO **AN_MEAS_WAIST_CIRC_COM**.

PMC47000/(AN_WAIST_CIRC_CNO_REASON_OTH).
SPECIFY: _____

PMC48000/(AN_MEAS_WAIST_CIRC_COM).

DATA COLLECTOR INSTRUCTIONS
• ENTER COMMENTS ABOUT WAIST CIRCUMFERENCE MEASUREMENTS.   • SELECT ALL THAT APPLY.

Label	Code	Go To
NONE	1	
MEASUREMENT TAKEN OVER THICK CLOTHING	2	
MEDICAL APPLIANCE/CAST NOT REMOVED	3	
OTHER	-5	

PROGRAMMER INSTRUCTIONS

• IF **AN_MEAS_WAIST_CIRC_COM** = 1:
 	
     o DO NOT ALLOW SELECTION OF ADDITIONAL RESPONSES
     o GO TO PROGRAMMER INSTRUCTION FOLLOWING **AN_MEAS_WAIST_CIRC_COM_OTH**.
 • IF **AN_MEAS_WAIST_CIRC_COM** = ANY COMBINATION OF 2 AND 3, GO TO PROGRAMMER INSTRUCTION FOLLOWING **AN_MEAS_WAIST_CIRC_COM_OTH**.
 • OTHERWISE, IF **AN_MEAS_WAIST_CIRC_COM** = -5 OR ANY COMBINATION OF 2 AND 3 AND -5, GO TO **AN_MEAS_WAIST_CIRC_OTH**.

PMC49000/(AN_MEAS_WAIST_CIRC_COM_OTH). DATA COLLECTOR MEASUREMENT COMMENTS

SPECIFY: _____

PROGRAMMER INSTRUCTIONS
• IF 48-MONTH EVENT (**EVENT_TYPE** = 39) OR 60-MONTH EVENT (EVENT_TYPE = XX), GO TO **AN_UPPER_ARM_LENGTH**.   • OTHERWISE, GO TO **AN_HEAD_CIRC1.**

PMC50000/(AN_HEAD_CIRC1). HEAD CIRCUMFERENCE 1

MEASURED HEAD CIRCUMFERENCE |___|___| . |___| cm.

DATA COLLECTOR INSTRUCTIONS
• OBTAIN HEAD CIRCUMFERENCE.

Label	Code	Go To
REFUSED	-1	AN_HEAD_CIRC_CNO_REASON
COULD NOT OBTAIN	-8	AN_HEAD_CIRC_CNO_REASON

PROGRAMMER INSTRUCTIONS
• IF MEASUREMENT IS < 0 OR > 70 CM, DISPLAY HARD EDIT. • GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.

PMC51000/(AN_HEAD_CIRC2). HEAD CIRCUMFERENCE 2

MEASURED HEAD CIRCUMFERENCE |___|___| . |___| cm.

DATA COLLECTOR INSTRUCTIONS
• OBTAIN HEAD CIRCUMFERENCE.

Label	Code	Go To
REFUSED	-1	
COULD NOT OBTAIN	-8	

PROGRAMMER INSTRUCTIONS

• IF MEASUREMENT IS < 0 OR > 70 CM, DISPLAY HARD EDIT.
• GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.
• IF **AN_HEAD_CIRC1** ≠ -1, -8 OR -4 AND **AN_HEAD_CIRC2** ≠ -1, -8 OR -4, CALCULATE THE ABSOLUTE VALUE OF THE DIFFERENCE BETWEEN **AN_HEAD_CIRC1** AND **AN_HEAD_CIRC2**:
   o IF **AN_HEAD_CIRC1** AND **AN_HEAD_CIRC2** DIFFER BY ≤ 0.3 CM:
      ▪ CALCULATE THE MEAN OF **AN_HEAD_CIRC1** AND **AN_HEAD_CIRC2**, SAVE AS **AN_HEAD_CIRC_MEAN**
      ▪ GO TO **AN_MEAS_HEAD_CIRC_COM**.
   o IF **AN_HEAD_CIRC1** AND **AN_HEAD_CIRC2** DIFFER BY > 0.3 CM, GO TO **AN_HEAD_CIRC3**.
• OTHERWISE, IF **AN_HEAD_CIRC2** = -1 OR -8:
   o SAVE **AN_HEAD_CIRC1** AS **AN_HEAD_CIRC_MEAN**
   o GO TO **AN_HEAD_CIRC_CNO_REASON**.

PMC52000/(AN_HEAD_CIRC3). HEAD CIRCUMFERENCE 3

MEASURED HEAD CIRCUMFERENCE |___|___| . |___| cm.

DATA COLLECTOR INSTRUCTIONS
• OBTAIN HEAD CIRCUMFERENCE.

Label	Code	Go To
REFUSED	-1	
COULD NOT OBTAIN	-8	

PROGRAMMER INSTRUCTIONS

• IF MEASUREMENT IS < 0 OR > 70 CM, DISPLAY HARD EDIT.
• GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.
• IF **AN_HEAD_CIRC1** ≠ -1, -8 OR -4, **AN_HEAD_CIRC2** ≠ -1, -8 OR -4, AND **AN_HEAD_CIRC3** ?≠ -1, -8 OR -4:
   o IF THE HIGHEST AND LOWEST MEASUREMENTS ARE EQUIDISTANT FROM THE MIDDLE MEASURE:
      ▪ SAVE THE MIDDLE MEASURE AS **AN_HEAD_CIRC_MEAN**
      ▪ GO TO **AN_MEAS_HEAD_CIRC_COM**.
   o IF THE HIGHEST AND LOWEST MEASUREMENTS ARE NOT EQUIDISTANT FROM THE MIDDLE MEASURE:
      ▪ CALCULATE THE MEAN OF THE TWO CLOSEST MEASUREMENTS OF **AN_HEAD_CIRC1**, **AN_HEAD_CIRC2**, AND **AN_HEAD_CIRC3**, SAVE THE VALUE AS **AN_HEAD_CIRC_MEAN**
      ▪ GO TO **AN_MEAS_HEAD_CIRC_COM**.
• OTHERWISE, IF **AN_HEAD_CIRC3** = -1 OR -8:
   o CALCULATE THE MEAN OF **AN_HEAD_CIRC1** AND **AN_HEAD_CIRC2**, SAVE AS **AN_HEAD_CIRC_MEAN**
   o GO TO **AN_HEAD_CIRC_CNO_REASON**.

PMC53000/(AN_HEAD_CIRC_CNO_REASON).

DATA COLLECTOR INSTRUCTIONS
• ENTER REASON(S) YOU COULD NOT OBTAIN THE HEAD CIRCUMFERENCE MEASURE(S). • SELECT ALL THAT APPLY.

Label	Code	Go To
PARENT/CAREGIVER REFUSAL	1	
CHILD REFUSAL	2	
COMMUNICATION ISSUES	3	
PARENT/CAREGIVER ILL/EMERGENCY	4	
CHILD ILL/EMERGENCY	5	
NO TIME	6	
EQUIPMENT FAILURE	7	
SAFETY EXCLUSION	8	
PHYSICAL LIMITATION	9	
DATA COLLECTOR ERROR	10	
OTHER	-5	
NONE GIVEN	-7	

PMC54000/(AN_HEAD_CIRC_CNO_REASON_OTH).
SPECIFY: _____

PMC55000/(AN_MEAS_HEAD_CIRC_COM).

DATA COLLECTOR INSTRUCTIONS
• ENTER COMMENTS ABOUT HEAD CIRCUMFERENCE MEASUREMENT(S).
• SELECT ALL THAT APPLY.

Label	Code	Go To
NONE	1	
MEASUREMENT TAKEN OVER THICK HAIRSTYLE	2	
MEASUREMENT TAKEN OVER HAIR/HEADPIECE	3	
CHILD NOT STILL DURING MEASURE	4	
OTHER	-5	

PMC56000/(AN_MEAS_HEAD_CIRC_COM_OTH). DATA COLLECTOR MEASUREMENT COMMENTS

SPECIFY: _____

PMC57000/(AN_UPPER_ARM_LENGTH). UPPER ARM (HUMERUS) LENGTH

MEASURED HUMERUS LENGTH |___|___| . |___| cm.

DATA COLLECTOR INSTRUCTIONS
• OBTAIN UPPER ARM (HUMERUS) LENGTH.

Label	Code	Go To
REFUSED	-1	AN_MID_UPARM_MEAS_CNO_REAS
COULD NOT OBTAIN	-8	AN_MID_UPARM_MEAS_CNO_REAS

PROGRAMMER INSTRUCTIONS
• IF MEASUREMENT IS < 0 OR > 80 CM, DISPLAY HARD EDIT.
• GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.
• IF **AN_UPPER_ARM_LENGTH** ≠ -1, -8 OR -4:
o CREATE DERIVED VARIABLE, **AN_MID_UPPER_ARM_LENGTH**, WHERE **AN_MID_UPPER_ARM_LENGTH** = **AN_UPPER_ARM_LENGTH**/2
o GO TO **AN_MID_UPPER_ARM_CIRC1**.

PMC58000/(AN_MID_UPPER_ARM_CIRC1). MID UPPER ARM CIRCUMFERENCE 1 MEASURED AT {**AN_MID_UPPER_ARM_LENGTH**}.

MEASURED MID UPPER ARM CIRCUMFERENCE |___|___| . |___| cm.

DATA COLLECTOR INSTRUCTIONS
• TAKE UPPER ARM CIRCUMFERENCE AT THE UPPER ARM (HUMERUS) MIDPOINT.

Label	Code	Go To
REFUSED	-1	AN_MID_UPARM_MEAS_CNO_REAS
COULD NOT OBTAIN	-8	AN_MID_UPARM_MEAS_CNO_REAS

PROGRAMMER INSTRUCTIONS
• IF MEASUREMENT IS < 0 OR > 70 CM, DISPLAY HARD EDIT.
• GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.
• DISPLAY **AN_MID_UPPER_ARM_LENGTH**.

PMC59000/(AN_MID_UPPER_ARM_CIRC2). MID UPPER ARM CIRCUMFERENCE 2 MEASURED AT {**AN_MID_UPPER_ARM_LENGTH**}.

MEASURED MID UPPER ARM CIRCUMFERENCE |___|___| . |___| cm.

DATA COLLECTOR INSTRUCTIONS
• TAKE UPPER ARM CIRCUMFERENCE AT THE UPPER ARM (HUMERUS)

Label	Code	Go To
REFUSED	**-1**	
COULD NOT OBTAIN	**-8**	

PROGRAMMER INSTRUCTIONS

• IF MEASUREMENT IS < 0 OR > 70 CM, DISPLAY HARD EDIT.
• GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.
• DISPLAY **AN_MID_UPPER_ARM_LENGTH**.
• IF **AN_MID_UPPER_ARM_CIRC1** ≠ -1, -8 OR -4 AND **AN_MID_UPPER_ARM_CIRC2** ?≠ -1, -8 OR -4, CALCULATE THE ABSOLUTE VALUE OF THE DIFFERENCE BETWEEN **AN_MID_UPPER_ARM_CIRC1** AND **AN_MID_UPPER_ARM_CIRC2**:
   o IF **AN_MID_UPPER_ARM_CIRC1** AND **AN_MID_UPPER_ARM_CIRC2** DIFFER BY ≤ 0.5 CM:
      ▪ CALCULATE THE MEAN OF **AN_MID_UPPER_ARM_CIRC1** AND **AN_MID_UPPER_ARM_CIRC2**, SAVE AS **AN_MID_UPPER_ARM_CIRC_MEAN**
      ▪ GO TO **AN_MEAS_MID_UPPER_ARM_COM**.
   o IF **AN_MID_UPPER_ARM_CIRC1** AND **AN_MID_UPPER_ARM_CIRC2** DIFFER BY > 0.5 CM, GO TO **AN_MID_UPPER_ARM_CIRC3**.
• OTHERWISE, IF **AN_MID_UPPER_ARM_CIRC2** = -1 OR -8:
   o SAVE **AN_MID_UPPER_ARM_CIRC1** AS **AN_MID_UPPER_ARM_CIRC_MEAN**
   o GO TO **AN_MID_UPARM_MEAS_CNO_REAS**.

PMC60000/(AN_MID_UPPER_ARM_CIRC3). MID UPPER ARM CIRCUMFERENCE 3 MEASURED AT {**AN_MID_UPPER_ARM_LENGTH**}.

MEASURED MID UPPER ARM CIRCUMFERENCE |___|___| . |___| cm.

DATA COLLECTOR INSTRUCTIONS
• TAKE UPPER ARM CIRCUMFERENCE AT THE UPPER ARM (HUMERUS) MIDPOINT.

Label	Code	Go To
REFUSED	**-1**	
COULD NOT OBTAIN	**-8**	

PROGRAMMER INSTRUCTIONS
• IF MEASUREMENT IS < 0 OR > 70 CM, DISPLAY HARD EDIT. • GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.

PROGRAMMER INSTRUCTIONS
- DISPLAY **AN_MID_UPPER_ARM_LENGTH**.
- IF **AN_MID_UPPER_ARM_CIRC1** ≠ -1, -8 OR -4, **AN_MID_UPPER_ARM_CIRC2** ≠ - 1, -8 OR -4, AND **AN_MID_UPPER_ARM_CIRC3** ?≠ -1, -8 OR -4:
  - o IF THE HIGHEST AND LOWEST MEASUREMENTS ARE EQUIDISTANT FROM THE MIDDLE MEASURE:
    - ▪ SAVE THE MIDDLE MEASURE AS **AN_MID_UPPER_ARM_CIRC_MEAN**
    - ▪ GO TO **AN_MEAS_MID_UPPER_ARM_COM**.
  - o IF THE HIGHEST AND LOWEST MEASUREMENTS ARE NOT EQUIDISTANT FROM THE MIDDLE MEASURE:
    - ▪ CALCULATE THE MEAN OF THE TWO CLOSEST MEASUREMENTS OF **AN_MID_UPPER_ARM_CIRC1**, **AN_MID_UPPER_ARM_CIRC2**, AND **AN_MID_UPPER_ARM_CIRC3**, SAVE THE VALUE AS **AN_MID_UPPER_ARM_CIRC_MEAN**
    - ▪ GO TO **AN_MEAS_MID_UPPER_ARM_COM**.
- OTHERWISE, IF **AN_MID_UPPER_ARM_CIRC3** = -1 OR -8:
  - o CALCULATE THE MEAN OF **AN_MID_UPPER_ARM_CIRC1** AND **AN_MID_UPPER_ARM_CIRC2**, SAVE AS **AN_MID_UPPER_ARM_CIRC_MEAN**
  - o GO TO **AN_MID_UPARM_MEAS_CNO_REAS**.

PMC61000/(AN_MID_UPARM_MEAS_CNO_REAS).

DATA COLLECTOR INSTRUCTIONS
- ENTER REASON(S) YOU COULD NOT OBTAIN THE MID UPPER ARM (HUMERUS) LENGTH AND/OR CIRCUMFERENCE MEASUREMENT(S).
- SELECT ALL THAT APPLY.

Label	Code	Go To
PARENT/CAREGIVER REFUSAL	1	
CHILD REFUSAL	2	
COMMUNICATION ISSUES	3	
PARENT/CAREGIVER ILL/EMERGENCY	4	
CHILD ILL/EMERGENCY	5	
NO TIME	6	
EQUIPMENT FAILURE	7	
SAFETY EXCLUSION	8	
PHYSICAL LIMITATION	9	
DATA COLLECTOR ERROR	10	
OTHER	-5	
NONE GIVEN	-7	

PROGRAMMER INSTRUCTIONS
- IF **AN_MID_UPARM_MEAS_CNO_REAS** = ANY COMBINATION OF RESPONSES 1 - 10, GO TO **AN_MEAS_MID_UPPER_ARM_COM**.
- IF **AN_MID_UPARM_MEAS_CNO_REAS** = -5 OR ANY COMBINATION OF RESPONSES 1 - 10 AND -5, GO TO **AN_MID_UPARM_MEAS_CNO_REAS_OTH**.

• OTHERWISE, IF **AN_MID_UPARM_MEAS_CNO_REAS** = -7:	
o DO NOT ALLOW SELECTION OF ADDITIONAL RESPONSES	
o GO TO **AN_MEAS_MID_UPPER_ARM_COM**.	

PMC62000/(AN_MID_UPARM_MEAS_CNO_REAS_OTH).
SPECIFY: _____

PMC63000/(AN_MEAS_MID_UPPER_ARM_COM).

DATA COLLECTOR INSTRUCTIONS
- ENTER COMMENT(S) ABOUT MID UPPER ARM (HUMERUS) LENGTH AND CIRCUMFERENCE MEASURMENTS.
- SELECT ALL THAT APPLY.

Label	Code	Go To
NONE	1	
MEASUREMENT TAKEN OVER THICK CLOTHING	2	
MEASUREMENT TAKEN ON LEFT ARM	3	
MEDICAL APPLIANCE/CAST NOT REMOVED	4	
AMPUTATION – ARM	5	
OTHER	-5	

PROGRAMMER INSTRUCTIONS
- IF **AN_MEAS_MID_UPPER_ARM_COM** = 1:

   o DO NOT ALLOW SELECTION OF ADDITIONAL RESPONSES
   o GO TO PROGRAMMER INSTRUCTION FOLLOWING **AN_MEAS_MID_UPPER_ARM_COM_OTH**.
- IF **AN_MEAS_MID_UPPER_ARM_COM** = ANY COMBINATION OF RESPONSES 2 - 5, GO TO PROGRAMMER INSTRUCTION FOLLOWING **AN_MEAS_MID_UPPER_ARM_COM_OTH**.
- IF **AN_MEAS_MID_UPPER_ARM_COM** = -5 OR ANY COMBINATION OF RESPONSE CODES 2 – 5 AND -5, GO TO **AN_MEAS_MID_UPPER_ARM_COM_OTH**.

PMC64000/(AN_MEAS_MID_UPPER_ARM_COM_OTH).
SPECIFY: _____

PROGRAMMER INSTRUCTIONS
- IF 6-MONTH EVENT (**EVENT_TYPE** = 24), 12-MONTH EVENT (**EVENT_TYPE** = 27), 24-MONTH EVENT (**EVENT_TYPE** = 31), 48-MONTH EVENT (**EVENT_TYPE** = 39), OR 60-MONTH EVENT (**EVENT_TYPE** = XX), GO TO **AN_LOWER_ARM_LENGTH1**.
- IF 36-MONTH EVENT (**EVENT_TYPE** = 37), GO TO **PMC86000.**

PMC65000/(AN_LOWER_ARM_LENGTH1). LOWER ARM (ULNAR) LENGTH 1

MEASURED LOWER ARM (ULNAR) LENGTH |___|___| . |___| cm.

DATA COLLECTOR INSTRUCTIONS
• OBTAIN LOWER ARM (ULNAR) LENGTH.

Label	Code	Go To
REFUSED	-1	AN_LOWER_ARM_CNO_REASON
COULD NOT OBTAIN	-8	AN_LOWER_ARM_CNO_REASON

PROGRAMMER INSTRUCTIONS
• IF MEASUREMENT IS < 0 OR > 80 CM, DISPLAY HARD EDIT. • GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.

PMC66000/(AN_LOWER_ARM_LENGTH2). LOWER ARM (ULNAR) LENGTH 2

MEASURED LOWER ARM (ULNAR) LENGTH |___|___| . |___| cm.

DATA COLLECTOR INSTRUCTIONS
• OBTAIN LOWER ARM (ULNAR) LENGTH.

Label	Code	Go To
REFUSED	-1	
COULD NOT OBTAIN	-8	

PROGRAMMER INSTRUCTIONS

• IF MEASUREMENT IS < 0 OR > 80 CM, DISPLAY HARD EDIT.
• GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.
• IF **AN_LOWER_ARM_LENGTH1** ≠ -1, -8 OR -4 AND **AN_LOWER_ARM_LENGTH2** ?≠ -1, -8 OR -4, CALCULATE THE ABSOLUTE VALUE OF THE DIFFERENCE BETWEEN **AN_LOWER_ARM_LENGTH1** AND **AN_LOWER_ARM_LENGTH2**:
 o IF **AN_LOWER_ARM_LENGTH1** AND **AN_LOWER_ARM_LENGTH2** DIFFER BY < 0.2 CM:
  ▪ CALCULATE THE MEAN OF **AN_LOWER_ARM_LENGTH1** AND **AN_LOWER_ARM_LENGTH2**, SAVE AS **AN_LOWER_ARM_LENGTH_MEAN**,
  ▪ GO TO **AN_LOWER_ARM_LENGTH_COM**.
 o IF **AN_LOWER_ARM_LENGTH1** AND **AN_LOWER_ARM_LENGTH2** DIFFER BY ≥ 0.2 CM, GO TO **AN_LOWER_ARM_LENGTH3**.

PROGRAMMER INSTRUCTIONS
• OTHERWISE, IF **AN_LOWER_ARM_LENGTH2** = -1 OR -8: 　o SAVE **AN_LOWER_ARM_LENGTH1** AS 　　**AN_LOWER_ARM_LENGTH_MEAN** 　o GO TO **AN_LOWER_ARM_CNO_REASON**.

PMC67000/(AN_LOWER_ARM_LENGTH3). LOWER ARM (ULNAR) LENGTH 3

MEASURED LOWER ARM (ULNAR) LENGTH 　　|___|___| . |___| cm.

DATA COLLECTOR INSTRUCTIONS
• OBTAIN LOWER ARM (ULNAR) LENGTH.

Label	Code	Go To
REFUSED	**-1**	
COULD NOT OBTAIN	**-8**	

PROGRAMMER INSTRUCTIONS
• IF MEASUREMENT IS < 0 OR > 80 CM, DISPLAY HARD EDIT. • GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT. • IF **AN_LOWER_ARM_LENGTH1** ≠ -1, -8 OR -4, **AN_LOWER_ARM_LENGTH2** ≠ -1, -8 OR -4, AND **AN_LOWER_ARM_LENGTH3** ?≠ -1, -8 OR -4: 　o IF THE HIGHEST AND LOWEST MEASUREMENTS ARE EQUIDISTANT FROM THE MIDDLE MEASURE: 　　▪ SAVE THE MIDDLE MEASURE AS 　　　**AN_LOWER_ARM_LENGTH_MEAN** 　　▪ GO TO **AN_LOWER_ARM_LENGTH_COM**. 　o IF THE HIGHEST AND LOWEST MEASUREMENTS ARE NOT EQUIDISTANT FROM THE MIDDLE MEASURE: 　　▪ CALCULATE THE MEAN OF THE TWO CLOSEST MEASUREMENTS OF **AN_LOWER_ARM_LENGTH1**, **AN_LOWER_ARM_LENGTH2**, AND **AN_LOWER_ARM_LENGTH3**, SAVE THE VALUE AS **AN_LOWER_ARM_LENGTH_MEAN** 　　▪ GO TO **AN_LOWER_ARM_LENGTH_COM**. • OTHERWISE, IF **AN_LOWER_ARM_LENGTH3** = -1 OR -8: 　o CALCULATE THE MEAN OF **AN_LOWER_ARM_LENGTH1** AND 　　**AN_LOWER_ARM_LENGTH2**, SAVE AS 　　**AN_LOWER_ARM_LENGTH_MEAN** 　o GO TO **AN_LOWER_ARM_CNO_REASON**.

PMC68000/(AN_LOWER_ARM_CNO_REASON).

DATA COLLECTOR INSTRUCTIONS
• ENTER REASON(S) YOU COULD NOT OBTAIN THE MID LOWER ARM (ULNAR) LENGTH MEASUREMENT(S). • SELECT ALL THAT APPLY.

Label	Code	Go To
PARENT/CAREGIVER REFUSAL	1	
CHILD REFUSAL	2	
COMMUNICATION ISSUES	3	
PARENT/CAREGIVER ILL/EMERGENCY	4	
CHILD ILL/EMERGENCY	5	
NO TIME	6	
EQUIPMENT FAILURE	7	
SAFETY EXCLUSION	8	
PHYSICAL LIMITATION	9	
DATA COLLECTOR ERROR	10	
OTHER	-5	
NONE GIVEN	-7	

PROGRAMMER INSTRUCTIONS

• IF **AN_LOWER_ARM_CNO_REASON** = ANY COMBINATION OF RESPONSES 1 - 10, GO TO **AN_LOWER_ARM_LENGTH_COM**.
• IF **AN_LOWER_ARM_CNO_REASON** = -5 OR ANY COMBINATION OF RESPONSES 1 - 10 AND -5, GO TO **AN_LOWER_ARM_CNO_REASON_OTH**.
• OTHERWISE, IF **AN_LOWER_ARM_CNO_REASON** = -7:
 	
    o DO NOT ALLOW SELECTION OF ADDITIONAL RESPONSES
    o GO TO **AN_LOWER_ARM_LENGTH_COM**.

PMC69000/(AN_LOWER_ARM_CNO_REASON_OTH).
SPECIFY: _____

PMC70000/(AN_LOWER_ARM_LENGTH_COM).

DATA COLLECTOR INSTRUCTIONS
• ENTER COMMENT(S) ABOUT LOWER ARM (ULNAR) LENGTH MEASUREMENT(S). • SELECT ALL THAT APPLY.

Label	Code	Go To
NONE	1	
MEASUREMENT TAKEN OVER THICK CLOTHING	2	
MEASUREMENT TAKEN ON LEFT ARM	3	
MEDICAL APPLIANCE/CAST NOT REMOVED	4	
AMPUTATION – ARM	5	
OTHER	-5	

PMC71000/(AN_LOWER_ARM_LENGTH_COM_OTH).
SPECIFY: _____

PMC72000/(AN_TRICEPS_SKINFOLD1). TRICEPS SKINFOLD MEASUREMENT 1

MEASURED TRICEPS SKINFOLD |___|___| mm.

Label	Code	Go To
EXCEEDS CAPACITY	-9	**AN_TRI_SKINFOLD_CNO_REASON**
REFUSED	-1	**AN_TRI_SKINFOLD_CNO_REASON**
COULD NOT OBTAIN	-8	**AN_TRI_SKINFOLD_CNO_REASON**

PMC73000/(AN_TRICEPS_SKINFOLD2). TRICEPS SKINFOLD MEASUREMENT 2

MEASURED TRICEPS SKINFOLD |___|___| mm.

Label	Code	Go To
REFUSED	**-1**	
COULD NOT OBTAIN	**-8**	

PROGRAMMER INSTRUCTIONS

• IF MEASUREMENT IS < 0 OR > 67 MM, DISPLAY HARD EDIT.
• GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.
• IF **AN_TRICEPS_SKINFOLD1** ≠ -1, -8 OR -4 AND **AN_TRICEPS_SKINFOLD2** ?≠ -1, -8 OR -4, CALCULATE THE ABSOLUTE VALUE OF THE DIFFERENCE BETWEEN **AN_TRICEPS_SKINFOLD1** AND **AN_TRICEPS_SKINFOLD2**:
    o IF **AN_TRICEPS_SKINFOLD1** AND **AN_TRICEPS_SKINFOLD2** DIFFER BY ≤ 2.0 MM:
        ▪ CALCULATE THE MEAN OF **AN_TRICEPS_SKINFOLD1** AND **AN_TRICEPS_SKINFOLD2**, SAVE AS **AN_TRICEPS_SKINFOLD_MEAN**
        ▪ GO TO **AN_MEAS_TRI_SKINFOLD_COM**.
    o IF **AN_TRICEPS_SKINFOLD1** AND **AN_TRICEPS_SKINFOLD2** DIFFER BY > 2.0 MM, GO TO **AN_TRICEPS_SKINFOLD3**.
• OTHERWISE, IF **AN_TRICEPS _SKINFOLD2** = -1 OR -8:
    o SAVE **AN_TRICEPS_SKINFOLD1** AS **AN_TRICEPS_SKINFOLD_MEAN**
    o GO TO **AN_TRI_SKINFOLD_CNO_REASON**.

PMC74000/(AN_TRICEPS_SKINFOLD3). TRICEPS SKINFOLD MEASUREMENT 3

MEASURED TRICEPS SKINFOLD |___|___| mm.

DATA COLLECTOR INSTRUCTIONS
• OBTAIN TRICEPS SKINFOLD.

Label	Code	Go To
REFUSED	**-1**	
COULD NOT OBTAIN	**-8**	

PROGRAMMER INSTRUCTIONS

• IF MEASUREMENT IS < 0 OR > 67 MM, DISPLAY HARD EDIT.
• GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.
• IF **AN_TRICEPS_SKINFOLD1** ≠ -1, -8 OR -4, **AN_TRICEPS_SKINFOLD2** ≠ -1, -8 OR -4 AND **AN_TRICEPS_SKINFOLD3** ?≠ -1, -8 OR -4:
    o IF THE HIGHEST AND LOWEST MEASUREMENTS ARE EQUIDISTANT FROM THE MIDDLE MEASURE:
        ▪ SAVE THE MIDDLE MEASURE AS **AN_TRICEPS_SKINFOLD_MEAN**
        ▪ GO TO **AN_MEAS_TRI_SKINFOLD_COM**.
    o IF THE HIGHEST AND LOWEST MEASUREMENTS ARE NOT

PMC75000/(AN_TRI_SKINFOLD_CNO_REASON).

Label	Code	Go To
PARENT/CAREGIVER REFUSAL	1	
CHILD REFUSAL	2	
COMMUNICATION ISSUES	3	
PARENT/CAREGIVER ILL/EMERGENCY	4	
CHILD ILL/EMERGENCY	5	
NO TIME	6	
EQUIPMENT FAILURE	7	
SAFETY EXCLUSION	8	
PHYSICAL LIMITATION	9	
DATA COLLECTOR ERROR	10	
OTHER	-5	
NONE GIVEN	-7	

PMC76000/(AN_TRI_SKINFOLD_CNO_REASON_OTH).
SPECIFY: _____

PMC77000/(AN_MEAS_TRI_SKINFOLD_COM).

Label	Code	Go To
NONE	1	
MEASUREMENT TAKEN ON LEFT ARM	2	
MEDICAL APPLIANCE/CAST NOT REMOVED	3	
AMPUTATION – ARM	4	
OTHER	-5	

PROGRAMMER INSTRUCTIONS

• IF **AN_MEAS_TRI_SKINFOLD_COM** = 1:
 	
    o DO NOT ALLOW SELECTION OF ADDITIONAL RESPONSES
    o GO TO **AN_SUBSCAP_SKINFOLD1**.
• IF **AN_MEAS_TRI_SKINFOLD_COM** = ANY COMBINATION OF RESPONSES 2 - 5, GO TO **AN_SUBSCAP_SKINFOLD1**.
• IF **AN_MEAS_ TRI_SKINFOLD_COM** = -5, OR ANY COMBINATION OF RESPONSE CODES 2 - 5 AND -5, GO TO **AN_MEAS_TRI_SKINFOLD_COM_OTH**.

PMC78000/(AN_MEAS_TRI_SKINFOLD_COM_OTH).
SPECIFY: _____

PMC79000/(AN_SUBSCAP_SKINFOLD1). SUBSCAPULAR SKINFOLD MEASUREMENT 1

MEASURED SUBSCAPULAR SKINFOLD |___|___| mm.

DATA COLLECTOR INSTRUCTIONS
• OBTAIN SUBSCAPULAR SKINFOLD.

Label	Code	Go To
EXCEEDS CAPACITY	-9	AN_SUBSCAP_SNFLD_CNO_REAS
REFUSED	-1	AN_SUBSCAP_SNFLD_CNO_REAS
COULD NOT OBTAIN	-8	AN_SUBSCAP_SNFLD_CNO_REAS

PROGRAMMER INSTRUCTIONS
• IF MEASUREMENT IS < 0 OR > 67 MM, DISPLAY HARD EDIT. • GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.

PMC80000/(AN_SUBSCAP_SKINFOLD2). SUBSCAPULAR SKINFOLD MEASUREMENT 2

MEASURED SUBSCAPULAR SKINFOLD |___|___| mm.

Label		
DATA COLLECTOR INSTRUCTIONS		
• OBTAIN SUBSCAPULAR SKINFOLD.		

Label	Code	Go To
REFUSED	**-1**	
COULD NOT OBTAIN	**-8**	

PROGRAMMER INSTRUCTIONS

- IF MEASUREMENT IS < 0 OR > 67 MM, DISPLAY HARD EDIT.
- GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.
- IF **AN_SUBSCAP_SKINFOLD1** ≠ -1, -8 OR -4 AND **AN_SUBSCAP_SKINFOLD2** ?≠ -1, -8 OR -4, CALCULATE THE ABSOLUTE VALUE OF THE DIFFERENCE BETWEEN **AN_SUBSCAP_SKINFOLD1** AND **AN_SUBSCAP_SKINFOLD2**:
  - o IF **AN_SUBSCAP_SKINFOLD1** AND **AN_SUBSCAP_SKINFOLD2** DIFFER BY ≤ 2.0 MM:
    - ▪ CALCULATE THE MEAN OF **AN_SUBSCAP_SKINFOLD1** AND **AN_SUBSCAP_SKINFOLD2**, SAVE AS **AN_SUBSCAP_SKINFOLD_MEAN**
    - ▪ GO TO **AN_MEAS_SUBSCAP_SKINFOLD_COM** .
  - o IF **AN_SUBSCAP_SKINFOLD1** AND **AN_SUBSCAP_SKINFOLD2** DIFFER BY > 2.0 MM, GO TO **AN_SUBSCAP_SKINFOLD3**.
- OTHERWISE, IF **AN_SUBSCAP_SKINFOLD2** = -1 OR -8:
  - o SAVE **AN_SUBSCAP_SKINFOLD1** AS **AN_SUBSCAP_SKINFOLD_MEAN**
  - o GO TO **AN_SUBSCAP_SNFLD_CNO_REAS**.

PMC81000/(AN_SUBSCAP_SKINFOLD3). SUBSCAPULAR SKINFOLD MEASUREMENT 3

MEASURED SUBSCAPULAR SKINFOLD |___|___| mm.

Label		
DATA COLLECTOR INSTRUCTIONS		
• OBTAIN SUBSCAPULAR SKINFOLD.		

Label	Code	Go To
REFUSED	**-1**	
COULD NOT OBTAIN	**-8**	

PROGRAMMER INSTRUCTIONS

- IF MEASUREMENT IS < 0 OR > 67 MM, DISPLAY HARD EDIT.
- GO TO APPENDIX A (ANTHROPOMETRY EDIT RANGES) TO DETERMINE SOFT EDITS. IF MEASUREMENT FALLS OUTSIDE SOFT EDIT RANGE BASED ON AGE AND GENDER, WHERE CHILD AGE IS CALCULATED USING **CHILD_DOB** AND **VISIT_DATE**, DISPLAY SOFT EDIT.
- IF **AN_SUBSCAP_SKINFOLD1** ≠ -1, -8 OR -4, **AN_SUBSCAP_SKINFOLD2** ≠ -1, -8 OR -4, AND **AN_SUBSCAP_SKINFOLD3** ?≠ -1, -8 OR -4:

PMC82000/(AN_SUBSCAP_SNFLD_CNO_REAS).

DATA COLLECTOR INSTRUCTIONS

- • ENTER REASON(S) YOU COULD NOT OBTAIN SUBSCAPULAR SKINFOLD MEASUREMENT(S).
- • SELECT ALL THAT APPLY.

Label	Code	Go To
PARENT/CAREGIVER REFUSAL	**1**	
CHILD REFUSAL	**2**	
COMMUNICATION ISSUES	**3**	
PARENT/CAREGIVER ILL/EMERGENCY	**4**	
CHILD ILL/EMERGENCY	**5**	
NO TIME	**6**	
EQUIPMENT FAILURE	**7**	
SAFETY EXCLUSION	**8**	
PHYSICAL LIMITATION	**9**	
DATA COLLECTOR ERROR	**10**	
OTHER	**-5**	
NONE GIVEN	**-7**	

o GO TO **AN_MEAS_SUBSCAP_SKINFOLD_COM**.

PMC83000/(AN_SUBSCAP_SNFLD_CNO_REAS_OTH).
SPECIFY: _____

PMC84000/(AN_MEAS_SUBSCAP_SKINFOLD_COM).

DATA COLLECTOR INSTRUCTIONS
• ENTER COMMENT(S) ABOUT SUBSCAPULAR SKINFOLD MEASUREMENT(S).

Label	Code	Go To
NONE	1	PMC86000
OTHER	-5	

PMC85000/(AN_MEAS_SUBSCAP_SKINFOLD_COM_OTH).
SPECIFY: _____

PMC86000. WEIGHT IN POUNDS AND OUNCES: {**AN_CONV_WEIGHT_LBS**}, {**AN_CONV_WEIGHT_OZ**}
RECUMBENT LENGTH IN INCHES: {**AN_CONV_RECUMB_LENGTH**}
STANDING HEIGHT IN INCHES: {**AN_CONV_STAND_HEIGHT**}

PROGRAMMER INSTRUCTIONS

• CONVERTING WEIGHT AND HEIGHT/LENGTH TO ENGLISH MEASURES FOR ALL EVENTS.
   o IF **AN_WT_MEAS_MEAN** CALCULATED, CREATE DERIVED VARIABLES, **AN_CONV_WEIGHT_LBS** AND **AN_CONV_WEIGHT_OZ** BY CONVERTING AVERAGE WEIGHT IN KILOGRAMS TO POUNDS AND OUNCES WHERE:
      ▪ WEIGHT IN POUNDS = [**AN_WT_MEAS_MEAN** X 2.2046] AND SAVE AS **AN_CONV_WEIGHT_LBS**
      ▪ WEIGHT IN OUNCES = MULTIPLY DECIMAL FRACTION BY 16, ROUND TO NEAREST OUNCE, AND SAVE AS **AN_CONV_WEIGHT_OZ.**
   o IF **AN_ADJ_RECUMB_LENGTH** CALCULATED, CREATE **AN_CONV_RECUMB_LENGTH** BY CONVERTING ADJUSTED RECUMBENT LENGTH IN CENTIMETERS TO INCHES WHERE **AN_CONV_RECUMB_LENGTH** = [**AN_ADJ_RECUMB_LENGTH** X 0.39], AND SAVE **AN_CONV_RECUMB_LENGTH.**
   o IF **AN_ADJ_STAND_HEIGHT** ?CALCULATED, CREATE **AN_CONV_STAND_HEIGHT** BY CONVERTING ADJUSTED STANDING HEIGHT IN CENTIMETERS TO INCHES WHERE **AN_CONV_STAND_HEIGHT** = [**AN_ADJ_STAND_HEIGHT** X 0.39], AND SAVE AS **AN_CONV_STAND_HEIGHT**.

PROGRAMMER INSTRUCTIONS
• IF MEASURE(S) CALCULATED, DISPLAY **AN_CONV_WEIGHT_LBS, AN_CONV_WEIGHT_OZ, AN_CONV_RECUMB_LENGT**

PROGRAMMER INSTRUCTIONS
H, AND/OR **AN_CONV_STAND_HEIGHT**. • OTHERWISE, IF MEASURE(S) COULD NOT BE CALCULATED, DISPLAY "COULD NOT BE OBTAINED" AS APPROPRIATE.

DATA COLLECTOR INSTRUCTIONS
• RECORD THE CONVERTED WEIGHT, HEIGHT AND/OR LENGTH FOR THE CHILD ON THE REPORT OF FINDING FORM. • IF "COULD NOT BE OBTAINED" IS DISPLAYED, CHECK BOX FOR 'COULD NOT OBTAIN' AS APPROPRIATE.

PMC88000. {Thank you for taking the time to answer these questions./Thank you for having {C_FNAME/the child} complete these measures.}

PROGRAMMER INSTRUCTIONS
• IF **AN_WT_MEAS1 =** -1, -8 OR -4, **AN_RECUMB_LENGTH1** = -1, -8 OR -4, **AN_THIGH_LENGTH** = -1, -8 OR -4, **AN_WAIST_CIRC1** = -1, -8 OR -4, **AN_HEAD_CIRC1** = -1, -8 OR -4, **AN_UPPER_ARM_LENGTH** = -1, -8 OR -4, **AN_LOWER_ARM_LENGTH1** = -1, -8 OR -4, **AN_TRICEPS_SKINFOLD1** = -1, -8 OR -4, AND **AN_SUBSCAP_SKINFOLD1** = -1, -8 OR -4, DISPLAY FIRST BRACKETED PHRASE. • OTHERWISE, DISPLAY SECOND BRACKETED PHRASE. • IF 12-MONTH EVENT (**EVENT_TYPE** = 27), 24-MONTH EVENT (**EVENT_TYPE** = 31), 36-MONTH EVENT (**EVENT_TYPE** = 37), 48-MONTH EVENT (**EVENT_TYPE** = 39), OR 60-MONTH EVENT (**EVENT_TYPE** = XX), PROCEED TO BLOOD PRESSURE INSTRUMENT (**BP_INTRO**).

(TIME_STAMP_PMC_ET).

PROGRAMMER INSTRUCTIONS
• INSERT DATE/TIME STAMP

APPENDIX A: BP SPECS- PROGRAMMER'S INSTRUCTION FOR ROF AND REFERRALS

IF **CHILD_SEX** = 1:
- IF VALID RESPONSE PROVIDED FOR **AN_STAND_HEIGHT_MEAN** IN ANTHROPOMETRY MODULE, CALCULATE CHILD'S AGE USING CURRENT DATE AND **CHILD_DOB** AND THEN CHECK CHILD'S AGE AND **AN_STAND_HEIGHT_MEAN** AGAINST APPENDIX B, APPENDIX C-1, AND TABLE A-1 (REFERRAL TABLE).
- IF VALID RESPONSE PROVIDED FOR **AN_RECUMB_LENGTH_MEAN** IN ANTHROPOMETRY MODULE, CALCULATE CHILD'S AGE USING CURRENT DATE AND **CHILD_DOB** AND THEN CHECK CHILD'S AGE AND **AN_RECUMB_LENGTH_MEAN** AGAINST APPENDIX B, APPENDIX C-2, AND TABLE A-1 (REFERRAL TABLE).
- COMPARE REFERRAL CATEGORY DETERMINED USING **AN_STAND_HEIGHT_MEAN** WITH REFERRAL CATEGORY DETERMINED USING **AN_RECUMB_LENGTH_MEAN** IF VALID RESPONSES FOR BOTH IN ANTHROPOMETRY MODULE. IF THE RESULTING REFERRAL CATEGORIES DIFFER, USE THE LOWER CATEGORY LEVEL FOR THE REPORT OF FINDINGS.
- OTHERWISE, IF VALID RESPONSE NOT PROVIDED FOR **AN_RECUMB_LENGTH_MEAN** IN ANTHROPOMETRY MODULE, CALCULATE CHILD'S AGE USING CURRENT DATE AND **CHILD_DOB** AND THEN CHECK CHILD'S AGE AGAINST APPENDIX D AND TABLE A-1 (REFERRAL TABLE).

IF **CHILD_SEX** = 2:
- IF VALID RESPONSE PROVIDED FOR **AN_STAND_HEIGHT_MEAN** IN ANTHROPOMETRY MODULE, CALCULATE CHILD'S AGE USING CURRENT DATE AND **CHILD_DOB** AND THEN CHECK CHILD'S AGE AND **AN_STAND_HEIGHT_MEAN** AGAINST APPENDIX B, APPENDIX F-1, AND TABLE A-1 (REFERRAL TABLE).
- IF VALID RESPONSE PROVIDED FOR **AN_RECUMB_LENGTH_MEAN** IN ANTHROPOMETRY MODULE, CALCULATE CHILD'S AGE USING CURRENT DATE AND **CHILD_DOB** AND THEN CHECK CHILD'S AGE AND **AN_RECUMB_LENGTH_MEAN** AGAINST APPENDIX E, APPENDIX F-2 AND TABLE A-1 (REFERRAL TABLE).
- COMPARE REFERRAL CATEGORY DETERMINED USING **AN_STAND_HEIGHT_MEAN** WITH REFERRAL CATEGORY DETERMINED USING **AN_RECUMB_LENGTH_MEAN** IF VALID RESPONSES FOR BOTH IN ANTHROPOMETRY MODULE. IF THE RESULTING REFERRAL CATEGORIES DIFFER, USE THE LOWER CATEGORY LEVEL FOR THE REPORT OF FINDINGS.
- OTHERWISE, IF VALID RESPONSE NOT PROVIDED FOR IN ANTHROPOMETRY MODULE **AN_RECUMB_LENGTH_MEAN**, CALCULATE CHILD'S AGE USING CURRENT DATE AND **CHILD_DOB** AND THEN CHECK CHILD'S AGE AGAINST APPENDIX G AND TABLE A-1 (REFERRAL TABLE).

APPENDIX B: ANTHROPOMETRY EDIT RANGES

Measure	Age (years)	Gender	Soft edit Low	Soft edit High
Weight	< 1	M	7.5	11.7
		F	6.9	11.2
	1 - <2	M	7.7	15.3
		F	7.1	14.8
	2 - <3	M	10.4	18.1
		F	10.05	15.1
	<4	M	11.5	20.7
		F	11.5	21.3
	<5	M	13.3	24.2
		F	12.9	24.9
	<6	M	14.8	28.3
		F	14.5	28.9
	<7	M	16.6	32.5
		F	16.0	33.4
	<8	M	18.4	37.4
		F	17.9	38.5
	<9	M	20.3	43.1
		F	19.7	44.6
Recumbent Length (cm)	< 1	M	61.7	79.7
		F	59.6	79.2
	1 - <2	M	70.9	93.9
		F	68.9	91.7
	2 - <3	M	82.2	102.0
		F	82.0	102.0
	<4	M	82.0	102.0
	<4	F	82.0	102.0
Height Adjustment-Below waist	–ALL	M	2.0	N/A
	ALL	F	N/A2.0	N/A
Height Adjustment-Above waist	ALL	M	2.0	N/A
	ALL	F	2.0	N/A
Femur Length (cm)	< 1	M	14.5	23.0
		F	14.5	23.0
	1 - <2	M	14.5	23.0
		F	14.5	23.0
	2 - 3	M	14.5	23.0
		F	14.5	23.0
Thigh Circumference (cm)	< 1	M	23.1	34.0
		F	23.8	36.1
	1 - <2	M	23.1	34.0
		F	23.8	36.1
	2 - 3	M	23.1	34.0
		F	23.8	36.1
Waist Circumference (cm)	< 1	M	1	50.8
		F	1	52.2

Measure	Age (years)	Gender	Soft edit	
			Low	High
	1 - <2	M	1	50.8
		F	1	52.2
	2 - <3	M	10	54.2
		F	10	55.3
	<4	M	10	57.6
		F	10	58.3
	<5	M	10	61.0
		F	10	61.4
Head Circumference (cm)	< 1	M	43.4	48.2
		F	42.0	47.1
	1 - <2	M	43.2	51.0
		F	42.3	49.8
	2 - <3	M	45.7	52.1
		F	44.7	51.2
	<4	M	47.5	53.5
		F	45.9	52.6
Humerus and Ulnar Length (cm)	< 1	M	10.0	16.8
		F	9.5	16.0
	1 - <2	M	13.3	19.0
		F	12.8	19.0
	2 - <3	M	15.3	20.5
		F	15.1	20.9
Upper Arm Circumference	< 1	M	7.0	14.0
		F	7.0	14.0
	1 - <2	M	7.0	14.0
		F	7.0	14.0
	2 - <3	M	10.0	21.0
		F	10.0	21.0
	<4	M	15.0	27.0
		F	15.0	27.0
	<5	M	15.0	27.0
		F	15.0	27.0
	<6	M	15.0	35.0
		F	15.0	35.0
	<7	M	15.0	35.0
		F	15.0	35.0
	<8	M	15.0	35.0
		F	15.0	35.0
	<9	M	21.0	35.0
		F	21.0	35.0
Triceps Skinfold (mm)	< 1	M	6	16
		F	6	16
	1 - <2	M	5	15
		F	6	16
	2 - <3	M	5	14
		F	6	16
Subscapular Skinfold (mm)	< 1	M	5	13
		F	5	13

Measure	Age (years)	Gender	Soft edit	
			Low	High
	1 - <2	M	4	12
		F	4	13
	2 - <3	M	4	11
		F	4	15