

## MrOS DXA Documentation

MrOS measures dual x-ray absorptiometry (DXA) on participants using Hologic QDR 4500 workstations at each of the 6 clinics. At Visit 1, Visit 2, and Visit 3 (B1, B2, B3), hip, spine, and whole body scans were performed on all of the participants. At the Dental Visit (BD), hip, spine, and whole body scans were performed on all of the participants at only 2 clinics, Pittsburgh and Birmingham. At the Sleep Visit (BS) and Visit 4 (B4), hip and whole body scans were performed at all clinics. At Visit 4R (B4R), hip scans were performed on 266 participants at 5 clinics (Birmingham did not participate), and whole body scans were performed on 50 participants at the Portland clinic.

Scans were performed and analyzed at each clinic. Review of scans was done at the UCSF Coordinating Center on random subsets of scans and on problematic scans identified (“flagged”) by technicians at the clinics. Some scans are deemed unacceptable and are not included in the data or are set to special missing value code “.N”, cannot evaluate.

At follow-up visits, positioning and analysis were matched to the Visit 1 scans, using the “compare” feature of the Hologic QDR. Generally, the right hip was scanned unless there was a fracture, implant, hardware or other problem preventing the right hip from being scanned, in which case the left hip was scanned. If during the study a different side was scanned, then scans at later visits were matched to the first scan of the new side. In addition to matching the follow-up scan to earlier scans, the earlier scans were re-analyzed by adjusting the regions-of-interest (ROI's) or deleting bone to match the later scan so longitudinal change variables could be calculated. This results in multiple versions of visit scans. For example, there are the original scan values for Visit 1, and also longitudinally-adjusted scan values, e.g. a Dental Visit-adjusted Visit 1 scan value. The original unadjusted scan is used for cross-sectional data analysis, and the longitudinally-adjusted later visit versions are used for calculating change variables, and for repeated-measures data analysis.

Each time an additional scan is completed at a new visit, the region of interest changes slightly. We have variables representing the adjustments to scans at each timepoint using the same ROI. This happens with each subsequent visit. Usually, this only results in very minor differences.

For those who are interested in using BMD as a time dependent covariate, you should use the BMD variables for each visit that are found in the latest clinic visit dataset. Please see the following example, using the THD variables:

- For people who only have baseline BMD, you'd use B1THD for baseline BMD from the **B1 dataset**.
- For people who have only baseline and visit 2 BMD but no Visit 3 BMD, you'd use B2THD for Visit 2 and B2THD1 for Visit 1 from the **B2 dataset**.
- For people have baseline, visit 2 and visit 3, you'd use B3THD for visit 3, B3THD2 for Visit 2 and B3THD1 for Visit 1 from the **B3 dataset**.
- Similarly, if they have Visit 3 and Visit 1 only, use the B3THD and the B3THD1 variables from the **B3 dataset**. If everyone must have all three measures then you'd just use the variables from the **B3 dataset** (That is B3THD for visit 3, B3THD2 for visit 2 and B3THD1 for visit 1)

Absolute and percent change variables are calculated using the (current visit value minus the earlier longitudinally-adjusted visit value), matching for side (hip scans) and scan mode.

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Change variables from non-matching sides or scan modes are also set to special missing value code “.N”. To calculate annualized change or percent change, simply divide by the number of years between scans, using the follow-up time variables in the DXA data set.

### Revisions

As of July, 2003, the variables previously in B1Dfeb03 and BDDfeb03 are combined into the file Bdjul03 and DXA variables have been renamed. A mapping of new variable names to old variable names is provided below.

For spine BMD, please use the variables from the lumbar spine scan (for example B1TLD for total spine BMD at baseline). There are also lumbar spine BMD and thoracic spine BMD variables that are subregions of the whole body scan (B1LSD and B1TSD at baseline). These are not intended for use as total spine BMD even at visits where no spine scan was performed.

As of August, 2006, some new whole body composition variables have been added to the data. New BMC, lean, fat, and mass in kilograms (kg) are added. Height measured in meters (m) is added. Using these variables the following 9 variables are calculated as follows:

Appendicular skel lean (kg), ASM	lf arm lean + rt arm lean + lf leg lean + rt leg lean
Non-ASM lean (kg)	Total body lean - ASM lean
Non-Trunk fat (kg)	Total body fat - trunk fat
Lean BMI (kg/m <sup>2</sup> )	Total body lean / height <sup>2</sup>
Fat BMI (kg/m <sup>2</sup> )	Total body fat / height <sup>2</sup>
ASM BMI (kg/m <sup>2</sup> )	ASM lean / height <sup>2</sup>
Trunk fat BMI (kg/m <sup>2</sup> )	Trunk fat / height <sup>2</sup>
Non-ASM lean BMI (kg/m <sup>2</sup> )	Non-ASM lean / height <sup>2</sup>
Non-Trunk fat BMI (kg/m <sup>2</sup> )	Non-Trunk fat / height <sup>2</sup>

As of Feb, 2007, the only change from Aug, 2006 data is 1 V2 spine scan (PI4713) changed to unacceptable following outlier review.

As of April, 2007, the following longitudinal correction factors have been applied to hip BMD: San Diego (QDR machine #49450):

For scans performed between 12/9/03-1/4/05, HTOTBMD multiplied by 1.0179.

For scans performed between 12/9/03-1/4/05, NBMD multiplied by 1.0179.

For scans performed between 12/9/03-1/4/05, TBMD multiplied by 1.0179.

For scans performed between 12/9/03-1/4/05, ITBMD multiplied by 1.0179.

For scans performed on or after 1/5/05, HTOTBMD multiplied by 1.0112.

For scans performed on or after 1/5/05, NBMD multiplied by 1.0112.

For scans performed on or after 1/5/05, TBMD multiplied by 1.0112.

For scans performed on or after 1/5/05, ITBMD multiplied by 1.0112.

Variables affected by these corrections have ‘Corrected’ added to their labels. All datasets have been revised. In the process of revising the data, a few additional scans were determined to be unacceptable in later reviews and some additional variables set to .N, so N’s in analysis may change from previous analysis. The only changes for B1 are 2 spine scans set to .N (PI5117, PO6948). The only change for BD is 1 spine scan set to .N (PO6948). Longitudinal corrections occurred after B1 and BD.

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Whole body longitudinal correction factors are added as of Aug, 2007 release. Please see MrOS End-of-Visit V2 Whole Body Report 2007JUL13 document for correction factors.

Aug, 2008, V2 BMD data has included 1 previously lost V2 hip scan (PI5215). There are some minor changes in a handful of other V2 scans. These include PI4925, PI5193 V1 spine scans ; BI0052, PI4925, PI5193 V2 spine scans, PI5139 V2 whole body scan. The biggest change is the addition of 554 V1 spine scans resulting in a larger N for V1-V2 change variables for spine scans. One V1 hip and 5 V1 whole body scans were also added.

Aug, 2009, V3 BMD does not include any whole body variables. These will be released in fall, 2009, when V3 corrections factors are completed. For visits prior to V3, whole body corrections are applied to sub-region variables in addition to total variables. See V2 end-of-visit QA report for whole body corrections. IMPORTANT NOTE: The recalculation of total lean was incorrect in Aug07 and Aug08 releases, and total FFM was inadvertently not recalculated. Total lean is recalculated correctly in Aug09 and FFM is recalculated in Aug09 release data. There are 2 corrections to the V2 data: the V1 whole body scan for PA3121 used for change variables at V2 is replaced with the same V1 scan used at V1 and other visits. Spine change variables for dental to V2 were previously left out of data and have been added.

As of August 2009, the following longitudinal correction factors have been applied to hip BMD:

The San Diego corrections on or after 1/5/05 from above are extended through V3.

Portland (QDR machine #49415):

For scans performed on or after 4/20/07, HTOTBMD multiplied by 1.0097.

For scans performed on or after 4/20/07, NBMD multiplied by 1.0097.

For scans performed on or after 4/20/07, TBMD multiplied by 1.0097.

For scans performed on or after 4/20/07, ITBMD multiplied by 1.0097.

As of August 2009, the following corrections have been applied to spine BMD at V3:

Portland (QDR machine #49415):

For scans performed on or after 4/20/07, STOTBMD multiplied by 1.0054.

For scans performed on or after 4/20/07, L1BMD multiplied by 1.0054.

For scans performed on or after 4/20/07, L2BMD multiplied by 1.0054.

For scans performed on or after 4/20/07, L3BMD multiplied by 1.0054.

For scans performed on or after 4/20/07, L4BMD multiplied by 1.0054.

Palo Alto (QDR machine #49430):

For scans performed on or after 2/1/07, STOTBMD multiplied by 0.9932.

For scans performed on or after 2/1/07, L1BMD multiplied by 0.9932.

For scans performed on or after 2/1/07, L2BMD multiplied by 0.9932.

For scans performed on or after 2/1/07, L3BMD multiplied by 0.9932.

For scans performed on or after 2/1/07, L4BMD multiplied by 0.9932.

Oct, 2009, V3 BMD includes whole body variables. Whole body corrections are applied to sub-region variables in addition to total variables. See V3 end-of-visit QA report for whole body corrections. Visit 3 hip and spine scans were not archived for BI0121 so scans are lost. Visit 3 whole body scan was not done for BI0798.

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Oct, 2010 Baseline corrections: PA3936 deleted from B1Oct10. This subject was found to be same individual as PA3481 so records for PA3481 are retained. Five PO subjects have corrections to whole body and subregions. Previously there was a gap in correction dates between 2/21 and 2/26/01. Scans for PO7064 PO7065 PO7066 PO7067 PO7068 occurred in the gap and are now corrected.

Feb 2015 - A few variables had the wrong labels. Variables B3TRD2, B3ITD2, B3FND3, B3THD2, B32DTND, B32DFND, B32DTRD, B32DITD, B32PTND, B32PFND, B32PITD all had "BD" in their labels instead of "B2". This has been corrected. A few variables were also incorrectly named: B3PEC2, B3PED2, AND B3LLA2, which represent the visit 2 longitudinal adjustment, were incorrectly named, ending with a "D" instead of "2". The correct "D" versions (for dental longitudinal adjustment) were overwritten by the data from the "2" versions as a result of this. So variables B3PECD, B3PEDD, and B3LLAD now reflect the correct data.

Aug 2016 – V4 BMD in this release includes only hip variables; uncorrected whole body variables for V4 will be released in October 2016, and corrected whole body variables will be released in February 2017. Hip change variables for baseline – V4 and for V3 – V4 are included in the V4 dataset. Femoral neck t-scores have been added to the DXA dataset for each visit (Baseline, Dental, Sleep, Visit 2, Visit 3, Visit 4). Looker 1998 reference values for young Caucasian females (mean = 0.858, SD = 0.120) were used in the femoral neck t-score calculations. The whole body data for some of the participants in the Dental, Sleep, and Visit 2 datasets have changed due to the fact that there were a few gaps in dates in the previous whole body corrections, and these gaps have now been eliminated. As a result, data for these participants that had not been previously corrected now have those corrections applied. For example, PO7066's baseline whole body measures in the Dental dataset were not corrected in Dental datasets previous to AUG16 – his baseline whole body scan was performed on 2/22/01, which was during the gap in corrections. Now that the more recent whole body correction program has been included when creating the updated Dental dataset for AUG16, many of the values for PO7066 have changed. The same is true for SD8790 and SD8982 in the Sleep and Visit 2 datasets, who were both scanned on 11/9/04 for the Sleep visit. Eleven Portland participants had their Sleep scans during the gap in dates, so their Sleep scan values have changed in both the Sleep and Visit 2 datasets: PO6609, PO6658, PO6677, PO6699, PO6738, PO6879, PO6929, PO6961, PO6966, PO6996, and PO7010. Also in the Sleep dataset, PO7065 and PO7066 had their baseline scans during one of the gaps in dates. In the Visit 2 dataset, PO7064 had his Baseline visit scan on 2/22/01, and PO7067 had his Baseline visit scan on 2/23/01; each of these scans took place during the gap in dates in the previous whole body correction program. The sub-region Area, BMC, and Lean values for San Diego participants whose Sleep scans occurred between 8/6/04-10/22/04 are slightly different in the Sleep and Visit 2 datasets previous to AUG16 due to a change in the correction factor that was applied during this time period – this affects 131 San Diego participants in the Sleep dataset and 122 San Diego participants in the Visit 2 dataset. In the Visit 3 dataset, 3 variables that previously did not have special missing values applied now have SMVC: B3LLA2, B3PEC2, and B3PED2.

As of August 2016, the following longitudinal correction factors have been applied to hip BMD:

The San Diego corrections on or after 1/5/05 from above are extended through V4.

The Portland corrections on or after 4/20/07 from above are extended through V4.

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Birmingham (QDR machine #49454):

For scans performed on or after 5/15/14, HTOTBMD multiplied by 1.0067.

For scans performed on or after 5/15/14, NBMD multiplied by 1.0067.

For scans performed on or after 5/15/14, TBMD multiplied by 1.0067.

For scans performed on or after 5/15/14, ITBMD multiplied by 1.0067.

Minneapolis (QDR machine #49487):

For scans performed on or after 3/26/14, HTOTBMD multiplied by 1.0202.

For scans performed on or after 3/26/14, NBMD multiplied by 1.0202.

For scans performed on or after 3/26/14, TBMD multiplied by 1.0202.

For scans performed on or after 3/26/14, ITBMD multiplied by 1.0202.

Oct 2016 – V4 BMD in this release includes uncorrected whole body measures for Visit 4 as well as the hip measures which were previously released in August 2016. Men who had either a hip scan and/or a whole body scan at Visit 4 are included in this dataset. Corrected whole body data for Visit 4 will be released in February 2017 and will include whole body change variables for baseline – V4 and for V3 – V4 as well as the whole body measures for each DXA time point (Baseline, Dental, Sleep, Visit 2, Visit 3, and Visit 4). V4R BMD in this release includes only hip variables, and longitudinal corrections have been applied to the data. The corrections that were applied to the data at Visit 4 were extended through the end of Visit 4R (see corrections provided in the Aug 2016 section above). Hip change variables for Visit 4 – Visit 4R are included in the V4R dataset. Corrected whole body data for Visit 4R will be released in February 2017.

Feb 2017 – V4 BMD in this release includes corrected whole body measures for Visit 4, whole body change variables for baseline – V4 and for V3 – V4, and whole body measures for each DXA time point (Baseline, Dental, Sleep, Visit 2, Visit 3, and Visit 4). V4R BMD in this release includes corrected whole body measures for Visit 4R, whole body change variables for Visit 4 – Visit 4R, and whole body measures for the Visit 4 and Visit 4R time points. Several of the Visit 3 whole body measures for 531 San Diego participants in the Visit 3 dataset have changed due to the fact that longitudinal correction factors were not correctly applied in previous releases of the Visit 3 dataset. The affected participants were scanned between July 2, 2007 and the end of Visit 3. The data for these participants is correct in the February 2017 Visit 3 dataset.

June 2019 – Some of the V4 whole body measures in this release have changed for Palo Alto and San Diego participants that were scanned during the last 18 months of Visit 4. The whole body BMD and BMC measures for 208 Palo Alto participants have changed due to the fact that four longitudinal corrections for BMD and BMC were not applied in previous releases of the Visit 4 dataset. The Percent Fat, Fat, Lean, and Fat Free Mass measures for 262 San Diego participants have changed due to the fact these measures were mistakenly corrected through the end of Visit 4 rather than being corrected just through the end of October 2014; these measures did not require correction after October 2014. The whole body data for these participants is correct in the June 2019 dataset.

### Variables

Each new variable is calculated for the current visit, and longitudinally adjusted previous visits. Percent change is calculated for the 9 variables above versus earlier visits. The new variables follow naming conventions described below for B #<sub>c</sub> #<sub>e</sub>, but not for S<sub>1</sub> S<sub>2</sub> M. New variable names and labels are as follows:

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Variable	Label
B#HGT	Height (m)
B#TBMKG	Total body mass (kg)
B#TBCKG	Total body BMC (kg)
B#TBFKG	Total body fat mass (kg)
B#TBLKG	Total body lean mass (kg)
B#SBMKG	Sub body mass (kg)
B#SBCKG	Sub body BMC (kg)
B#SBFKG	Sub body fat (kg)
B#SBLKG	Sub body lean (kg)
B#LALKG	Left arm lean (kg)
B#LAFKG	Left arm fat (kg)
B#RALKG	Right arm lean (kg)
B#RAFKG	Right arm fat (kg)
B#LLLKG	Left leg lean (kg)
B#LLFKG	Left leg fat (kg)
B#RLLKG	Right leg lean (kg)
B#RLFKG	Right leg fat (kg)
B#TKLKG	Trunk lean (kg)
B#TKFKG	Trunk fat (kg)
B#ASM	Appendicular skel lean (kg)
B#OTHLKG	Non-ASM lean (kg)
B#OTHFKG	Non-Trunk fat (kg)
B#TBLBMI	Lean BMI (kg/m <sup>2</sup> )
B#TBFBMI	Fat BMI (kg/m <sup>2</sup> )
B#ASMBMI	ASM BMI (kg/m <sup>2</sup> )
B#TKFBMI	Trunk fat BMI (kg/m <sup>2</sup> )
B#OTHLBMI	Non-ASM lean BMI (kg/m <sup>2</sup> )
B#OTHFBMI	Non-Trunk fat BMI (kg/m <sup>2</sup> )

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### General Naming Conventions:

There are 4 types of variables: cross-sectional visit, longitudinally-adjusted visit, change variables, and scan information variables. The variable name is a combination of 5 factors: current visit (B#<sub>c</sub>); type of change variable (C); earlier visit (#<sub>e</sub>); scan type or region (S<sub>1</sub> S<sub>2</sub>); and type of measurement (M). See tables below for values of M and S<sub>1</sub> S<sub>2</sub>. Visit #<sub>c</sub> or #<sub>e</sub> will be numeric or character: 1= Visit 1, D=Dental Visit, etc.

1. Cross-sectional variables are 5 character variable names. Current visit is identified by the first 2 characters, scan region in the 3<sup>rd</sup> and 4<sup>th</sup> characters, and type of measurement in the 5<sup>th</sup> character.

B #<sub>c</sub> S<sub>1</sub> S<sub>2</sub> M

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2. Longitudinally-adjusted variables are 6 character variable names similar to cross-sectional variables with the earlier visit number at the end. Current visit is identified by the first 2 characters, scan region in the 3<sup>rd</sup> and 4<sup>th</sup> characters, type of measurement in the 5<sup>th</sup> character, and earlier visit number in the 6<sup>th</sup> character.

B #<sub>c</sub> S<sub>1</sub> S<sub>2</sub> M #<sub>e</sub>

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3. Change variables are 7 character variable names. Current visit is identified by the first 2 characters, earlier visit is the 3<sup>rd</sup> character, type of change variable is the 4<sup>th</sup> character, scan region in the 5<sup>th</sup> and 6<sup>th</sup> characters, and type of measurement in the 7<sup>th</sup> character. The type of change variable C is either D for absolute change or P for percent change.

B #<sub>c</sub> #<sub>e</sub> C S<sub>1</sub> S<sub>2</sub> M

— — — — —

Years between scans is named as follows using scan type for S<sub>1</sub> and S<sub>2</sub> :

B #<sub>c</sub> #<sub>e</sub> S<sub>1</sub> S<sub>2</sub> Y R S

— — — — —

4. Scan information variables (hip side, scan date (days since enrolled), scan mode, and QDR serial number) are 7-8 character variable names. For cross-sectional variables, current visit is identified by the first 2 characters, scan type in the 3<sup>rd</sup> and 4<sup>th</sup> characters, and SIDE, DAYS, MODE, QDR in the remaining characters. For longitudinally-adjusted variables, the 8<sup>th</sup> character is #<sub>e</sub>, preceded by and SID, DAY, MOD, QDR.

B #<sub>c</sub> S<sub>1</sub> S<sub>2</sub> X X X X

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B #<sub>c</sub> S<sub>1</sub> S<sub>2</sub> X X X #<sub>e</sub>

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Take, for example, Total hip.

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- a. The Visit 1 cross-sectional visit BMD is B1THD and BMC is B1THC. The Dental Visit cross-sectional visit BMD is BDTHD.
- b. The Visit 1 BMD longitudinally-adjusted variable at Dental Visit (considered a Dental Visit variable) is BDTHD1.
- c. Absolute change from Visit 1 to Dental Visit (considered a Dental Visit variable) is BD1DTHD. Percent change from Visit 1 to Dental Visit is BD1PTHD.
- d. A hip information variable for Visit 1 is B1HPSIDE, for Dental Visit is BDHPSIDE, and the Visit 1 longitudinally-adjusted side at Dental Visit is BDHPSID1.

Type of measurement (M) abbreviations :

A	Area
C	Bone Mineral Content (BMC)
D	Bone Mineral Density (BMD=BMC/Area)
E	Fat Free Mass (FFM=BMC+Lean)
F	Fat
L	Lean
M	Mass
P	Percent fat

Scan type and region (S<sub>1</sub> S<sub>2</sub>) abbreviations:

Scan type		Region	
HP	Hip	TH	Total Hip
		FN	Femoral Neck
		IT	Intertrochanter
		TR	Trochanter
		WD	Wards
SP	Spine	TL	Total Lumbar Spine
		L1	L1
		L2	L2
		L3	L3
		L4	L4
WB	Whole body	TB	Total Whole body
		SB	Sub Total Whole body
		HD	Head
		LA	Left arm
		RA	Right arm
		LR	Left rib
		RR	Right rib
		TS	Thoracic spine
		LS	Lumbar spine
		TK	Trunk
		PE	Pelvic
		LL	Left leg
		RL	Right leg



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Scan mode coding:

Scan mode	
10	High Definition
11	Array
12	Fast Array

Hologic QDR Serial numbers

QDR Serial Numbers	
Birmingham	49454
Minneapolis	49487
Palo Alto	49430
Pittsburgh	48878
Portland	49415
San Diego	49450

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### Variable Renaming

B1 variables		
New name	Old name	Label
B1HPQDR	HQDR_NB	Hip scan QDR number
B1TRA	TAREA	Trochanteric Area (cm2)
B1TRC	TBMC	Trochanteric BMC (g)
B1TRD	TBMD	Trochanteric BMD (g/cm2)
B1ITA	ITAREA	Intertrochanteric Area (cm2)
B1ITC	ITBMC	Intertrochanteric BMC (g)
B1ITD	ITBMD	Intertrochanteric BMD (g/cm2)
B1FNA	NAREA	Femoral Neck Area (cm2)
B1FNC	NBMC	Femoral Neck BMC (g)
B1FND	NBMD	Femoral Neck BMD (g/cm2)
B1WDA	WAREA	Wards Area (cm2)
B1WDC	WBMC	Wards BMC (g)
B1WDD	WBMD	Wards BMD (g/cm2)
B1THA	HTOTAREA	Total Hip Area (cm2)
B1THC	HTOTBMC	Total Hip BMC (g)
B1THD	HTOTBMD	Total Hip BMD (g/cm2)
B1HPADT	HANALDAT	Hip scan analysis date
B1HPDATE	HSCANDAT	Hip scan date
B1HPTYP	HSCANTYP	Hip scan type
B1HPMODE	HSCANMOD	Hip scan mode
B1HPCOD	HSCANCOD	Hip scan operator code
B1HPPRO	HSCANPRO	Hip scan protocol
B1HPSIDE	HSIDE	Hip side
B1HPID	HSCANID	Hip scan Id
B1SPQDR	SQDR_NB	Spine scan QDR number
B1L1A	L1AREA	L1 Area (cm2)
B1L1C	L1BMC	L1 BMC (g)
B1L1D	L1BMD	L1 BMD (g/cm2)
B1L2A	L2AREA	L2 Area (cm2)
B1L2C	L2BMC	L2 BMC (g)
B1L2D	L2BMD	L2 BMD (g/cm2)
B1L3A	L3AREA	L3 Area (cm2)
B1L3C	L3BMC	L3 BMC (g)
B1L3D	L3BMD	L3 BMD (g/cm2)
B1L4A	L4AREA	L4 Area (cm2)
B1L4C	L4BMC	L4 BMC (g)
B1L4D	L4BMD	L4 BMD (g/cm2)
B1TLA	STOTAREA	Total Spine Area (cm2)
B1TLC	STOTBMC	Total Spine BMC (g)
B1TLD	STOTBMD	Total Spine BMD (g/cm2)
B1SPADT	SANALDAT	Spine scan analysis date
B1SPDATE	SSCANDAT	Spine scan date
B1SPTYP	SSCANTYP	Spine scan type
B1SPMODE	SSCANMOD	Spine scan mode
B1SPCOD	SSCANCOD	Spine scan operator code
B1SPPRO	SSCANPRO	Spine scan protocol
B1SPID	SSCANID	Spine scan Id
B1WBQDR	BQDR_NB	Whole Body scan QDR number
B1TBA	BTOTAREA	Whole Body Total Area (cm2)
B1TBC	BTOTBMC	Whole Body Total BMC (g)

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B1TBD	BTOTBMD	Whole Body Total BMD (g/cm2)
B1SBA	BSUBAREA	Whole Body Sub Total Area (cm2)
B1SBC	BSUBBMC	Whole Body Sub Total BMC (g)
B1SBD	BSUBBMD	Whole Body Sub Total BMD (g/cm2)
B1HDA	HEADAREA	Head Area (cm2)
B1HDC	HEADBMC	Head BMC (g)
B1HDD	HEADBMD	Head BMD (g/cm2)
B1LAA	LARMAREA	Left Arm Area (cm2)
B1LAC	LARMBMC	Left Arm BMC (g)
B1LAD	LARMBMD	Left Arm BMD (g/cm2)
B1RAA	RARMAREA	Right Arm Area (cm2)
B1RAC	RARMBMC	Right Arm BMC (g)
B1RAD	RARMBMD	Right Arm BMD (g/cm2)
B1LRA	LRIBAREA	Left Rib Area (cm2)
B1LRC	LRIBBMC	Left Rib BMC (g)
B1LRD	LRIBBMD	Left Rib BMD (g/cm2)
B1RRA	RRIBAREA	Right Rib Area (cm2)
B1RRC	RRIBBMC	Right Rib BMC (g)
B1RRD	RRIBBMD	Right Rib BMD (g/cm2)
B1TSA	TSPIAREA	Thoracic Spine Area (cm2)
B1TSC	TSPIBMC	Thoracic Spine BMC (g)
B1TSD	TSPIBMD	Thoracic Spine BMD (g/cm2)
B1LSA	LSPIAREA	Lumbar Spine Area (cm2)
B1LSC	LSPIBMC	Lumbar Spine BMC (g)
B1LSD	LSPIBMD	Lumbar Spine BMD (g/cm2)
B1PEA	PELVAREA	Pelvic Area (cm2)
B1PEC	PELVBMC	Pelvic BMC (g)
B1PED	PELVBMD	Pelvic BMD (g/cm2)
B1LLA	LLEGAREA	Left Leg Area (cm2)
B1LLC	LLEGBMC	Left Leg BMC (g)
B1LLD	LLEGBMD	Left Leg BMD (g/cm2)
B1RLA	RLEGAREA	Right Leg Area (cm2)
B1RLC	RLEGBMC	Right Leg BMC (g)
B1RLD	RLEGBMD	Right Leg BMD (g/cm2)
B1WBADT	BANALDAT	Whole Body scan analysis date
B1WBDATE	BSCANDAT	Whole Body scan date
B1WBTYPE	BSCANTYP	Whole Body scan type
B1WBMODE	BSCANMOD	Whole Body scan mode
B1WBCOD	BSCANCOD	Whole Body scan operator code
B1WBPRO	BSCANPRO	Whole Body scan protocol
B1BRF	BRAINFAT	Brain Fat (g)
B1HDF	HEADFAT	Head Fat (g)
B1HDE	HEADFFM	Head FFM (g)
B1HDM	HEADMASS	Head Mass (g)
B1HDP	HEADPF	Head %Fat
B1LAF	LARMFAT	Left Arm Fat (g)
B1LAE	LARMFFM	Left Arm FFM (g)
B1LAM	LARMMASS	Left Arm Mass (g)
B1LAP	LARMPF	Left Arm %Fat
B1RAF	RARMFAT	Right Arm Fat (g)
B1RAE	RARMFFM	Right Arm FFM (g)
B1RAM	RARMMASS	Right Arm Mass (g)
B1RAP	RARMPF	Right Arm %Fat
B1TKF	TRUNKFAT	Trunk Fat (g)

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B1TKE	TRNKFFM	Trunk FFM (g)
B1TKM	TRNKMMASS	Trunk Mass (g)
B1TKP	TRNKPFF	Trunk %Fat
B1LLF	LLEGFAT	Left Leg Fat (g)
B1LLE	LLEGFFM	Left Leg FFM (g)
B1LLM	LLEGMASS	Left Leg Mass (g)
B1LLP	LLEGPF	Left Leg %Fat
B1RLF	RLEGFAT	Right Leg Fat (g)
B1RLE	RLEGFFM	Right Leg FFM (g)
B1RLM	RLEGMASS	Right Leg Mass (g)
B1RLP	RLEGPF	Right Leg %Fat
B1SBF	BSUBFAT	Sub Total Fat (g)
B1SBE	BSUBFFM	Sub Total FFM (g)
B1SBM	BSUBMASS	Sub Total Mass (g)
B1SBP	BSUBPF	Sub Total %Fat
B1TBF	BTOTFAT	Total Fat (g)
B1TBE	BTOTFFM	Total FFM (g)
B1TBM	BTOTMASS	Total Mass (g)
B1TBP	BTOTPF	Total %Fat
B1TKC	TRNKBMC	Trunk BMC (g)
B1TBL	BTOTLEAN	Total Lean (g)
B1HDL	HEADLEAN	Head Lean (g)
B1LAL	LARMLEAN	Left Arm Lean (g)
B1RAL	RARMLEAN	Right Arm Lean (g)
B1TKL	TRNKGLEAN	Trunk Lean (g)
B1LLL	LLEGLEAN	Left Leg Lean (g)
B1RLL	RLEGLEAN	Right Leg Lean (g)
B1SBL	BSUBLEAN	Sub Total Lean (g)
B1WBID	BSCANID	Whole Body scan Id

Views subsequent to Dental visit will follow similar variable naming convention as below.

BDD Variables		
New name	Old name	Label
BDHPQDR	HQDR_NB	Hip scan QDR number
BDTRA	TAREA	Trochanteric Area (cm2)
BDTRC	TBMC	Trochanteric BMC (g)
BDTRD	TBMD	Trochanteric BMD (g/cm2)
BDITA	ITAREA	Intertrochanteric Area (cm2)
BDITC	ITBMC	Intertrochanteric BMC (g)
BDITD	ITBMD	Intertrochanteric BMD (g/cm2)
BDFNA	NAREA	Femoral Neck Area (cm2)
BDFNC	NBMC	Femoral Neck BMC (g)
BDFND	NBMD	Femoral Neck BMD (g/cm2)
BDWDA	WAREA	Wards Area (cm2)
BDWDC	WBMC	Wards BMC (g)
BDWDD	WBMD	Wards BMD (g/cm2)
BDTHA	HTOTAREA	Total Hip Area (cm2)
BDTHC	HTOTBMC	Total Hip BMC (g)
BDTHD	HTOTBMD	Total Hip BMD (g/cm2)
BDHPADT	HANALDAT	Hip scan analysis date
BDHPDATE	HSCANDAT	Hip scan date
BDHPTYP	HSCANTYP	Hip scan type
BDHPMODE	HSCANMOD	Hip scan mode

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BDHPCOD	HSCANCOD	Hip scan operator code
BDHPPRO	HSCANPRO	Hip scan protocol
BDHPSIDE	HSIDE	Hip side
BDHPID	HSCANID	Hip scan Id
BDSPQDR	SQDR_NB	Spine scan QDR number
BDL1A	L1AREA	L1 Area (cm2)
BDL1C	L1BMC	L1 BMC (g)
BDL1D	L1BMD	L1 BMD (g/cm2)
BDL2A	L2AREA	L2 Area (cm2)
BDL2C	L2BMC	L2 BMC (g)
BDL2D	L2BMD	L2 BMD (g/cm2)
BDL3A	L3AREA	L3 Area (cm2)
BDL3C	L3BMC	L3 BMC (g)
BDL3D	L3BMD	L3 BMD (g/cm2)
BDL4A	L4AREA	L4 Area (cm2)
BDL4C	L4BMC	L4 BMC (g)
BDL4D	L4BMD	L4 BMD (g/cm2)
BDTLA	STOTAREA	Total Spine Area (cm2)
BDTLC	STOTBMC	Total Spine BMC (g)
BDTLD	STOTBMD	Total Spine BMD (g/cm2)
BDSPADT	SANALDAT	Spine scan analysis date
BDSPDATE	SSCANDAT	Spine scan date
BDSPTYP	SSCANTYP	Spine scan type
BDSPMODE	SSCANMOD	Spine scan mode
BDSPCOD	SSCANCOD	Spine scan operator code
BDSPPRO	SSCANPRO	Spine scan protocol
BDSPID	SSCANID	Spine scan Id
BDWBQDR	BQDR_NB	Whole Body scan QDR number
BDTBA	BTOTAREA	Whole Body Total Area (cm2)
BDTBC	BTOTBMC	Whole Body Total BMC (g)
BDTBD	BTOTBMD	Whole Body Total BMD (g/cm2)
BDSBA	BSUBAREA	Whole Body Sub Total Area (cm2)
BDSBC	BSUBBMC	Whole Body Sub Total BMC (g)
BDSBD	BSUBBMD	Whole Body Sub Total BMD (g/cm2)
BDHDA	HEADAREA	Head Area (cm2)
BDHDC	HEADBMC	Head BMC (g)
BDHDD	HEADBMD	Head BMD (g/cm2)
BDLAA	LARMAREA	Left Arm Area (cm2)
BDLAC	LARMBMC	Left Arm BMC (g)
BDLAD	LARMBMD	Left Arm BMD (g/cm2)
BDRAA	RARMAREA	Right Arm Area (cm2)
BDRAC	RARMBMC	Right Arm BMC (g)
BDRAD	RARMBMD	Right Arm BMD (g/cm2)
BDLRA	LRIBAREA	Left Rib Area (cm2)
BDLRC	LRIBBMC	Left Rib BMC (g)
BDLRD	LRIBBMD	Left Rib BMD (g/cm2)
BDRRA	RRIBAREA	Right Rib Area (cm2)
BDRRC	RRIBBMC	Right Rib BMC (g)
BDRRD	RRIBBMD	Right Rib BMD (g/cm2)
BDTSA	TSPIAREA	Thoracic Spine Area (cm2)
BDTSC	TSPIBMC	Thoracic Spine BMC (g)
BDTSD	TSPIBMD	Thoracic Spine BMD (g/cm2)
BDLSA	LSPIAREA	Lumbar Spine Area (cm2)

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BDLSC	LSPBMC	Lumbar Spine BMC (g)
BDLSD	LSPBMD	Lumbar Spine BMD (g/cm2)
BDPEA	PELVAREA	Pelvic Area (cm2)
BDPEC	PELVBMC	Pelvic BMC (g)
BDPED	PELVBMD	Pelvic BMD (g/cm2)
BDLLA	LLEGAREA	Left Leg Area (cm2)
BDLLC	LLEGBMC	Left Leg BMC (g)
BDLLD	LLEGBMD	Left Leg BMD (g/cm2)
BDRLA	RLEGAREA	Right Leg Area (cm2)
BDRLC	RLEGBMC	Right Leg BMC (g)
BDRLD	RLEGBMD	Right Leg BMD (g/cm2)
BDWBADT	BANALDAT	Whole Body scan analysis date
BDWBDATE	BSCANDAT	Whole Body scan date
BDWBTYPE	BSCANTYP	Whole Body scan type
BDWBMODE	BSCANMOD	Whole Body scan mode
BDWBCOD	BSCANCOD	Whole Body scan operator code
BDWBPRO	BSCANPRO	Whole Body scan protocol
BDBRF	BRAINFAT	Brain Fat (g)
BDHDF	HEADFAT	Head Fat (g)
BDHDE	HEADFFM	Head FFM (g)
BDHDM	HEADMASS	Head Mass (g)
BDHDP	HEADPF	Head %Fat
BDLAF	LARMFAT	Left Arm Fat (g)
BDLAE	LARMFFM	Left Arm FFM (g)
BDLAM	LARMMASS	Left Arm Mass (g)
BDLAP	LARMPF	Left Arm %Fat
BDRAF	RARMFAT	Right Arm Fat (g)
BDRAE	RARMFFM	Right Arm FFM (g)
BDRAM	RARMMASS	Right Arm Mass (g)
BDRAP	RARMPF	Right Arm %Fat
BDTKF	TRUNKFAT	Trunk Fat (g)
BDTKE	TRNKFFM	Trunk FFM (g)
BDTKM	TRNKMASS	Trunk Mass (g)
BDTKP	TRNKPFF	Trunk %Fat
BDLLF	LLEGFAT	Left Leg Fat (g)
BDLLE	LLEGFFM	Left Leg FFM (g)
BDLLM	LLEGMASS	Left Leg Mass (g)
BDLLP	LLEGPF	Left Leg %Fat
BDRLF	RLEGFAT	Right Leg Fat (g)
BDRLE	RLEGFFM	Right Leg FFM (g)
BDRLM	RLEGMASS	Right Leg Mass (g)
BDRLP	RLEGPF	Right Leg %Fat
BDSBF	BSUBFAT	Sub Total Fat (g)
BDSBE	BSUBFFM	Sub Total FFM (g)
BDSBM	BSUBMASS	Sub Total Mass (g)
BDSBP	BSUBPF	Sub Total %Fat
BDTBF	BTOTFAT	Total Fat (g)
BDTBE	BTOTFFM	Total FFM (g)
BDTBM	BTOTMASS	Total Mass (g)
BDTBP	BTOTPF	Total %Fat
BDTKC	TRNKBMC	Trunk BMC (g)
BDTBL	BTOTLEAN	Total Lean (g)
BDHDL	HEADLEAN	Head Lean (g)

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BDLAL	LARMLEAN	Left Arm Lean (g)
BDRAL	RARMLEAN	Right Arm Lean (g)
BDTKL	TRNKLEAN	Trunk Lean (g)
BDLLL	LLEGLEAN	Left Leg Lean (g)
BDRLL	RLEGLEAN	Right Leg Lean (g)
BDSBL	BSUBLEAN	Sub Total Lean (g)
BDWBID	BSCANID	Whole Body scan Id
BD1HPDYS	HPDAYS	Days since B1
BD1HPYRS	HPYRS	Years since B1
BD1DTHA	DHPAREA	Total Hip Area abs change since B1
BD1DTHC	DHPBMC	Total Hip BMC abs change since B1
BD1DTHD	DHPBMD	Total Hip BMD abs change since B1
BD1DFNA	DNAREA	Femoral Neck Area abs change since B1
BD1DFNC	DNBMC	Femoral Neck BMC abs change since B1
BD1DFND	DNBMD	Femoral Neck BMD abs change since B1
BD1DTRA	DTAREA	Trochanteric Area abs change since B1
BD1DTRC	DTBMC	Trochanteric BMC abs change since B1
BD1DTRD	DTBMD	Trochanteric BMD abs change since B1
BD1DITA	DITAREA	Intertrochanter Area abs change since B1
BD1DITC	DITBMC	Intertrochanter BMC abs change since B1
BD1DITD	DITBMD	Intertrochanter BMD abs change since B1
BD1DWDA	DWAREA	Wards Area abs change since B1
BD1DWDC	DWBMC	Wards BMC abs change since B1
BD1DWDD	DWBMD	Wards BMD abs change since B1
BD1PTHA	PHPAREA	Total Hip Area % change since B1
BD1PTHC	PHPBMC	Total Hip BMC % change since B1
BD1PTHD	PHPBMD	Total Hip BMD % change since B1
BD1PFNA	PNAREA	Femoral Neck Area % change since B1
BD1PFNC	PNBMC	Femoral Neck BMC % change since B1
BD1PFND	PNBMD	Femoral Neck BMD % change since B1
BD1PTRA	PTAREA	Trochanteric Area % change since B1
BD1PTRC	PTBMC	Trochanteric BMC % change since B1
BD1PTRD	PTBMD	Trochanteric BMD % change since B1
BD1PITA	PITAREA	Intertrochanter Area % change since B1
BD1PITC	PITBMC	Intertrochanter BMC % change since B1
BD1PITD	PITBMD	Intertrochanter BMD % change since B1
BD1PWDA	PWAREA	Wards Area % change since B1
BD1PWDC	PWBMC	Wards BMC % change since B1
BD1PWDD	PWBMD	Wards BMD % change since B1
BD1SPDYS	SPDAYS	Days since B1
BD1SPYRS	SPYRS	Years since B1
BD1DTLA	DSPAREA	Total Spine Area abs change since B1
BD1DTLC	DSPBMC	Total Spine BMC abs change since B1
BD1DTLD	DSPBMD	Total Spine BMD abs change since B1
BD1DL1A	DL1AREA	L1 Area (cm2) abs change since B1
BD1DL1C	DL1BMC	L1 BMC (g) abs change since B1
BD1DL1D	DL1BMD	L1 BMD (g/cm2) abs change since B1
BD1DL2A	DL2AREA	L2 Area (cm2) abs change since B1
BD1DL2C	DL2BMC	L2 BMC (g) abs change since B1
BD1DL2D	DL2BMD	L2 BMD (g/cm2) abs change since B1
BD1DL3A	DL3AREA	L3 Area (cm2) abs change since B1
BD1DL3C	DL3BMC	L3 BMC (g) abs change since B1
BD1DL3D	DL3BMD	L3 BMD (g/cm2) abs change since B1

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BD1DL4A	DL4AREA	L4 Area (cm <sup>2</sup> ) abs change since B1
BD1DL4C	DL4BMC	L4 BMC (g) abs change since B1
BD1DL4D	DL4BMD	L4 BMD (g/cm <sup>2</sup> ) abs change since B1
BD1PTLA	PSPAREA	Total Spine Area % change since B1
BD1PTLC	PSPBMC	Total Spine BMC % change since B1
BD1PTLD	PSPBMD	Total Spine BMD % change since B1
BD1PL1A	PL1AREA	L1 Area % change since B1
BD1PL1C	PL1BMC	L1 BMC % change since B1
BD1PL1D	PL1BMD	L1 BMD % change since B1
BD1PL2A	PL2AREA	L2 Area % change since B1
BD1PL2C	PL2BMC	L2 BMC % change since B1
BD1PL2D	PL2BMD	L2 BMD % change since B1
BD1PL3A	PL3AREA	L3 Area % change since B1
BD1PL3C	PL3BMC	L3 BMC % change since B1
BD1PL3D	PL3BMD	L3 BMD % change since B1
BD1PL4A	PL4AREA	L4 Area % change since B1
BD1PL4C	PL4BMC	L4 BMC % change since B1
BD1PL4D	PL4BMD	L4 BMD % change since B1
BD1WBDYS	WBDAYS	Days since B1
BD1WBYRS	WBYRS	Years since B1
BD1DTBA	DWBAREA	Whole Body Total Area abs change since B1
BD1DTBC	DWBBMC	Whole Body Total BMC abs change since B1
BD1DTBD	DWBBMD	Whole Body Total BMD abs change since B1
BD1DHDA	DHEADARE	Head Area abs change since B1
BD1DHDC	DHEADBMC	Head BMC abs change since B1
BD1DHDD	DHEADBMD	Head BMD abs change since B1
BD1DLAA	DLARMARE	Left Arm Area abs change since B1
BD1DLAC	DLARMBMC	Left Arm BMC abs change since B1
BD1DLAD	DLARMBMD	Left Arm BMD abs change since B1
BD1DRAA	DRARMARE	Right Arm Area abs change since B1
BD1DRAC	DRARMBMC	Right Arm BMC abs change since B1
BD1DRAD	DRARMBMD	Right Arm BMD abs change since B1
BD1DLRA	DLRIBARE	Left Rib Area abs change since B1
BD1DLRC	DLRIBBMC	Left Rib BMC abs change since B1
BD1DLRD	DLRIBBMD	Left Rib BMD abs change since B1
BD1DRRA	DRRIBARE	Right Rib Area abs change since B1
BD1DRRC	DRRIBBMC	Right Rib BMC abs change since B1
BD1DRRD	DRRIBBMD	Right Rib BMD abs change since B1
BD1DTSA	DTSPIARE	Thoracic Spine Area abs change since B1
BD1DTSC	DTSPIBMC	Thoracic Spine BMC abs change since B1
BD1DTSD	DTSPIBMD	Thoracic Spine BMD abs change since B1
BD1DLSA	DLSPIARE	Lumbar Spine Area abs change since B1
BD1DLSC	DLSPIBMC	Lumbar Spine BMC abs change since B1
BD1DLSD	DLSPIBMD	Lumbar Spine BMD abs change since B1
BD1DPEA	DPELVARE	Pelvic Area abs change since B1
BD1DPEC	DPELVBMC	Pelvic BMC abs change since B1
BD1DPED	DPELVBMD	Pelvic BMD abs change since B1
BD1DLLA	DLLEGARE	Left Leg Area abs change since B1
BD1DLLC	DLLEGBMC	Left Leg BMC abs change since B1
BD1DLLD	DLLEGBMD	Left Leg BMD abs change since B1
BD1DRLA	DRLEGARE	Right Leg Area abs change since B1
BD1DRLC	DRLEGBMC	Right Leg BMC abs change since B1
BD1DRLD	DRLEGBMD	Right Leg BMD abs change since B1



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BD1DBRF	DBRAINFA	Brain Fat abs change since B1
BD1DHDF	DHEADFAT	Head Fat abs change since B1
BD1DHDE	DHEADFFM	Head FFM abs change since B1
BD1DHDM	DHEADMAS	Head Mass abs change since B1
BD1DHDP	DHEADPF	Head %Fat abs change since B1
BD1DLAF	DLARMFAT	Left Arm Fat abs change since B1
BD1DLAE	DLARMFFM	Left Arm FFM abs change since B1
BD1DLAM	DLARMMAS	Left Arm Mass abs change since B1
BD1DLAP	DLARMPF	Left Arm %Fat abs change since B1
BD1DRAF	DRARMFAT	Right Arm Fat abs change since B1
BD1DRAE	DRARMFFM	Right Arm FFM abs change since B1
BD1DRAM	DRARMMAS	Right Arm Mass abs change since B1
BD1DRAP	DRARMPF	Right Arm %Fat abs change since B1
BD1DTKF	DTRUNKFA	Trunk Fat abs change since B1
BD1DTKE	DTRNKFFM	Trunk FFM abs change since B1
BD1DTKM	DTRNKMAS	Trunk Mass abs change since B1
BD1DTKP	DTRNKPFF	Trunk %Fat abs change since B1
BD1DLLF	DLLEGFAT	Left Leg Fat abs change since B1
BD1DLLE	DLLEGFFM	Left Leg FFM abs change since B1
BD1DLLM	DLLEGMAS	Left Leg Mass abs change since B1
BD1DLLP	DLLEGPFF	Left Leg %Fat abs change since B1
BD1DRLF	DRLEGFAT	Right Leg Fat abs change since B1
BD1DRLE	DRLEGFFM	Right Leg FFM abs change since B1
BD1DRLM	DRLEGMAS	Right Leg Mass abs change since B1
BD1DRLP	DRLEGPFF	Right Leg %Fat abs change since B1
BD1DTBF	DTOTFAT	Total Fat abs change since B1
BD1DTBE	DTOTFFM	Total FFM abs change since B1
BD1DTBM	DTOTMASS	Total Mass abs change since B1
BD1DTBP	DTOTPF	Total %Fat abs change since B1
BD1DTKC	DTRNKBMC	Trunk BMC abs change since B1
BD1DTBL	DTOTLEAN	Total Lean abs change since B1
BD1DHDL	DHEADLEA	Head Lean abs change since B1
BD1DLAL	DLARMLEA	Left Arm Lean abs change since B1
BD1DRAL	DRARMLEA	Right Arm Lean abs change since B1
BD1DTKL	DTRNMLEA	Trunk Lean abs change since B1
BD1DLLL	DLLEGLEA	Left Leg Lean abs change since B1
BD1DRLL	DRLEGLEA	Right Leg Lean abs change since B1
BD1PTBA	PWBAREA	Whole Body Total Area % change since B1
BD1PTBC	PWB BMC	Whole Body Total BMC % change since B1
BD1PTBD	PWB BMD	Whole Body Total BMD % change since B1
BD1PHDA	PHEADARE	Head Area % change since B1
BD1PHDC	PHEADBMC	Head BMC % change since B1
BD1PHDD	PHEADBMD	Head BMD % change since B1
BD1PLAA	PLARMARE	Left Arm Area % change since B1
BD1PLAC	PLARMBMC	Left Arm BMC % change since B1
BD1PLAD	PLARMBMD	Left Arm BMD % change since B1
BD1PRAA	PRARMARE	Right Arm Area % change since B1
BD1PRAC	PRARMBMC	Right Arm BMC % change since B1
BD1PRAD	PRARMBMD	Right Arm BMD % change since B1
BD1PLRA	PLRIBARE	Left Rib Area % change since B1
BD1PLRC	PLRIBBMC	Left Rib BMC % change since B1
BD1PLRD	PLRIBBMD	Left Rib BMD % change since B1
BD1PRRA	PRRIBARE	Right Rib Area % change since B1

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BD1PRRC	PRRIBBMC	Right Rib BMC % change since B1
BD1PRRD	PRRIBBMD	Right Rib BMD % change since B1
BD1PTSA	PTSPIARE	Thoracic Spine Area % change since B1
BD1PTSC	PTSPIBMC	Thoracic Spine BMC % change since B1
BD1PTSD	PTSPIBMD	Thoracic Spine BMD % change since B1
BD1PLSA	PLSPIARE	Lumbar Spine Area % change since B1
BD1PLSC	PLSPIBMC	Lumbar Spine BMC % change since B1
BD1PLSD	PLSPIBMD	Lumbar Spine BMD % change since B1
BD1PPEA	PPELVARE	Pelvic Area % change since B1
BD1PPEC	PPELVBMC	Pelvic BMC % change since B1
BD1PPED	PPELVBMD	Pelvic BMD % change since B1
BD1PLLA	PLLEGARE	Left Leg Area % change since B1
BD1PLLC	PLLEGBMC	Left Leg BMC % change since B1
BD1PLLD	PLLEGBMD	Left Leg BMD % change since B1
BD1PRLA	PRLEGARE	Right Leg Area % change since B1
BD1PRLC	PRLEGBMC	Right Leg BMC % change since B1
BD1PRLD	PRLEGBMD	Right Leg BMD % change since B1
BD1PBRF	PBRAINFA	Brain Fat % change since B1
BD1PHDF	PHEADFAT	Head Fat % change since B1
BD1PHDE	PHEADFFM	Head FFM % change since B1
BD1PHDM	PHEADMAS	Head Mass % change since B1
BD1PHDP	PHEADPF	Head %Fat % change since B1
BD1PLAF	PLARMFAT	Left Arm Fat % change since B1
BD1PLAE	PLARMFFM	Left Arm FFM % change since B1
BD1PLAM	PLARMMAS	Left Arm Mass % change since B1
BD1PLAP	PLARMPF	Left Arm %Fat % change since B1
BD1PRAF	PRARMFAT	Right Arm Fat % change since B1
BD1PRAE	PRARMFFM	Right Arm FFM % change since B1
BD1PRAM	PRARMMAS	Right Arm Mass % change since B1
BD1PRAP	PRARMPF	Right Arm %Fat % change since B1
BD1PTKF	PTRUNKFA	Trunk Fat % change since B1
BD1PTKE	PTRNKFFM	Trunk FFM % change since B1
BD1PTKM	PTRNKMAS	Trunk Mass % change since B1
BD1PTKP	PTRNKPF	Trunk %Fat % change since B1
BD1PLLF	PLLEGFAT	Left Leg Fat % change since B1
BD1PLLE	PLLEGFFM	Left Leg FFM % change since B1
BD1PLLM	PLLEGMAS	Left Leg Mass % change since B1
BD1PLLP	PLLEGPF	Left Leg %Fat % change since B1
BD1PRLF	PRLEGFAT	Right Leg Fat % change since B1
BD1PRLE	PRLEGFFM	Right Leg FFM % change since B1
BD1PRLM	PRLEGMAS	Right Leg Mass % change since B1
BD1PRLP	PRLEGPF	Right Leg %Fat % change since B1
BD1PTBF	PTOTFAT	Total Fat % change since B1
BD1PTBE	PTOTFFM	Total FFM % change since B1
BD1PTBM	PTOTMASS	Total Mass % change since B1
BD1PTBP	PTOTPF	Total %Fat % change since B1
BD1PTKC	PTRNKBMC	Trunk BMC % change since B1
BD1PTBL	PTOTLEAN	Total Lean % change since B1
BD1PHDL	PHEADLEA	Head Lean % change since B1
BD1PLAL	PLARMLEA	Left Arm Lean % change since B1
BD1PRAL	PRARMLEA	Right Arm Lean % change since B1
BD1PTKL	PTRNKLEA	Trunk Lean % change since B1
BD1PLLL	PLLEGLEA	Left Leg Lean % change since B1

## MrOS DXA Documentation

BD1PRLL	PRLEGLEA	Right Leg Lean % change since B1
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B1D variables		
New name	Old name	Label
BDHPQDR1	HQDR_NB	Hip scan QDR number B1
BDTRA1	TAREA	Trochanteric Area B1 longitud adj
BDTRC1	TBMC	Trochanteric BMC B1 longitud adj
BDTRD1	TBMD	Trochanteric BMD B1 longitud adj
BDITA1	ITAREA	Intertrochanteric Area B1 longitud adj
BDITC1	ITBMC	Intertrochanteric BMC B1 longitud adj
BDITD1	ITBMD	Intertrochanteric BMD B1 longitud adj
BDFNA1	NAREA	Femoral Neck Area B1 longitud adj
BDFNC1	NBMC	Femoral Neck BMC B1 longitud adj
BDFND1	NBMD	Femoral Neck BMD B1 longitud adj
BDWDA1	WAREA	Wards Area B1 longitud adj
BDWDC1	WBMC	Wards BMC B1 longitud adj
BDWDD1	WBMD	Wards BMD B1 longitud adj
BDTHA1	HTOTAREA	Total Hip Area B1 longitud adj
BDTHC1	HTOTBMC	Total Hip BMC B1 longitud adj
BDTHD1	HTOTBMD	Total Hip BMD B1 longitud adj
BDHPADT1	HANALDAT	Hip scan analysis date B1
BDHPDAT1	HSCANDAT	Hip scan date B1
BDHPTYP1	HSCANTYP	Hip scan type B1
BDHPMOD1	HSCANMOD	Hip scan mode B1
BDHPCOD1	HSCANCOD	Hip scan operator code B1
BDHPPRO1	HSCANPRO	Hip scan protocol B1
BDHPSID1	HSIDE	Hip side B1
BDHPID1	HSCANID	Hip scan Id B1
BDSPQDR1	SQDR_NB	Spine scan QDR number B1
BDL1A1	L1AREA	L1 Area (cm2) B1 longitud adj
BDL1C1	L1BMC	L1 BMC (g) B1 longitud adj
BDL1D1	L1BMD	L1 BMD (g/cm2) B1 longitud adj
BDL2A1	L2AREA	L2 Area (cm2) B1 longitud adj
BDL2C1	L2BMC	L2 BMC (g) B1 longitud adj
BDL2D1	L2BMD	L2 BMD (g/cm2) B1 longitud adj
BDL3A1	L3AREA	L3 Area (cm2) B1 longitud adj
BDL3C1	L3BMC	L3 BMC (g) B1 longitud adj
BDL3D1	L3BMD	L3 BMD (g/cm2) B1 longitud adj
BDL4A1	L4AREA	L4 Area (cm2) B1 longitud adj
BDL4C1	L4BMC	L4 BMC (g) B1 longitud adj
BDL4D1	L4BMD	L4 BMD (g/cm2) B1 longitud adj
BDTLA1	STOTAREA	Total Spine Area (cm2) B1 longitud adj
BDTLC1	STOTBMC	Total Spine BMC (g) B1 longitud adj
BDTLD1	STOTBMD	Total Spine BMD (g/cm2) B1 longitud adj
BDSPADT1	SANALDAT	Spine scan analysis date B1
BDSPDAT1	SSCANDAT	Spine scan date B1
BDSPTYP1	SSCANTYP	Spine scan type B1
BDSPMOD1	SSCANMOD	Spine scan mode B1
BDSPCOD1	SSCANCOD	Spine scan operator code B1
BDSPPRO1	SSCANPRO	Spine scan protocol B1
BDSPID1	SSCANID	Spine scan Id B1
BDWBQDR1	BQDR_NB	Whole Body scan QDR number B1

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BDTBA1	BTOTAREA	Whole Body Total Area B1 longitud adj
BDTBC1	BTOTBMC	Whole Body Total BMC B1 longitud adj
BDTBD1	BTOTBMD	Whole Body Total BMD B1 longitud adj
BDSBA1	BSUBAREA	Whole Body Sub Total Area B1 longitud adj
BDSBC1	BSUBBMC	Whole Body Sub Total BMC B1 longitud adj
BDSBD1	BSUBBMD	Whole Body Sub Total BMD B1 longitud adj
BDHDA1	HEADAREA	Head Area B1 longitud adj
BDHDC1	HEADBMC	Head BMC B1 longitud adj
BDHDD1	HEADBMD	Head BMD B1 longitud adj
BDLAA1	LARMAREA	Left Arm Area B1 longitud adj
BDLAC1	LARMBMC	Left Arm BMC B1 longitud adj
BDLAD1	LARMBMD	Left Arm BMD B1 longitud adj
BDRAA1	RARMAREA	Right Arm Area B1 longitud adj
BDRAC1	RARMBMC	Right Arm BMC B1 longitud adj
BDRAD1	RARMBMD	Right Arm BMD B1 longitud adj
BDLRA1	LRIBAREA	Left Rib Area B1 longitud adj
BDLRC1	LRIBBMC	Left Rib BMC B1 longitud adj
BDLRD1	LRIBBMD	Left Rib BMD B1 longitud adj
BDRRA1	RRIBAREA	Right Rib Area B1 longitud adj
BDRRC1	RRIBBMC	Right Rib BMC B1 longitud adj
BDRRD1	RRIBBMD	Right Rib BMD B1 longitud adj
BDTSA1	TSPIAREA	Thoracic Spine Area B1 longitud adj
BDTSC1	TSPIBMCM	Thoracic Spine BMC B1 longitud adj
BDTSD1	TSPIBMCM	Thoracic Spine BMD B1 longitud adj
BDLSA1	LSPIAREA	Lumbar Spine Area B1 longitud adj
BDLSC1	LSPIBMC	Lumbar Spine BMC B1 longitud adj
BDLSD1	LSPIBMD	Lumbar Spine BMD B1 longitud adj
BDPEA1	PELVAREA	Pelvic Area B1 longitud adj
BDPEC1	PELVBMC	Pelvic BMC B1 longitud adj
BDPED1	PELVBMD	Pelvic BMD B1 longitud adj
BDLLA1	LLEGAREA	Left Leg Area B1 longitud adj
BDLLC1	LLEGBMC	Left Leg BMC B1 longitud adj
BDLLD1	LLEGBMD	Left Leg BMD B1 longitud adj
BDRLA1	RLEGAREA	Right Leg Area B1 longitud adj
BDRLC1	RLEGBMC	Right Leg BMC B1 longitud adj
BDRLD1	RLEGBMD	Right Leg BMD B1 longitud adj
BDWBADT1	BANALDAT	Whole Body scan analysis date B1
BDWBDAT1	BSCANDAT	Whole Body scan date B1
BDWBTYP1	BSCANTYP	Whole Body scan type B1
BDWBMOD1	BSCANMOD	Whole Body scan mode B1
BDWBCOD1	BSCANCOD	Whole Body scan operator code B1
BDWBPRO1	BSCANPRO	Whole Body scan protocol B1
BDBRF1	BRAINFAT	Brain Fat B1 longitud adj
BDHDF1	HEADFAT	Head Fat B1 longitud adj
BDHDE1	HEADFFM	Head FFM B1 longitud adj
BDHDM1	HEADMASS	Head Mass B1 longitud adj
BDHDP1	HEADPF	Head %Fat B1 longitud adj
BDLAF1	LARMFAT	Left Arm Fat B1 longitud adj
BDLAE1	LARMFFM	Left Arm FFM B1 longitud adj
BDLAM1	LARMMASS	Left Arm Mass B1 longitud adj
BDLAP1	LARMPF	Left Arm %Fat B1 longitud adj
BDRAF1	RARMFAT	Right Arm Fat B1 longitud adj
BDRAE1	RARMFFM	Right Arm FFM B1 longitud adj

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BDRAM1	RARMMASS	Right Arm Mass B1 longitud adj
BDRAP1	RARMPF	Right Arm %Fat B1 longitud adj
BDTKF1	TRUNKFAT	Trunk Fat B1 longitud adj
BDTKE1	TRNKFFM	Trunk FFM B1 longitud adj
BDTKM1	TRNKMASS	Trunk Mass B1 longitud adj
BDTKP1	TRNKPf	Trunk %Fat B1 longitud adj
BDLLF1	LLEGFAT	Left Leg Fat B1 longitud adj
BDLLE1	LLEGFFM	Left Leg FFM B1 longitud adj
BDLLM1	LLEGMASS	Left Leg Mass B1 longitud adj
BDLLP1	LLEGPF	Left Leg %Fat B1 longitud adj
BDRLF1	RLEGFAT	Right Leg Fat B1 longitud adj
BDRLE1	RLEGFFM	Right Leg FFM B1 longitud adj
BDRLM1	RLEGMASS	Right Leg Mass B1 longitud adj
BDRLP1	RLEGPF	Right Leg %Fat B1 longitud adj
BDSBF1	BSUBFAT	Sub Total Fat B1 longitud adj
BDSBE1	BSUBFFM	Sub Total FFM B1 longitud adj
BDSBM1	BSUBMASS	Sub Total Mass B1 longitud adj
BDSBP1	BSUBPF	Sub Total %Fat B1 longitud adj
BDTBF1	BTOTFAT	Total Fat B1 longitud adj
BDTBE1	BTOTFFM	Total FFM B1 longitud adj
BDTBM1	BTOTMASS	Total Mass B1 longitud adj
BDTBP1	BTOTPF	Total %Fat B1 longitud adj
BDTKC1	TRNKBMC	Trunk BMC B1 longitud adj
BDTBL1	BTOTLEAN	Total Lean B1 longitud adj
BDHDL1	HEADLEAN	Head Lean B1 longitud adj
BDLAL1	LARMLEAN	Left Arm Lean B1 longitud adj
BDRAL1	RARMLEAN	Right Arm Lean B1 longitud adj
BDTKL1	TRNKLEAN	Trunk Lean B1 longitud adj
BDLLL1	LLEGLEAN	Left Leg Lean B1 longitud adj
BDRLL1	RLEGLEAN	Right Leg Lean B1 longitud adj
BDSBL1	BSUBLEAN	Sub Total Lean B1 longitud adj
BDWBID1	BSCANID	Whole Body scan Id B1