

Cohort, Exam 2**UBME****Data Sets Containing Imputed Values**

Because gender-race specific regression models were used to perform the imputation, a separate data set exists for White Males, White Females, Black Males, and Black Females. Each data set name consists of UBME (indicating ultrasound) + WM, WF, BF, or BM (indicating the specific gender-race group) + 4 (updated version number). For example, the data set containing imputed ultrasound data for white males is named UBMEWM4. Similarly, the data set containing imputed ultrasound data for black females is named UBMEBF4. A similar pattern holds for the other gender-race groups.

The variables contained within the data sets are summarized in the table below. Most variable names consist of LBIB, RBIB, LOPB, ROPB, LINB, or RINB (indicating location) + DA or WA (indicating the type of statistic) +45 (indicating that the measurement is of the far wall). There are a few other summary variables which have unique names. These are included in the following list.

VARIABLE	DESCRIPTION	TYPE
ID	Participant ID number	Character
*DA45	Imputed site-specific average far wall thickness *=LBIB, RBIB, LOPB, ROPB, LINB, RINB	Continuous
*WA45	Weight for site-specific imputed average wall thickness *=LBIB, RBIB, LOPB, ROPB, LINB, RINB	Continuous
SUM45_23	Z score summary statistic for *DA45	Continuous
SUM2WT45	Number of observed values / 6 = weight for Sum45_21, 2, or 3	Continuous

Imputed versus Unimputed Data

You may want to rerun analyses previously run on unimputed (observed) ultrasound data (using the UBME4 data set), on imputed data (using the UBME_{xx}4 data sets, where xx can be BM, BF, WM, or WF). Because of the naming conventions used, this should be a relatively easy task. Note that the data set containing unimputed ultrasound data (UBME) contains variables of average far wall width, such as LINBAV45 and LBIBAV45. These unimputed variables on the UBME data set correspond to the imputed variables LINBDA45 and LBIBDA45, respectively, on the UBME_{xx}4 data sets. Thus, only the middle component of the variable name must be changed for AV (unimputed average) to DA (imputed average). This logic holds true for all of the site-specific averages.

Use of Weights

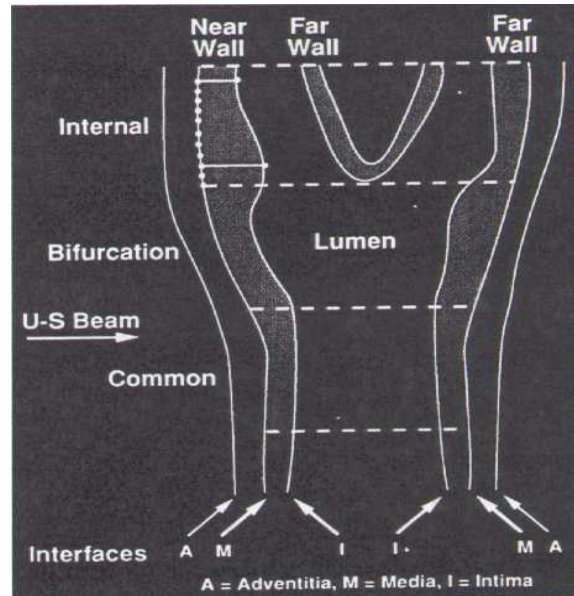
The weights are a measure of precision which varies by number of sites observed. Regression estimates, using *DA45 or SUM45_21 as dependent variables, will generally be more precise if weighted regression is used.

Appendix A**B-Mode Derived Variable Site Prefixes**

LAN	Left Common Carotid: Anterior Angle
RAN	Right Common Carotid: Anterior Angle
LBI	Left Bifurcation
RBI	Right Bifurcation
LIN	Left Internal Carotid
RIN	Right Internal Carotid
LOP	Left Common Carotid: Optimal Angle
ROP	Right Common Carotid: Optimal Angle
LPO	Left Common Carotid: Posterior Angle
RPO	Right Common Carotid: Posterior Angle
LPP	Left Popliteal
RPP	Right Popliteal
QC1	First QC Repeat Scan (refer to QC01 for site identification)
QC2	Second QC Repeat Scan (refer to QC02 for site identification)

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Schematic Overview of Carotid Artery B-Mode Ultrasound Measurements



- Interfaces:
- 1- Boundary between the periadventitia and adventitia of the near wall (not measured)
 - 2- Boundary between the adventitia and media of the near wall
 - 3- Boundary between the intima of the near wall and the blood
 - 4- Boundary between blood and intima of the far wall
 - 5- Boundary between media and adventitia of the far wall
 - 6- Boundary between adventitia and periadventitia of the far wall (not measured)

Max 23 = B-A; Max 45 = D-C; Min 34 = H-G

The extracranial carotid system is divided into one-centimeter segments: I = internal carotid; II = carotid bifurcation; III = common carotid. A maximum of eleven measurements is made by URC readers on each arterial wall interface, in each arterial segment. These measurements are placed equidistant at 1 millimeter intervals, represented by the eleven points placed on interface B2 on the internal carotid. Also shown on this schematic is the definition of a maximum and a minimum wall thickness variable.

Cohort, Exam 2**Ultrasound data**

Imputed, black female

<i>ID</i>		<i>Aric Subject ID (Cir)</i>
<i>N</i>	<i>Value</i>	<i>Description</i>
2090	Present	Text suppressed

<i>LBIBDA45</i>		<i>Derived Average Far Wall Thickness, Left Bifurcation</i>
<i>N</i>	<i>Value</i>	<i>Description</i>
2015	Range	0.376875 - 7.035 (median=0.781667 mean=0.8363532 std=0.3280874)
75		Missing

<i>LBIBWA45</i>		<i>Weight For LBIBDA45</i>
<i>N</i>	<i>Value</i>	<i>Description</i>
123	0.1666666667	
267	0.3333333333	
234	0.5	
153	0.6666666667	
58	0.8333333333	
1180	1	
75		Missing

<i>LINBDA45</i>		<i>Derived Average Far Wall Thickness, Left Internal Carotid</i>
<i>N</i>	<i>Value</i>	<i>Description</i>
2015	Range	0.201 - 3.67543 (median=0.630467 mean=0.6530302 std=0.2168539)
75		Missing

<i>LINBWA45</i>		<i>Weight For LINBDA45</i>
<i>N</i>	<i>Value</i>	<i>Description</i>
125	0.1666666667	
282	0.3333333333	
313	0.5	
293	0.6666666667	
154	0.8333333333	
848	1	
75		Missing

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<i>LOPBDA45</i>		<i>Derived Average Far Wall Thickness, Left Common Carotid: Optimal Angle</i>
<i>N</i>	<i>Value</i>	<i>Description</i>
2015	Range	0.268 - 2.4522 (median=0.645636 mean=0.6675056 std=0.1706549)
75		Missing

<i>LOPBWA45</i>		<i>Weight For LOPBDA45</i>
<i>N</i>	<i>Value</i>	<i>Description</i>
90	0.166666667	
109	0.333333333	
77	0.5	
33	0.666666667	
9	0.833333333	
1697	1	
75		Missing

<i>RBIBDA45</i>		<i>Derived Average Far Wall Thickness, Right Bifurcation</i>
<i>N</i>	<i>Value</i>	<i>Description</i>
2015	Range	0.268 - 4.824 (median=0.82453 mean=0.878537 std=0.331652)
75		Missing

<i>RBIBWA45</i>		<i>Weight For RBIBDA45</i>
<i>N</i>	<i>Value</i>	<i>Description</i>
121	0.166666667	
248	0.333333333	
223	0.5	
128	0.666666667	
48	0.833333333	
1247	1	
75		Missing

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<i>RESPONS2</i>		<i>Number Of Observed Sites</i>
<i>N</i>	<i>Value</i>	<i>Description</i>
75	0	
132	1	
325	2	
404	3	
469	4	
446	5	
239	6	

<i>RINBDA45</i>		<i>Derived Average Far Wall Thickness, Right Internal Carotid</i>
<i>N</i>	<i>Value</i>	<i>Description</i>
2015	Range	0.223333 - 7.571 (median=0.658105 mean=0.7002007 std=0.3270970)
75		Missing

<i>RINBWA45</i>		<i>Weight For RINBDA45</i>
<i>N</i>	<i>Value</i>	<i>Description</i>
127	0.1666666667	
307	0.3333333333	
317	0.5	
310	0.6666666667	
168	0.8333333333	
786	1	
75		Missing

<i>ROPBDA45</i>		<i>Derived Average Far Wall Thickness, Right Common Carotid: Optimal Angle</i>
<i>N</i>	<i>Value</i>	<i>Description</i>
2015	Range	0.268 - 1.69936 (median=0.67 mean=0.690 std=0.166)
75		Missing

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<i>ROPBWA45</i>		<i>Weight For ROPBDA45</i>
<i>N</i>	<i>Value</i>	<i>Description</i>
74	0.1666666667	
87	0.3333333333	
48	0.5	
21	0.6666666667	
9	0.8333333333	
1776	1	
75		Missing

<i>SUM2WT45</i>		<i>Number of observed values / 6 = weight for Sum45_21, 2, or 3</i>
<i>N</i>	<i>Value</i>	<i>Description</i>
75	0	
132	0.1666666667	
325	0.3333333333	
404	0.5	
469	0.6666666667	
446	0.8333333333	
239	1	

<i>SUM45_21</i>		<i>Mean Of The DA45 Variables</i>
<i>N</i>	<i>Value</i>	<i>Description</i>
2015	Range	0.40155 - 2.657346 (median=0.706063 mean=0.7376774 std=0.1743303)
75		Missing

<i>SUM45_22</i>		<i>Weighted Mean Of The DA45 Variables</i>
<i>N</i>	<i>Value</i>	<i>Description</i>
2015	Range	0.404459 - 2.717696 (median=0.707152 mean=0.7376774 std=0.1719488)
75		Missing

<i>SUM45_23</i>		<i>Z-Score Summary Statistic For The DA45 Variables</i>
<i>N</i>	<i>Value</i>	<i>Description</i>
2015	Range	0.36189 - 2.489643 (median=0.705727 mean=0.7376774 std=0.1789921)
75		Missing