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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 UBMExx4 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 UBMExx4 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

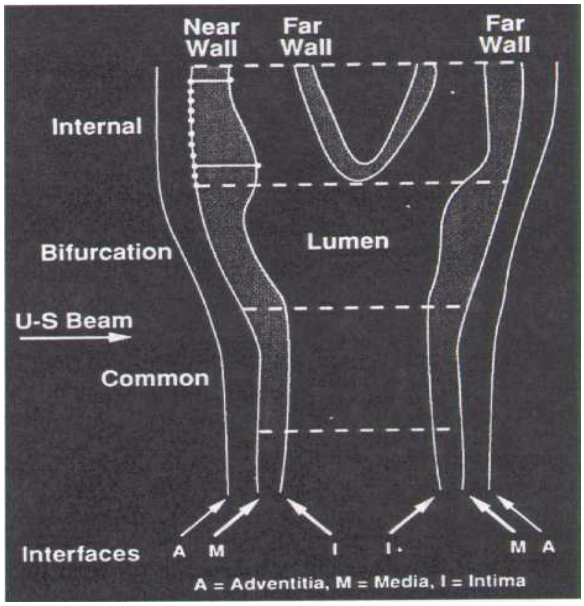
The weights are a measure of precision which varies by number of sites observed. Regression estimates, using *DA45 or SUM45_21 as dependent variables, will generally be more precise if weighted regression is used.

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)

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.

Ultrasound data

Imputed, white male

ID		*Aric Subject ID (Cir)*
N	*Value*	*Description*
5016	Present	Text suppressed

LBIBDA45		*Derived Average Far Wall Thickness, Left Bifurcation*
N	*Value*	*Description*
4955	Range	0.268 - 4.57833 (median=0.832504 mean=0.9031870 std=0.3595924)
61		Missing

LBIBWA45		*Weight For LBIBDA45*
N	*Value*	*Description*
186	0.1666666667	
266	0.3333333333	
424	0.5	
422	0.6666666667	
248	0.8333333333	
3409	1	
61		Missing

LINBDA45		*Derived Average Far Wall Thickness, Left Internal Carotid*
N	*Value*	*Description*
4955	Range	0.245667 - 5.025 (median=0.674285 mean=0.7298472 std=0.3265155)
61		Missing

LINBWA45		*Weight For LINBDA45*
N	*Value*	*Description*
178	0.1666666667	
288	0.3333333333	
472	0.5	
526	0.6666666667	
391	0.8333333333	
3100	1	
61		Missing

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LOPBDA45		*Derived Average Far Wall Thickness, Left Common Carotid: Optimal Angle*
N	*Value*	*Description*
4955	Range	0.201 - 3.3165 (median=0.677444 mean=0.7032099 std=0.1929788)
61		Missing

LOPBWA45		*Weight For LOPBDA45*
N	*Value*	*Description*
138	0.1666666667	
144	0.3333333333	
157	0.5	
97	0.6666666667	
64	0.8333333333	
4355	1	
61		Missing

RBIBDA45		*Derived Average Far Wall Thickness, Right Bifurcation*
N	*Value*	*Description*
4955	Range	0.223333 - 7.68267 (median=0.8576 mean=0.95511 std=0.43916)
61		Missing

RBIBWA45		*Weight For RBIBDA45*
N	*Value*	*Description*
182	0.1666666667	
254	0.3333333333	
317	0.5	
375	0.6666666667	
187	0.8333333333	
3640	1	
61		Missing

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RESPONS2		*Number Of Observed Sites*
N	*Value*	*Description*
61	0	
196	1	
343	2	
647	3	
1041	4	
1273	5	
1455	6	

RINBDA45		*Derived Average Far Wall Thickness, Right Internal Carotid*
N	*Value*	*Description*
4955	Range	0.223333 - 6.58833 (median=0.733389 mean=0.8073586 std=0.3944636)
61		Missing

RINBWA45		*Weight For RINBDA45*
N	*Value*	*Description*
189	0.1666666667	
299	0.3333333333	
470	0.5	
568	0.6666666667	
337	0.8333333333	
3092	1	
61		Missing

ROPBDA45		*Derived Average Far Wall Thickness, Right Common Carotid: Optimal Angle*
N	*Value*	*Description*
4955	Range	0.156333 - 3.0619 (median=0.66634 mean=0.690594 std=0.186985)
61		Missing

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ROPBWA45		*Weight For ROPBDA45*
N	*Value*	*Description*
107	0.1666666667	
121	0.3333333333	
101	0.5	
94	0.6666666667	
46	0.8333333333	
4486	1	
61		Missing

SUM2WT45		*Number of observed values / 6 = weight for Sum45_21, 2, or 3*
N	*Value*	*Description*
61	0	
196	0.1666666667	
343	0.3333333333	
647	0.5	
1041	0.6666666667	
1273	0.8333333333	
1455	1	

SUM45_21		*Mean Of The DA45 Variables*
N	*Value*	*Description*
4955	Range	0.401876 - 2.980514 (median=0.753466 mean=0.7982174 std=0.2159865)
61		Missing

SUM45_22		*Weighted Mean Of The DA45 Variables*
N	*Value*	*Description*
4955	Range	0.404072 - 2.777297 (median=0.755566 mean=0.7982174 std=0.2103666)
61		Missing

SUM45_23		*Z-Score Summary Statistic For The DA45 Variables*
N	*Value*	*Description*
4955	Range	0.36407 - 2.506409 (median=0.754606 mean=0.7982174 std=0.2215761)
61		Missing