Cohort, Exam 4

Ultrasound data
Reader Trend Adjusted Derived Variables for Far Wall Thickness

Because of method drift over the visit and systematic differences between readers, an additional set of far wall thickness variables was derived to adjust for these problems. These are the Reader Trend Adjusted (RTA) variables for the far wall thickness (ie boundaries 4 and 5) as illustrated in the schematic in Appendix A. The following variables appear in the RTA data files.

Variable Name	Description
id	Aric subject id
lbidrt45	Imputed RTA far wall thickness, LBID
lbidwt45	Weight for lbidrt45
lindrt45	Imputed RTA far wall thickness, LIND
lindwt45	Weight for lindrt45
lopdrt45	Imputed RTA far wall thickness, LOPD
lopdwt45	weight for lopdrt45
mnd45_1	Mean of the *rt45 variables
rbidrt45	Imputed RTA far wall thickness, RBID
rbidwt45	Weight for rbidrt45 variables
rindrt45	Imputed RTA far wall thickness, RIND
rindwt45	Weight for rindrt45 variables
ropdrt45	Imputed RTA far wall thickness, ROPD
ropdwt45	Weight for ropdrt45

Data Set Names
The data sets containing these variables are: rtabf41, rtabm41, rtawf41, and rtawm41 where rta indicates the variables are reader trend adjusted, the next two letters indicate the gender-race group, the 4 indicates it is a Visit 4 data set, and the 1 is a placeholder for the version of the data set.

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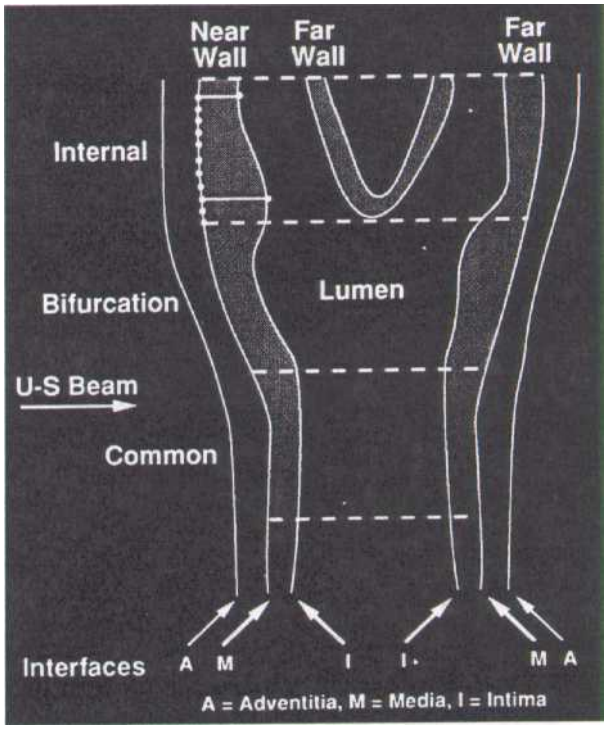
Appendix A

B-Mode Derived Variable Site Prefixes

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
QCC1	First QC Repeat Scan (refer to QC01 for site identification)
QCC2	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. Computational formulae for these variables are shown in this appendix.

Ultrasound data

Reader trend adjusted derived variables for far wall thickness - black male

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

LBIDRT45		*Imputed RTA far wall thickness, LBID*
N	*Value*	*Description*
463	Range	0.432532 - 4.16989 (median=0.96147 mean=1.045496 std=0.419474)

LBIDWT45		*Weight For LBIDRT45*
N	*Value*	*Description*
57	0.1666666667	
69	0.3333333333	
61	0.5	
47	0.6666666667	
15	0.8333333333	
214	1	

LINDRT45		*Imputed RTA far wall thickness, LIND*
N	*Value*	*Description*
463	Range	0.309852 - 2.84136 (median=0.709175 mean=0.7504838 std=0.2552110)

LINDWT45		*Weight For LINDRT45*
N	*Value*	*Description*
55	0.1666666667	
64	0.3333333333	
69	0.5	
49	0.6666666667	
29	0.8333333333	
197	1	

LOPDRT45		*Imputed RTA far wall thickness, LOPD*
N	*Value*	*Description*
463	Range	0.401878 - 2.49889 (median=0.782157 mean=0.8125301 std=0.2077423)

LOPDWT45		*Weight For LOPDRT45*
N	*Value*	*Description*
40	0.1666666667	
21	0.3333333333	
9	0.5	
3	0.6666666667	
1	0.8333333333	
389	1	

MND45_1		*Mean Of The RT45 Variables*
N	*Value*	*Description*
463	Range	0.519768 - 2.397308 (median=0.834234 mean=0.8878902 std=0.2230120)

RBIDRT45		*Imputed RTA far wall thickness, RBID*
N	*Value*	*Description*
463	Range	0.436563 - 3.62757 (median=0.946706 mean=1.0322300 std=0.4011796)

RBIDWT45		*Weight For RBIDRT45*
N	*Value*	*Description*
56	0.1666666667	
67	0.3333333333	
64	0.5	
46	0.6666666667	
17	0.8333333333	
213	1	

RINDRT45		*Imputed RTA far wall thickness, RIND*
N	*Value*	*Description*
463	Range	0.327269 - 6.4145 (median=0.758841 mean=0.8199130 std=0.3979955)

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RINDWT45		*Weight For RINDRT45*
N	*Value*	*Description*
55	0.1666666667	
67	0.3333333333	
79	0.5	
53	0.6666666667	
18	0.8333333333	
191	1	

ROPDRT45		*Imputed RTA far wall thickness, ROPD*
N	*Value*	*Description*
463	Range	0.346756 - 2.1822 (median=0.838678 mean=0.8666887 std=0.2145289)

ROPDWT45		*Weight For ROPDRT45*
N	*Value*	*Description*
32	0.1666666667	
16	0.3333333333	
12	0.5	
2	0.6666666667	
1	0.8333333333	
400	1	

TEMPL		*TEMPL*
N	*Value*	*Description*
55	0.1666666667	
64	0.3333333333	
69	0.5	
49	0.6666666667	
29	0.8333333333	
197	1	

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	TEMPR	*TEMPR*
N	*Value*	*Description*
55	0.1666666667	
67	0.3333333333	
79	0.5	
53	0.6666666667	
18	0.8333333333	
191	1	