ARIC MANUSCRIPT PROPOSAL FORM

Manuscript #147

1. Title (length 26):
   Prevalence of PAD
   Full title: Estimation of Asymptomatic Peripheral Atherosclerotic Disease by Ankle Blood Pressure in Black and White Men and Women

2. Writing Group:
   (lead) ZJ Zheng, R Hutchinson, FJ Nieto, R Barnes, L Chambless, G Heiss

3. Timeline:
   Data will be downloaded from diskettes at the URC. Analyses are expected to be completed within 7 months after file creation; a report formatted as a draft manuscript can be presented to the writing group 2 months after the completion of the analysis.

4. Rationale:
   The prevalence of peripheral atherosclerotic disease (PAD) in the lower extremities in the general population is not well documented, basically because of the lack of data on asymptomatic PAD. The ratio of ankle to arm systolic pressure (AAI) has been shown to have a good sensitivity and specificity in diagnosing asymptomatic peripheral atherosclerotic disease in clinic studies, and recommended by AHA as a cheap, easy, and important measurement of PAD in epidemiologic surveys. However, few epidemiologic studies have described the prevalence and correlates of AAI defined asymptomatic PAD. The ARIC study provides a unique opportunity to estimate asymptomatic PAD prevalence and correlates by using this measurement in white and black men and women.

5. Main Hypothesis:
   1) Prevalent asymptomatic PAD is higher in blacks than whites, and higher in men than women;
   2) Prevalent asymptomatic PAD is associated with cigarette smoking, diabetes, and hypertension.

6. Data:
   Visit 1 data set including ankle BP and AAI will be used for analysis. The population distribution of ankle systolic pressure and its ratio to arm pressure will be described. Asymptomatic PAD is defined by AAI, the cut point of which is based on the clinical criteria and population distribution. Other variables include center, age, sex, race, SES, smoking status, alcohol consumption, physical activity, BMI, blood lipids, blood pressure, hemostatic factors, ECG, insulin and blood glucose, medical history, and family history of CVD/stroke. Data analysis is to be performed by the lead author.