1. **a. Full title:** Blood Pressure Control among Type 2 Diabetics: The Atherosclerosis Risk in Communities Study

   **b. Abbreviated Title:** Blood pressure in diabetics

2. **Writing Group:**
   
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3. **Timeline:** Analysis to begin after Publication Committee approval. Manuscript anticipated for initial review in September 2002.

4. **Rationale:** The sixth report of the Joint National Committee for Detection, Evaluation, and Treatment of High Blood Pressure recommends that individuals with Type 2 Diabetes Mellitus achieve a target blood pressure of < 130 mmHg SBP and < 85 mmHg DBP. The United Kingdom Prospective Diabetes Study demonstrated that tight control of blood pressure is more important than glycemic control in reducing macrovascular events including stroke, MI, renal disease, and death. Recent clinical trials have demonstrated that the treatment of high blood pressure results in a greater reduction of cardiovascular events in patients with diabetes as compared to the patient without diabetes.

   Among patients with hypertension control rates are poor. The NHANES phase 2 data show that only 27.4% of hypertensive subjects achieved a blood pressure goal of < 140 mmHg SBP and
Among diabetics in the NHANES phase 2 analysis, 71% had elevated blood pressure defined as < 130/85. Fifty-seven percent of diabetics with HTN were treated yet only 12% had achieved a target blood pressure.

The prevalence of hypertension is greater among African Americans (AA) as compared to whites. Furthermore, hypertension occurs in younger AA patients and is more severe. African Americans are more likely to develop Type 2 diabetes mellitus. Control rates of hypertension in patients with diabetes are likely to be lower among AA than whites.

The purpose of the current proposal is to determine blood pressure control among adults with type 2 diabetes in the ARIC cohort. The difference in controls between AA and whites will be explored. Blood pressure control rates will be defined by date-specific JNC guidelines. Understanding control rates of hypertension in patients with diabetes is critical to the development of increased detection, evaluation, and treatment of hypertension and has important public health implications.

5. **Main Hypothesis:** This is a descriptive analysis of blood pressure control rates in participants with type 2 diabetes mellitus.

**Study Questions:**
1. Are there differences in blood pressure control rates in AA as compared to whites?
2. Does body weight impact blood pressure control in race/gender groups?

6. **Data:** Visit I - IV cross-sectional analysis

**Variables:**
- SBP
- DBP
- BMI
- Gender
- Age
- Ethnicity
- Diabetes Mellitus (defined as serum glucose of >126 or treatment for DM)
- Hypertension (defined as BP > 130 mmHg SBP or > 85 mmHg DBP or currently treated for HTN)

7.a. Will the data be used for non-CVD analysis in this manuscript? No

8.a. Will the DNA data be used in this manuscript? No
9. The lead author of this manuscript proposal has reviewed the list of existing ARIC Study manuscript proposals and has found no overlap between this proposal and previously approved manuscript proposals either published or still in active status.

References