1. Title:
CHD Mortality and Race Differences in Person Years of Life Between Ages 35-75

2. Writing Group:
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3. Background:
The 1990 US Life Tables (NCHS 1994) indicate that the probability of survival from age 35 to age 75 is 0.56, 0.76, 0.38, and 0.58 respectively for white males, white females, black males and black females. The corresponding figures for the year 1987 were 0.54, 0.71, 0.39 and 0.58. These figures indicate the existence of a large racial gap in these survival probabilities. Further, the survival rate for black males show a slight decline. A detailed examination of the contribution of various causes of death to these trends and differentials in the survival probabilities are lacking in the literature. This study aims to fill this gap in the literature.

4. Objectives:
Using ARIC Surveillance data we propose to examine the contribution of various causes of death, with emphasis on CHD mortality, to the race differentials in the survival rate for each of the calendar years 1987-1993. Specifically, we would like to examine the average person years of life contributed in the age range by various race-gender groups and examine the role of cause specific death rates in the race differences in the person years of life.

5. Data:
We propose to use the ARIC surveillance data to obtain CHD data and death tapes to obtain all cause, cancer, and other causes of death for ARIC sites.

6. Main Hypothesis:
Declining CHD mortality is expected to have a significant positive impact in the change in person years of life from 1987 to 1993. However, the impact may be less for black males.

7. Method:
For each of the calendar years 1987-1993 we first obtain i) age specific death rates and ii) cause specific rates. Use the computed rates to construct multiple decrement life tables. These life tables will provide index measures such as the cumulative probability of death due to specific causes before attaining 75 for an individual who is alive at age 35. The life tables using total mortality will give the average person years of life in the age interval 35-74. By simple algebraic relations, the difference in the average person years of life can be decomposed into weighted differences in the age cause specific mortality in various sub age groups.

8. Timeline:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time*</th>
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</thead>
<tbody>
<tr>
<td>1. Obtain data</td>
<td>Months 1-2</td>
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<tr>
<td>2. Performing analysis</td>
<td>Months 3-5</td>
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<tr>
<td>3. Complete manuscript</td>
<td>Months 6</td>
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</tbody>
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*Time since approval of proposal