ARIC MANUSCRIPT PROPOSAL FORM

Manuscript #111

1. Title:
Surveillance Validation of Death Certificate Diagnosis for CHD

2. Writing Group:
(lead) Cooper, White, Sorlie, Folsom, CSCC representative

3. Timeline:
Analysis could begin anytime on 1987-88 Surveillance mortality data, and completed when the 1989 data are available.

4. Rationale:
The validity of CHD mortality data derived from vital statistics is a major raison d'etre for ARIC. The issue of ICD code validation by ARIC Surveillance is already being addressed in a broad way in ARIC Manuscript #16, "Community Surveillance of CHD: Designs, Methods, and Applications." This manuscript would explore the issue of ICD code validation in greater depth.

Validation rates would be assessed by factors to include the following:
1) Geographic location, hospital type
2) Subject characteristics (e.g., gender, race, age)
3) Sources of information used to satisfy validation criteria (e.g., coroner, hospital, informant, physician, MMCC review, death certificate)
4) Place of death (e.g., inpatient hospital, emergency room, home, nursing home) and circumstances (e.g., witnessed vs. unwitnessed, time interval between onset of symptoms and death)
5) Time trends (if detectable within 3 years)

Attention should be given to the specificity, sensitivity, and predictive value of the different CHD ICD codes, d to non-CHD ICD codes yielding ARIC CHD diagnoses.

The literature of CHD validation studies is fairly large, but relatively few studies have been population based, and few if any assess ICD rates for different locations using the same validation criteria and over time. ARIC's rigorous quality control (dealt with extensively by Manuscript #16) in all relevant areas of surveillance, including record abstraction, MMCC review, and informant interviewing, makes its validation data especially credible. This paper could have valuable implications for the usefulness and limitations of data derived from vital statistics.

6. Data:
In-hospital deaths in all communities and out-of-hospital deaths in all communities except Washington County; relevant data for these deaths from the DTH, HRA, IFI, PHQ, and COR forms; results of MMCC review and adjudication where applicable.