1. Title: Disease Progression and Mortality in Older Americans

2. Writing Group:
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3. Timeline:
   Six year follow-up data analyzed over next 12 to 18 months.

4. Rationale:
The major aim of the project is to describe levels and patterns of disease progression and mortality by (co) morbidity status. The project will examine precursors of cardiovascular disease and their relationship to mortality by developing a new approach to incorporating comorbidity through the use of increment-decrement (multi state) life tables, and use this methodology to analyze disease progression and mortality. The multi state life tables will have eight states that recognize all combinations of the presence or absence of overweight, diabetes (PM), and cardiovascular disease (CVD). They will enable the estimations of indicators not otherwise available, including:
   i) the probability of ever getting CVD
   ii) the average duration to onset of CVD from various disease statuses, and
   iii) the expected duration of remaining life by age and by disease status.

5. Main Hypothesis:
   Significant effects of comorbid conditions on future morbidity and mortality can be meaningfully analyzed through multistate (increment-decrement) life tables of health status. Particular attention will be given to the effects of overweight and DM on CVD.

6. Design:
The baseline plus two (or three) follow-up plus data will be used to estimate age-specific transition rates among disease statuses (Overweight, diabetes, cardiovascular disease, and their combinations). Other covariates (demographic, behavioral and other diseases) will also be incorporated in the estimation.

7. Data:
   Diseases: Diabetes mellitus, cardiovascular disease, hypertension, and hypercholesterolemia
   Covariates: Age, gender, race, BMI (from weight and height), education, smoking, drink,
physical activity, medication use, and family history of diseases.