ARIC Manuscript Proposal #2153

1.a. Full Title: Trends in incidence of hospitalized STEMI and NSTEMI and CHD mortality among 35-84 year olds in ARIC Community Surveillance 2005-2014

b. Abbreviated Title (Length 26 characters): MI incidence trends

2. Writing Group:
Writing group members:
Wayne Rosamond, Gerardo Heiss, Thomas Mosely, Joe Coresh, Aaron Folsom, others welcome

I, the first author, confirm that all the coauthors have given their approval for this manuscript proposal. WDR [please confirm with your initials electronically or in writing]

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ARIC author to be contacted if there are questions about the manuscript and the first author does not respond or cannot be located (this must be an ARIC investigator).

Name:
Address: CSCC- Chapel Hill

Phone:
Fax:
E-mail:

3. Timeline:
The majority of the analysis is already complete in the form of a trend report issued to NIH March 2013. First draft to be complete in 2 months.

4. Rationale:
Within the past couple years several community based surveillance studies have reported trends in MI, including a recent report from ARIC Study on trends from 1987 through 2008 (Rosamond et al
Circulation 2012 2012;125:1848-1857). However this report was restricted to trends among person 35 to 74 years of age. Other studies have recently reported trends through 2008 in a broader age range. For example Yeh and colleagues published trends in STEMI and non-STEMI for persons 30 years of age and over (Yeh et al. NEJM 2010;362:2155-2165). The most recent reports from Olmsted county show trends through event year 2006 without age limits (Roger et al Circulation 2010;121:863-869). The ARIC study expanded the age window in community surveillance to include individuals up to 84 years of age beginning for events occurring in 2005. However, these trends in event rates that include this broader age range have not been published. The ARIC study now has trends in event rates for ages 35 to 84 for years 2005 through 2010. In order to put trends in the ARIC communities in context with other community based reports it is important to follow up our recent publication with one that includes the older age category. Aspects that will differentiate this report from the recent publication on trends (in addition to the wider age range) include, report data on age specific rates in addition to age-adjusted rates, a focus on trends in rates of STEMI vs. non-STEMI, more discussion of recurrent MI trends, and more focus on in vs. out of hospital CHD mortality.

5. **Main Hypothesis/Study Questions:**

1. Do the trends in incident STEMI and non-STEMI between 2005 and 2010 differ by age, race and gender?

2. Do the trends in CHD mortality for in-hospital and out-of-hospital differ by age group?

3. What are the trends in case fatality in this age group?

6. **Design and analysis (study design, inclusion/exclusion, outcome and other variables of interest with specific reference to the time of their collection, summary of data analysis, and any anticipated methodologic limitations or challenges if present).**

This paper will use community surveillance data complete for events occurring between 2005 and 2010 for ages 35 to 84.

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

    b. If Yes, is the author aware that the file ICTDER03 must be used to exclude persons with a value RES_OTH = “CVD Research” for non-DNA analysis, and for DNA analysis RES_DNA = “CVD Research” would be used?  ____ Yes    ____ No

    (This file ICTDER03 has been distributed to ARIC PIs, and contains the responses to consent updates related to stored sample use for research.)

8.a. **Will the DNA data be used in this manuscript?**  ____ Yes    ____ No

    b. If yes, is the author aware that either DNA data distributed by the Coordinating Center must be used, or the file ICTDER03 must be used to exclude those with value RES_DNA = “No use/storage DNA”?  ____ Yes    ____ 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. ARIC Investigators have access to the publications lists under the Study Members Area of the web site at: http://www.csecc.unc.edu/ARIC/search.php

___X___ Yes    _______ No

10. What are the most related manuscript proposals in ARIC (authors are encouraged to contact lead authors of these proposals for comments on the new proposal or collaboration)? MS# 1909, MS# 2014

11.a. Is this manuscript proposal associated with any ARIC ancillary studies or use any ancillary study data? ___ Yes    _X_ No

11.b. If yes, is the proposal

___ A. primarily the result of an ancillary study (list number* __________)

___ B. primarily based on ARIC data with ancillary data playing a minor role (usually control variables; list number(s)* __________ __________ __________)

*ancillary studies are listed by number at http://www.csecc.unc.edu/aric/forms/

12a. Manuscript preparation is expected to be completed in one to three years. If a manuscript is not submitted for ARIC review at the end of the 3-years from the date of the approval, the manuscript proposal will expire.

12b. The NIH instituted a Public Access Policy in April, 2008 which ensures that the public has access to the published results of NIH funded research. It is your responsibility to upload manuscripts to PUBMED Central whenever the journal does not and be in compliance with this policy. Four files about the public access policy from http://publicaccess.nih.gov/ are posted in http://www.csecc.unc.edu/aric/index.php, under Publications, Policies & Forms. http://publicaccess.nih.gov/submit_process_journals.htm shows you which journals automatically upload articles to Pubmed central.