

NHANES Open Space

September 11-12, 2003

Session Title: Novel factors in cardiovascular risk prediction

Session Headlines: C-reactive protein and homocysteine are 'novel' for example. NHANES is a great opportunity to look at these across a broad spectrum of subgroups of the population. The massive data NHANES has on other markers such as adiposity such as insulin levels make NHANES a great resource. If NHANES can target special populations adds even more to the mix.

NHANES is good opportunity for longitudinal monitoring of the risk factors. This would include monitoring for the effects of intervention.

Looking at epinephrine and norepinephrine as novel indicators. Cortisol levels from saliva. BNP and pro BNP are the 'in' measures for CHF.

How to decide what markers to look at? They are stable in plasma, inexpensive, predicts risk in multiple studies.

Stats Canada wants to set aside about 1/3 of their resources for speculative content!! NHANES has historically done this rarely and when it doesn't work out we are chastised severely.

How long does the novel marker need to be in just 2 years?

Has NHANES considered the quick and dirty cheaper measure? Maybe we should start to consider it as a covariate versus having it as a reference distribution. Some felt that it should stay at the high gold standard level rather than the cheaper method because it is the national data.

Can we find a measure of ‘stress’ in individuals that is objective? Mostly the discussion was ‘no’. Could we risk with say a cortisol level and having some questions that might strengthen. Wants to correlate stress levels to neighborhood stress. Including this type of measure would greatly enhance opportunities for researchers.

Brain Natriuretic Peptide (BNP) may be an early marker of left ventricular hypertrophy in African Americans and only a national survey is likely to give enough data to describe whether such differences appear to exist. “All of the hospitals” are using BNP—it has become standard medical practice in the ambulatory population of persons reporting shortness of breath.

Echocardiograms are easy to have on studies now—images very standardized. Huge training not required of the technician performing but need a trained reader.

What about B-mode ultrasound is that possible on NHANES?

MRI and CT scan machinery is getting smaller so within the next 5 years these may be possible on surveys.

Research issues related to disparity. Example: LVH in young African American men with pre-hypertension—do they have increased BNP? Should/could NHANES have other examination components that look at LVH?

Next Steps/Action Items:

Make a definitive plan to get one or two of the MORE “novel” markers on NHANES. One suggestion is BNP.

Investigate markers for stress for inclusion in NHANES.

Investigate whether there are 'novel' markers or markers for stress that could use surplus specimens.

NHANES should considering cycling non-trending markers out of the survey so make room for new/alternative markers.