**Phone-based Prevention Program Improves Biometric and Cardiometabolic Risk Outcomes**

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**METHODS**

- Eligible patients identified proactively through data from the EHR. Eligibility criteria:
  - Individuals at highest risk for having a heart attack (excluding those with active disease or diabetes, meet AHA metabolic syndrome criteria or high Framingham risk).
- Interventions are delivered through worksites, health care and the community.
- Behavioral measures were only available on program enrollees. Baseline biometric values were defined as the most recent available measure prior to the individual’s enrollment date. Current biometric values were defined as those from their first phone encounter and current measures are from the most recent phone encounter.
- Study design compares participants to eligible non-participants (i.e., opt-outs or unresponsive to recruitment efforts (31% of eligible).
- Individuals at highest risk for having a heart attack (excluding those with active disease or diabetes, meet AHA metabolic syndrome criteria or high Framingham risk).
- Changes in biometric measures in enrollees and non-enrollees were adjusted for gender, age and the time between baseline and current measures. Adjusted changes differ by enrollment status at p<0.05.

**RESULTS**

- 1005 patients who were eligible for the HBC program were included in the study sample. Of these:
  - 323 (30.2%) enrolled
  - 682 (69.8%) did not enroll for the following reasons: 350 refused (33% of eligible) 332 were unresponsive to recruitment efforts (31% of eligible)
- Out of 323 patients enrolled at any point, 131 (40.6%) have ended their enrollment. Most common reasons for program termination were:
  - 61 (46.5%) No response to efforts by coach to reach participant
  - 31 (23.7%) Completed program by reaching goals
  - 28 (21.4%) Participant chose to no longer participate
- More than half (54.8%) of enrollees were female compared to 44.4% of non-enrollees. The two groups did not differ on age, marital status, baseline blood pressure, cholesterol (total, HDL, LDL), triglycerides or body mass index (BMI).
- Changes in biometric measures in enrollees and non-enrollees were adjusted for gender, age and the time between baseline and current measures. Adjusted differences did not differ from unadjusted so only unadjusted are shown here.

**CONCLUSIONS**

- A targeted clinical prevention program can meaningfully reduce cardiovascular risk factors among patients compared to eligible non-participants.
- Changes in biometric risk factors were two to four greater in the enrollee group for total cholesterol, high LDL and mean triglycerides.
- Increased enrollees were associated with larger magnitude changes in behavioral risk factors but not biometric changes (Table 2). Behavioral findings are limited to those who elected to participate in HBC.
- Positive changes in the non-participant group may be attributed to the broader HONU project and the interventions available in worksites and throughout the community. Additionally, bi-annual provider trainings are conducted to provide physicians and mid-level providers with an opportunity to learn about the role of the medical provider in the project and available treatment options for the management of all individuals at high risk for CHD.

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