Background: Hereditary Breast and Ovarian Cancer Syndrome (HBOC) accounts for 5 to 10% of all breast cancers and about 15% of ovarian cancers. A majority of HBOC cancers are due to mutations in the BRCA1 and BRCA2 genes.

Physician and patient education leading to greater use of genetic services can result in early detection of tumors or risk reduction through prophylactic measures.

NCCN guidelines for referral to genetic services:
- Breast cancer at ≤ 50 years
- Triple negative (ER-, PR-, HER2-) Breast cancer
- Ovarian cancer
- Males with Breast cancer

Educational letters containing information about risks associated with HBOC, benefits of genetic counseling and contact information for local genetic services were mailed to these selected clinicians and patients. All patients and clinicians received a link to an online survey to assess their familiarity with and possible use of genetic testing and counseling. The patient survey was 15 minutes long and the provider survey took only a minute. A $2 bill was included with the patient letter as an incentive for completing the survey.

Results: A total of 399 (14%) of patients and 5 (<1%) of physicians completed the survey. Among respondents, 47.6% had received genetic counseling and 55.9% had received the BRCA genetic test. The most common reason for NOT receiving genetic counseling or testing was that they were never recommended (56.5%) and the next frequent reason was insurance coverage issues (22.9%). Respondents who had not received counseling or genetic testing were more likely to have learned new information (57.1%) from the letters or thought the information was useful, and were more likely to be prompted to take action.

Conclusions: Central cancer registries can be used to promote awareness and discussions of HBOC among patients and providers, and thus increase referrals to genetic services.