CHARM: Cancer Health Assessments Reaching Many

WHAT WILL WE DO?
The Cancer Health Assessments Reaching Many (CHARM) study wants to understand what health systems can do to ensure equity of access to genetic testing and counseling services among all patients. Exome sequencing can detect genetic variants that cause a large number of diseases, including cancer. Right now, patient access to existing genetic services suggests that we could see unequal access to exome sequencing as it becomes available in clinics and doctor’s offices, especially among patients from minority groups or who have a lower level of education or income.

CHARM is screening healthy adults ages 18-49 in primary care clinics to help identify patients at risk for Hereditary Breast and Ovarian Cancer (HBOC) syndrome and Lynch syndrome—two hereditary cancer syndromes that lead to an increased risk of several types of cancer, including breast, ovarian, colon, and endometrial cancer. The CHARM project offers patients screening for these cancer syndromes. If screening indicates that patients are at risk, the project offers them additional genetic services, which may include exome sequencing, to further evaluate and assess their risk.

CHARM is a comprehensive program that is testing multiple interventions related to delivering this complex medical service, with a goal to reach lower income, lower literacy, and minority patients. One intervention is a web-based tool that asks patients about their personal and family history and can assess their risk for inherited cancer syndromes without an in-person visit. This patient-facing tool is accessible to patients of all literacy levels. The research team wants to learn whether this tool can help identify patients at risk, increase their access to genetic testing, and improve diagnosis of these cancer syndromes. Improving diagnosis is important because these syndromes greatly increase a patient’s cancer risk. A diagnosis means a patient can be closely watched for cancer. Preventive treatments are also available, including risk-reducing surgery.

CHARM is enrolling participants from Kaiser Permanente Northwest, a health system with an all-insured population in Oregon and Washington, and Denver Health, which serves many uninsured and underinsured patients in Colorado. So far, the study has enrolled more than 400 people, both English-speaking and Spanish-speaking. The majority are in racial or ethnic minority groups or have a lower education or income level.

WHAT DIFFERENCE WILL THIS STUDY MAKE?
The streamlined processes CHARM is testing could enable health plans to offer genetic screening, testing, and counseling to more patients. The CHARM study hopes to provide a model that can increase appropriate and equitable use of genomic services for all patients in the future.