

## Economic Factors and Precision Medicine: Role of Price and Reimbursement on Decision-making for Multigene Testing for Cancer Risk Screening and Treatment

### Overview:

The use of “multigene tests” (gene panels and whole exome/genome sequencing tests) is growing rapidly, particularly for cancer. However, these tests raise questions such as:

- Will multigene tests be covered by insurers when appropriate so that there is neither overuse nor underuse because of cost?
- How will coverage, reimbursement, and out-of-pocket price for multigene tests influence testing practices across diverse providers and clinical sites, particularly in safety-net settings?

These economic factors can impact whether and how patients are tested and ultimately health and economic outcomes.

### Objectives:

To **examine publicly available payer coverage policies for multigene tests** by:

- Analyzing factors associated with coverage/non-coverage and how these are evolving (2015-2019), building from pilot data from our unique, systematic Payer Coverage Policy Registry
- Conducting in-depth analyses exploring why tests are covered/ not covered, using data from payer interviews and a Symposium that engages payers, clinicians, and researchers

To **examine the influence of economic factors on testing decisions and practices in clinical settings for cancer testing** by:

- Conducting semi-structured interviews with genetic counselors, physicians, and clinic administrators in seven sites, including safety net and community clinics, to examine how economic factors influence testing in actual practice across providers and sites
- Conduct a national survey of genetic counselors to obtain quantitative data on how they believe that economic factors influence testing decisions and practices

### TRANSPERS

*Launched in 2008, the Center for Translational and Policy Research on Precision Medicine (TRANSPERS) at the University of California, San Francisco is a first-of-its-kind research center dedicated to developing evidence-based information for patients, providers, industry, researchers and policymakers to objectively assess how precision medicine can be most beneficial and efficient in improving health outcomes. The TRANSPERS Center has been funded by grants from the National Institutes of Health (NIH) and several foundations.*

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