TRANSPERS Program on Coverage & Reimbursement: Understanding Payer Decision Making

Insurance coverage is crucial to integrating precision medicine into practice and policy. Payers' decisions impact research, evidence, and adoption of new genomic technologies. However, in the U.S., diverse payer coverage can lead to variability and unequal access.

There's a **gap in understanding** what influences payers' decisions and the evidence they need, which varies across payers and testing methods. Payers cite insufficient clinical utility evidence as the primary barrier to coverage and interpret what constitutes sufficient evidence differently. The complexity of multigene tests challenges existing coverage frameworks, and policy differences can limit access, especially for underserved groups. **Few forums** exist for objective discussion on payer decisions, as advisory boards often serve commercial interests rather than independent research.

To address this gap, we assembled the **UCSF TRANSPERS Payer Research Board** in 2007. Since then, we have conducted a unique research program in collaboration with the Board. Board members represent key stakeholders, including:

- Leading national and regional private insurer plans
- Business groups on health representing self-insured employers
- Laboratory benefit management companies
- Experts in public and private payer policies

Our research program is conducted using **two methods**:

- Individual interview studies with Board members on their perspectives relevant to coverage decision-making
- Board roundtables featuring group discussions

Accomplishments

Our research reveals critical insights into payer decision-making. This work has resulted in numerous highly cited peer-reviewed publications in major journals, including Genetics in Medicine and Value in Health, which are used by researchers, payers, industry, organizations, and venture capital firms. Our studies include coverage for genetic testing and genome sequencing across a wide range of areas, including cancer, newborn and pediatric care, prenatal care, and rare diseases.

We continue pioneering research on emerging genomic technologies. Our 2023 *Health Affairs Scholar* paper was among the first to examine payer perspectives on multicancer early detection (MCED) tests - one of the most promising yet challenging innovations in cancer screening, capable of detecting over 50 types of cancer from a single blood draw. This widely cited work revealed the unique complexities these breakthrough technologies pose for coverage decisions. Building on this foundation, our 2025 *JCO Precision Oncology* article identified key factors shaping cancer genomics coverage and opportunities to enhance equitable access. **Our findings are already informing discussions among payers and policymakers.**

Future Directions

We are continually advancing our research on insurance coverage decision-making to establish an unprecedented convening space for payers, patients, providers, researchers, and stakeholders in precision medicine, where diverse perspectives can be shared and solutions developed to improve decision-making and coverage policies.

For more information: https://pharm.ucsf.edu/transpers/grants-programs/evidence-reimbursement