

The determination of medical necessity for hereditary cancer genetic testing is complex and does not easily lend itself to automation and/or scalability. To address this, health plans are increasingly contracting lab benefits managers (LBMs) to perform these services, aiming to control unnecessary testing and lower costs. This increased reliance on LBMs has raised concerns about the transparency of the processes and the resultant impact on patient access to care. While National Comprehensive Cancer Network (NCCN) testing criteria are widely accepted by both clinicians and health plans as the standard for hereditary cancer testing, some medical policies diverge significantly, with a resultant impact on patient access to testing.

Participants referred for hereditary cancer panel testing at one commercial laboratory

METHODS

Dates of Study: 1/1/24 to 5/31/24

Histories obtained from ordering provider's clinical notes, pedigrees, test requisitions etc.

We sought to quantify the impact of NCCN-discrepant payor policies from one LBM.

NCCN BOPP criteria selected for comparison[#]:

- Breast cancer patients over 50 with a first (FDR), second (SDR) or third degree relative with metastatic or high- or very-high risk group prostate cancer
- Unaffected people with:
- SDR with breast cancer < 50
- FDR/SDR with triple negative breast cancer
- FDR/SDR with breast cancer dx at any age and a close blood relative with metastatic, or
- high- or very-high risk group prostate cancer
- [#]Criteria not included in LBM policy

Trained data curators determined if participants met NCCN criteria^{1,2} ("NCCNeligible")

Four LBM breast/ovarian/pancreatic/prostate cancer (BOPP) criteria and four colon cancer criteria that most-impactfully differed from NCCN were selected.



Histories of NCCN-eligible patients were mapped to the corresponding LBM criteria.

Participants not meeting LBM criteria (and denied access to testing) were identified.

The impact of these criteria was then extrapolated to our entire testing cohort.





NCCN colon cancer criteria selected for comparison^{##}:

- Personal history of any Lynch syndrome-related cancer AND: Diagnosed <50y
- A second Lynch syndrome cancer at any age
- FDR or SDR with a Lynch syndrome cancer diagnosed <50y

 \sum

Ω

- $\circ \geq 2$ FDR or SDR with Lynch syndrome cancers at any age
- ##Only colon and endometrial cancers qualify in LBM policy, not ANY Lynch syndrome cancer

TAKE HOME POINTS

| Testing criteria adopted by one | Ves | 8.75% of tho covered by t |
|------------------------------------|--------|---------------------------|
| large LBM resulted | Siti | LBM's BOPP |
| in a significant | Ő | and 7.24% o |
| decrease in patients | | not covered |
| eligible for genetic | Û | colon criteria |
| testing (5.7% | S S | positive in a |

- of those not ed by the BOPP criteria .24% of those overed by their criteria tested
- This study highlights
 - that eligibility
 - restrictions
 - implemented by an
 - LBM, without
 - supporting
 - evidence,

* For 12 moderate and high penetrance breast, ovarian, pancreatic and prostate cancer genes included in the analysis: ATM, BRCA1, BRCA2, CDH1, CHEK2, NBN, NF1, PALB2, PTEN, RAD51C, *RAD51D, TP53.*

** For 19 moderate and high penetrance colon cancer genes included in the analysis: APC, AXIN2, BMPR1A, CDH1, EPCAM, GREM1, MLH1, MSH2, MSH3, MSH6, MUTYH, NTHL1, PMS2,

meeting NCCN estri BOPP criteria and 26% meeting NCCN colon criteria).

Eligibilitv

moderate or high penetrance gene.



decreased access

to standard-of-care

genetic testing for hereditary cancer.

POLD1, POLE, PTEN, SMAD4, STK11, TP53.



1) National Comprehensive Cancer Network. Genetic/Familial High-Risk Assessment: Breast, Ovarian, and

Pancreatic (v3.2024). National Comprehensive Cancer Network .

2) National Comprehensive Cancer Network. Genetic/Familial High-Risk Assessment: Colon (v3.2023). National

Comprehensive Cancer Network .