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# Perspectives of private payers on multicancer early-detection tests: informing research, implementation, and policy

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## Abstract

Emerging blood-based multicancer early-detection (MCED) tests may redefine cancer screening, reduce mortality, and address health disparities if their benefit is demonstrated. U.S. payers' coverage policies will impact MCED test adoption and access; thus, their perspectives must be understood. We examined views, coverage barriers, and evidentiary needs for MCED from 19 private payers collectively covering 150 000 000 enrollees. Most saw an MCED test's potential merit for cancers without current screening (84%), but fewer saw its merit for cancers with existing screening (37%). The largest coverage barriers were inclusion of cancers without demonstrated benefits of early diagnosis (73%), a high false-negative rate (53%), and lack of care protocols for MCED-detected but unconfirmed cancers (53%). The majority (58%) would not require mortality evidence and would accept surrogate endpoints. Most payers (64%) would accept rigorous real-world evidence in the absence of a large randomized controlled trial. The majority (74%) did not expect MCED to reduce disparities due to potential harm from overtreatment resulting from an MCED and barriers to downstream care. Payers' perspectives and evidentiary needs may inform MCED test developers, researchers producing evidence, and health systems framing MCED screening programs. Private payers should be stakeholders of a national MCED policy and equity agenda.

**Key words:** multicancer early detection; MCED; insurance coverage and reimbursement; payer coverage decision making; cancer.

## Introduction

Despite considerable medical advances, cancer remains the second-leading cause of death in the United States.<sup>1</sup> Presymptomatic, premetastatic detection improves survival in some malignancies. However, population screening in the United States is recommended by the U.S. Preventative Task Force (USPSTF) only for four cancers (breast, colorectal, cervical, and lung),<sup>2</sup> and is impeded by low uptake and high false-positive rates.<sup>3,4</sup> Cancers without recommended screening are commonly detected in advanced stages and result in 71% of cancer deaths.<sup>5</sup> Late-stage diagnoses are especially prevalent in minority and underserved populations with constrained access to screening and care, which contributes to disparities in mortality.<sup>6–8</sup> This situation poses a high public health burden and challenges clinicians, including primary care clinicians and subspecialties performing screening, as well as oncologists conducting diagnosis and treatment.

In response to these challenges, a new type of screening test has emerged: multicancer early-detection (MCED) tests. These tests interrogate biomarkers, such as circulating cell-free

DNA, which are shed by tumors into the blood, allowing detection of up to fifty types of cancers in a single blood draw.<sup>9–11</sup> MCED tests determine whether a cancer signal is detected in a blood sample, and some also identify the origin organ of cancer. Numerous MCED tests are in development or on the market.<sup>12</sup> The tests vary in technology and analytes measured, their states of development, number of included cancers, and accuracy, both overall and for individual cancers.<sup>13–15</sup> None of the MCED tests are approved by the U.S. Food and Drug Administration (FDA).

As a screening tool, MCED tests are proposed to be used for asymptomatic adults aged fifty or more 50 years without known cancer—for example, during a routine checkup. For cancers without current screening, the intention is to detect the disease at asymptomatic, potentially more treatable stages than is currently possible, before progression to more advanced, symptomatic stages. For the four cancers with USPSTF-recommended screening, MCED is proposed to be used in conjunction with the existing screening. Since MCED tests are more convenient and less invasive than existing single-cancer screening modalities, they may generate

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higher uptake, increase adherence to the USPSTF-recommended screening, and reduce disparities by detecting earlier-stage cancers in underserved populations.<sup>7,16,17</sup>

Although MCED testing is professed to redefine cancer screening and detect some cancers at earlier stages and ultimately reduce mortality, published MCED evidence is limited mostly to diagnostic performance,<sup>13–15</sup> and considerable uncertainties exist about its benefits and harms. Concerns include overtreatment caused by false-positive results, as well as overtreatment of indolent (slow-growing) cancers detected by MCED tests.<sup>14,17–19</sup> Despite assumptions that MCED tests will reduce cancer disparities, its impact on health equity is unknown.<sup>20–22</sup>

To address these uncertainties, extensive private and government research programs are underway or in planning, including a population trial in the United Kingdom, and the largest-ever screening trial in the United States, being planned by the National Cancer Institute (NCI).<sup>12,23,24</sup> Concurrently, an MCED test is already commercially available. It is being offered by some health systems to their patients and is covered by some health plans.<sup>25–28</sup> Now is the time to envision the future translation of MCED tests into clinical care and policy and determine what key stakeholders will need to facilitate effective and equitable MCED implementation.<sup>22</sup>

U.S. payers are important stakeholders in the translation of research into health as their coverage policies affect the adoption of and access to medical innovations.<sup>29,30</sup> Payers issue positive coverage policies for medical technologies—tests, procedures, or treatments—which they deem medically necessary and not experimental/investigational.<sup>29,31–33</sup> Covered technologies can be included in an enrollee's benefits package and their use could be reimbursed. Therefore, payers' coverage impacts providers' decisions to adopt a test or treatment.<sup>34,35</sup> Coverage decision making is a complex process of evaluating available evidence of benefits and harms and assessing a number of contextual, healthcare factors.<sup>29,32,36,37</sup> Therefore, proactive understanding of payers' perspectives and evidentiary needs is essential to inform product development, clinical research, and healthcare implementation, thus enabling effective and timely translation.<sup>38,39</sup> For MCED tests, obtaining payers' perspectives is particularly important given the high stakes of this potentially paradigm-shifting innovation, the magnitude of clinical research, and the potential impact on disparities. While editorials have contemplated possible challenges and pathways to MCED insurance coverage,<sup>21,40,41</sup> payers' perspectives on MCED tests have not been directly investigated.

Our objective was to examine considerations for MCED coverage decision making by U.S. private payers, including their perspectives on MCED tests, barriers to coverage, appropriate populations and uses, evidence needs, and equity considerations. We focused on private payers because they collectively cover about two-thirds of the U.S. population,<sup>42</sup> including adults aged fifty to sixty-five years, an important segment of the MCED target subgroup. Herein, we describe our findings, discuss their implications for MCED research, highlight how they may inform entities developing MCED tests and health systems considering MCED adoption, as well as suggest how they may contribute to the emerging MCED policy agenda.

This study builds on our prior research of private payer coverage decision making on genomic technologies and utilizes established research methods.<sup>36,37,43,44</sup> Specifically, this study provides evidence to address the questions raised in

our 2022 commentary in *Health Affairs* regarding potential challenges and factors of coverage for MCED tests.<sup>21</sup>

## Methods

This qualitative study was conducted using semistructured interviews utilizing the modified framework approach of qualitative research to guide study design and analysis.<sup>45,46</sup> Qualitative research is an appropriate and effective method for exploring novel topics without previous data, such as payer coverage considerations for MCED tests.<sup>45,46</sup> The framework approach has been previously used by us and other authors in primary research examining healthcare stakeholder perspectives and coverage policy decision making.<sup>36,37,43,47,48</sup> Our study followed the Consolidated Criteria for Reporting Qualitative Research (COREQ).<sup>49</sup> The full reporting based on COREQ is provided in [supplement 1](#). The University of California, San Francisco (UCSF), Institutional Review Board deemed this study exempt from review.

## Study cohort

The study cohort was a purposive sample of U.S. private payers, defined here as entities making coverage decisions for privately insured populations, including private payers, laboratory benefit-management companies, and employer groups on health. The cohort included representatives from nineteen payer organizations collectively covering over 150 000 000 lives: fifteen private health plans developing coverage policies for their enrollees (seven national and eight regional plans), two groups representing self-insured employers who act as healthcare payers for their employees, and two companies developing coverage policies as a service to health plans and self-insured employers. For the purposes of this article, and to preserve promised anonymity, we will refer to all study participants as payers. All study participants were senior executives responsible for coverage policy decision making in their organizations. Payers were recruited from the membership of the UCSF Center for Translational and Policy Research on Precision Medicine (TRANSPERS) Payer Advisory Board.<sup>44</sup> The payers were represented by senior executives responsible for, or knowledgeable of, coverage policy decisions in their respective organizations. All invited payers agreed to participate in the study.

## Interview guide

To develop the interview guide, we performed a literature review and conducted detailed discussions with six clinical and/or research experts on MCED's current state, available evidence, potential benefits and risks, and topics to explore with payers. The interview guide included background information on MCED tests and the interview topics and questions. The background was meant as a high-level illustrative summary to inform detailed, nuanced discussions during interviews. The interview topics included payers' interest in MCED tests, views on its potential merit, concerns about MCED tests, the evidence needed for coverage, and considerations of the potential impact of MCED tests on health disparities (see [supplement 2](#) for the full interview guide). We pilot-tested the guide with two individuals knowledgeable about payer coverage who were not study participants.

**Table 1.** Perspectives on MCED testing merit, purpose, and populations for use.

Perspective	Percent (n/N) of payers who shared this perspective (N = 19)
Interest in MCED tests	
MCED is of interest to me and/or my organization	89 (17/19)
Interest in MCED from employers	47 (9/19)
Approached by MCED companies	26 (5/19)
Conducting internal MCED pilot with employees	11 (2/19)
Perspectives on scenarios of use	
Overall potential merit of MCED	100 (19/19)
Merit of using together with recommended screening for respective cancers	42 (8/19)
Merit of using MCED before recommended screening, as a gateway to increase uptake	37 (7/19)
Merit of using MCED after recommended screening as part of confirmation	5 (1/19)
Merit for use to screen common cancers without recommended screening tests	84 (16/19)
Merit for use to screen rare cancers to increase aggregate diagnostic yield	53 (10/19)
Perspectives on populations for use and potential future coverage	
High-risk and/or other specified populations; would not consider MCED for general population screening	58 (11/19)
May be appropriate for general populations if proven by evidence	42 (8/19)

Note: Recommended screening: based on U.S. Preventative Task Force (USPSTF) recommendations: mammograms for breast cancer screening, colonoscopies for colorectal cancer screening, low-dose computed tomography scans for lung cancer screening, and cervical cytology for cervical cancer. MCED = multicancer early-detection.

## Data collection

The interviews were conducted February–April 2022 and analyzed May–August 2022. All interviews were conducted by one investigator (J.R.T.), a health services researcher experienced in qualitative research, including primary qualitative studies with payers. Interviewees were invited to participate via email and, upon agreement, received the interview guide in advance of the interview. Interviews were conducted via Zoom (Zoom Video Communications, Inc., San Jose, CA, United States), audio-recorded, and transcribed verbatim. Each interview lasted forty-five to fifty minutes. Each interviewee provided verbal consent for recording at the start of the interview. All interviewees were promised individual and organizational anonymity of responses and that results would be reported in an aggregate and unattributable fashion. No interviewees were compensated for participation.

## Data analysis

The initial coding scheme was derived from the structure of the interview guide (see [supplement 3](#)). Two investigators (J.R.T. and C.B.W.) independently reviewed interview transcripts and conducted thematic coding, expanding and refining the initial scheme. They used Excel (Microsoft Corporation, Redmond, WA, United States) for coding. During this process, they conducted an iterative comparison of coding results, resolving disagreement by discussion and consensus. The coding was then reviewed by all investigators, and their input was incorporated into the final coding document. To preserve the anonymity of study participants, they were designated in the coding documents by a nonmeaningful study ID. After coding was finalized, frequencies were used to further describe findings but not to draw any statistical conclusions.

## Results

### Payers' interest in MCED and perspectives on its merit and purpose

Although no interviewed payers covered MCED tests, 89% noted interest in MCED tests within their organizations, and some reported contact from interested employers and

MCED companies ([Table 1](#)). Two payers have started MCED pilots offering these tests to their employees.

All payers saw the potential merit of MCED tests as an appealing means to address cancer screening gaps but considered it a hypothesis to test. Views on specific MCED purposes varied: while 84% saw potential merit in using MCED tests for common cancers that lack recommended screening, fewer (53%) saw the merit of screening rare cancers. Others expected a low combined diagnostic yield for rare cancers, requiring massive numbers to screen. Forty-two percent saw merit in combining MCED testing with recommended screening for relevant cancers, and 37% viewed MCED tests as an effective gateway into screening—that is, the first step leading to increasing existing screening, especially for populations with access barriers. Others viewed MCED tests as having “inferior sensitivity”—that is, a high rate of false-negatives—relative to existing screening, and disagreed with using MCED tests as a precursor to existing screening protocols. They suggested that the goal should be to replace current screening with comparable or better tests. Even if clinical benefits are demonstrated, 58% would not cover MCED tests for general populations aged fifty years and older, but rather for prespecified subgroups—for example, high-risk patients.

### Concerns about MCED tests and which concerns could preclude coverage if unaddressed

Payers expressed multiple concerns, some of which they also noted as precluding coverage if unaddressed ([Table 2](#)). The most common barrier was the inclusion of cancers for which clinical benefits of early diagnosis have not been demonstrated (74%). These payers, and those concerned that the inclusion of indolent cancers may cause overtreatment (47%), recommended removing such cancers from MCED results. The most common concern overall (79%), and a barrier precluding coverage for 53%, was the lack of protocols for false-positive scenarios, in which cancer is detected by MCED tests, yet unconfirmed by further evaluation. The MCED false-negative rate was considered too high and potentially precluding coverage by 53% of payers who believed it would cause a false sense of security and dissuade patients from further screening. Fewer

**Table 2.** Payers' concerns about MCED testing and which concerns would preclude coverage if unaddressed.

Concern	Percent ( <i>n/N</i> ) of payers expressing this concern ( <i>N</i> = 19)	Percent ( <i>n/N</i> ) of payers for whom this concern would preclude coverage if unaddressed ( <i>N</i> = 19)
Test performance		
Rate of false-negatives is too high	74 (14/19)	53 (10/19)
Rate of false-positives is too high	32 (6/19)	26 (5/19)
Inclusion of cancers		
Inclusion of indolent cancers will lead to overtreatment	47 (9/19)	47 (9/19)
Inclusion of cancers where early diagnosis does not lead to improved outcomes	74 (14/19)	74 (14/19)
Clinical integration		
No protocols for uncertain scenarios where cancer is not confirmed	79 (15/19)	53 (10/19)
No protocol for testing frequency	21 (4/19)	11 (2/19)
Difficulty implementing in clinical care	47 (9/19)	0
Costs		
Costs of test	26 (5/19)	11 (2/19)
Cost of downstream diagnostics and care	63 (12/19)	26 (5/19)
Other concerns		
Lack of FDA approval	11 (2/19)	11 (2/19)
Lack of coverage recommendation from BlueCross/Blue Shield Association	11 (2/19)	11 (2/19)

Note: Numbers in cells do not amount to 100% as some payers expressed multiple concerns. FDA = Food and Drug Administration; MCED = multicancer early-detection.

payers considered the false-positive rate too high and precluding coverage (26%), commenting that real-world, false-positive rates will exceed those from studies and will cause unnecessary testing and anxiety. Others believed that false-positives and false-negatives “come with the screening territory” and will be addressed with education and guidelines.

MCED implementation in clinical practice, while not a barrier that could preclude coverage, was perceived as a challenge by 47%, due to the additional burden on an already strained workforce and the complexity of developing systematic referral and workup pathways. Costs of post-MCED care were concerning to 63% of payers and were indicated as potentially precluding coverage by 26%.

### Evidence needed for MCED coverage decisions

Payers outlined ten types of evidence needed for MCED tests, but only five were reported as decisive for coverage while others would be informative but not sufficient (Table 3). Evidence of survival was the most common decisive endpoint reported by 42%. Another 37% noted that a reduction in disease morbidity or treatment toxicity would be sufficient, even without a survival benefit. Among these two payer groups, 80% (12/15) would accept surrogate endpoints for cancers with existing data on early-stage outcomes (data not shown). The impact of MCED tests on stage at diagnosis would be sufficient for coverage for 16% of payers. Although downstream care costs were noted as a concern by some payers (as reported above), only one payer stated that data on costs would be essential for coverage.

Regarding types of studies, 37% would require a phase III randomized controlled trial (RCT), while 63% would accept data from large rigorous real-world studies (Table 4). Payers in the latter group prefer RCT data but state the need to develop policy sooner to guide MCED use in clinical practice due to expected rapid MCED commercialization. Forty-seven percent might accept modeling results if built on solid underlying study data from clinical trials and/or rigorous real-world evidence studies. Regarding study populations, 58% of payers believed that outcomes should be proven in

populations intended for MCED, and 42% would accept evidence in high-risk groups, which then may be expanded or extrapolated to other populations. Most payers (79%) plan to evaluate MCED evidence for individual cancers included, while 21% would evaluate aggregated data.

### Views on MCED's potential impact on disparities

Most payers (68%) believed that MCED tests may reduce barriers to screening, such as logistics and aversion to invasive screening, but only 26% thought this might reduce disparities (Table 5). Others believed that potential harm and financial burden from overtreatment caused by false-positives and diagnosis of indolent cancers would disproportionately impact the underserved (47%) and noted that coverage of MCED testing will not resolve logistical barriers and patient costs related to evaluation and treatment (37%). Additionally, 16% of payers noted that MCED coverage by private payers will not help underserved patients who are uninsured or covered by Medicaid, which they thought was typically slower to cover new tests.

Most payers (58%) stated that disparity considerations might impact their MCED coverage if MCED testing is clinically proven and demonstrates a reduction in disparities and if its implementation incorporates measures addressing logistical barriers to downstream care. Others (42%) noted that disparity considerations would not impact their coverage because, once proven, MCED tests should be covered for all patients.

### Discussion

Our study provides the first empirical evidence on payer coverage considerations and evidence needs for MCED with a cohort of U.S. private payers. We found that 84% of payers saw potential merit in using MCED tests for cancers that lack screening, but only 37% agreed with using it as a gateway to existing screening. The most frequent barriers to coverage were the inclusion of cancers without a proven benefit from early diagnosis (74%), perceived high false-negative rates (53%), and the lack of evaluative protocols for unconfirmed



**Table 3.** Types of evidence for MCED outcomes that payers need for coverage considerations and which types would be decisive factors in coverage decisions.

Evidence categories and types of evidence	Percent ( <i>n/N</i> ) of payers who will need this evidence for coverage decisions <sup>a</sup> ( <i>N</i> = 19)	Percent ( <i>n/N</i> ) of payers for whom this evidence will be a decisive factor in coverage decisions <sup>b</sup> ( <i>N</i> = 19)
Screening endpoints		
Uptake of MCED	26 (5/19)	0
Changes in adherence to recommended screening as a result of using MCED	21 (4/19)	0
Diagnosis endpoints		
Impact on stage at diagnosis	84 (16/19)	16 (3/19)
Number to screen to get one cancer diagnosis	21 (4/19)	0
NPV, PPV	26 (5/19)	0
Clinical care endpoints		
Survival	42 (8/19)	42 (8/19)
Net clinical outcome: survival and harms from increased morbidity and/or treatment toxicity	21 (4/19)	21 (4/19)
Survival only	21 (4/19)	21 (4/19)
Reduction in disease morbidity and/or treatment toxicity	37 (7/19)	37 (7/19)
Impact on patient anxiety	26 (5/19)	0
Healthcare factors		
Cost	47 (9/19)	5 (1/19)
Patient and clinician satisfaction	11 (2/19)	0

Note: MCED = multicancer early-detection; NPV = negative predictive value; PPV = positive predictive value.

<sup>a</sup>This column does not amount to 100% as some payers noted the need for multiple types of evidence.

<sup>b</sup>This column amounts to 100% as each payer named one type of evidence that would be decisive for coverage.

**Table 4.** MCED evidence study design/methods acceptable by payers.

Study design feature	Percent ( <i>n/N</i> ) of payers who would accept a study with this feature for consideration in coverage decision for MCED testing ( <i>N</i> = 19)
RCT vs. an RWE study	
Data from rigorous RWE will be acceptable	63 (12/19)
RWE alone	47 (9/19)
RWE with a smaller non-phase III RCT	16 (3/19)
RCT is needed	37 (7/19)
Data modeling methods	
Modeling complementing study data may be considered	47 (9/19)
Could be used to strengthen the data from trials	26 (5/19)
Could help extrapolate study results to additional cancers or populations	21 (4/19)
Modeling would not be considered in coverage decisions	53 (10/19)
Populations to study	
Start with high- or elevated-risk population	42 (8/19)
Need to test in the populations intended for the use of MCED tests	58 (11/19)
How evidence will be evaluated	
Individually for each cancer included in a test	79 (15/19)
In aggregate for all cancers included in a test	21 (4/19)

Note: MCED = multicancer early-detection; RCT = randomized controlled trial; RWE = real-world evidence.

cancers (53%). For evidence, 58% would accept surrogate endpoints versus mortality data and 64% would accept rigorous real-world evidence versus an RCT. The majority (74%) did not expect MCED tests to reduce disparities unless access barriers to downstream care are reduced and MCED testing is covered by Medicaid.

Prior studies of private payers' decision making for multigene and multicancer tests found that a major coverage barrier was a misalignment of these tests with payers' evidentiary and coverage frameworks designed for evaluating single-gene/single-result tests, and a high evidence bar, such as a requirement for RCTs.<sup>33,36,37,50</sup> We found that some payers' coverage approaches are evolving in that they are willing to consider real-

world evidence, surrogate outcomes, and population screening if the evidence supports this. However, in this initial assessment, we did not explore complex questions such as how payers will assess tests given that they use different technologies and their accuracy and validity vary by cancer and by stage. Other coverage hurdles previously identified for presymptomatic tests, and expected for MCED tests, were a requirement for cost-effectiveness and payers' unwillingness to cover tests for broad versus risk-defined populations.<sup>20,37,50,51</sup> In contrast, most payers in our study would not require cost-effectiveness data for MCED test coverage and nearly half would cover MCED tests for population screening, if proven. This also suggests that private payers' coverage approaches are evolving over time.

**Table 5.** Payers' views on MCED's potential impact on disparities and whether this will be considered in coverage decisions.

Aspect	Percent (n/N) of payers expressing this view (N = 19)
Does MCED testing have the potential to address barriers to screening?	
Yes	68 (13/19)
No	32 (6/19)
Does MCED testing have the potential to reduce disparities?	
Yes	26 (6/19)
No	74 (14/19)
Reasons why MCED testing will not reduce disparities <sup>a</sup>	
Harm and financial burden from overdiagnosis or overtreatment will disproportionately impact people with disparities	47 (9/19)
Access to an MCED test will not resolve barriers to other needed care	37 (7/19)
Coverage of MCED testing by private payers and employers will not address disparities in an uninsured or Medicaid population	16 (3/19)
Would disparity considerations impact coverage decisions for MCED testing?	
Yes	58 (11/19)
If MCED is clinically proven	21 (4/19)
If MCED demonstrates reduction in disparities	16 (3/19)
If logistical barriers to access for downstream care are addressed	21 (4/19)
No	42 (8/19)
Once the test is proven, it should be covered for all patients	26 (5/19)
Policies are based on clinical benefit for all. It is not legally possible to structure a policy based on social determinants of health	16 (3/19)

Note: MCED = multicancer early-detection.

<sup>a</sup>Does not amount to 100% as some payers cited multiple reasons.

Our results are instructive for MCED test developers as they strive to frame rigorous, yet expedient, paths to MCED access. For example, unlike opinions that the currently reported MCED rate of false-negatives is acceptable,<sup>19,40,51–53</sup> most payers considered it too high and recommended testing only cancers with a low rate of false-negatives. While this may be debated, it behooves entities developing MCED tests to incorporate payers' insights, which may reduce barriers and time to coverage. Likewise, payers' evidentiary needs should inform MCED clinical research strategy, especially large efforts such as the NCI MCED initiative.<sup>12</sup> We found a spectrum of opinions among payers, but most signaled acceptance of more attainable evidence. Although our findings do not point to one solution across payers, they inform the overall MCED research strategy with an opportunity to prioritize studies based on the needs of payers who may be early adopters of MCED coverage. Payers' recommendations to study MCED testing in underserved populations, as well as to focus on cancers without current screening approaches, should also be reflected in research priorities.

Despite the lack of evidence and reimbursement, clinical implementation of MCED tests has begun.<sup>20,25,26,54</sup> It has been suggested that incorporating payer perspectives into clinical implementation of medical innovations can make implementation more appropriate<sup>39</sup> and we believe this is also true for MCED tests. Payers' evidentiary needs and requirements may help health systems adopting MCED tests assess evolving evidence in the context of potential coverage, forecast when and for which tests coverage may occur, and integrate these forecasts into MCED programs. Given payers' interest in MCED, health systems may have an opportunity to establish collaborative pilot programs with some health plans to address payers' concerns, such as development of evaluative protocols for undetermined cancers and access to testing and downstream care for underserved patients.

To realize the promise of MCED tests, a national policy agenda is emerging, and private payers should be at the table. Efforts are underway to outline a legislative path for

Medicare/Medicaid MCED test coverage,<sup>55</sup> but private payers may or may not follow Medicare coverage<sup>56,57</sup> and their perspectives should be incorporated into the overall agenda. Private and public payers have a shared vested interest in ensuring that MCED tests address, not exacerbate, health disparities. While national-level solutions will be important, certain issues such as Medicaid coverage for MCED tests should be addressed at the state level. An important consideration voiced by payers in our study was the impact of MCED implementation on an already overburdened clinician workforce. Although mentioned in the literature,<sup>22,58</sup> this concern is not yet at the forefront of current MCED-related efforts. This impact must be addressed proactively at the national level to ensure that primary care, oncology, and other specialties have the capacity to care for increasing numbers of newly diagnosed patients with cancer and, it is hoped, more cancer survivors, resulting from MCED test adoption.

Our study had limitations. Studies of payer considerations like ours are inherently limited to descriptive analyses based on representative payers. Large, quantitative payer surveys would be infeasible and would not capture the broad scope of data obtained by in-depth interviews. However, our findings have implications for the broad privately insured U.S. population, as payers in our cohort collectively cover over 150 000 000 lives and include the seven largest U.S. health plans. Our objective was specifically to elucidate perspectives from private payers, but future studies should also examine the views of public payers, including Medicare and state Medicaid plans, as their coverage will be essential for equitable access to MCED tests. We were also unable to examine all payer considerations and evidence needs that may be relevant to MCED tests, but we focused on those that were identified by experts as particularly relevant. While most payers (seventeen of the nineteen) were already familiar with MCED tests prior to our study, two payers did not have prior familiarity. This variation in prior knowledge across payers was mitigated by providing all interviewees with an MCED background summary in advance of

the interviews. Our study addressed important aspects of payer coverage considerations for MCED tests but did not explore all relevant considerations, such as the impact on patient out-of-pocket costs and insurance premiums. Future studies should examine these issues.

## Conclusions

We examined coverage considerations and evidence needs for MCED tests with a cohort of U.S. private payers. Payers recognized the potential importance of MCED tests, especially for detecting cancers without current screening methods. Payers articulated their concerns about MCED tests, including testing for cancers without an established benefit from early diagnosis, a high rate of false-negatives, and the lack of evaluative and follow-up protocols for MCED-detected but unconfirmed cancers. Understanding these concerns could help test developers fine-tune MCED products and work with clinical experts to develop relevant care protocols. Payers also communicated their evidentiary needs, indicating acceptance of rigorously generated, real-world data and surrogate endpoints in the absence of mortality evidence. This feedback may inform researchers designing MCED clinical studies and health systems framing MCED screening programs. Private payers should be stakeholders of a national MCED policy agenda, including equity efforts and initiatives addressing workforce capacity for cancer detection and care.

## Supplementary material

Supplementary material is available at *Health Affairs Scholar* online.

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## Conflicts of interest

Please see ICMJE form(s) for author conflicts of interest. These have been provided as supplementary materials.

## Notes

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