



SESSION 6

Wrap Up Discussion

Co-Moderators

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Speakers

Session 1: Beth Karlan and Lawrence Shulman

Session 2: Ruth Etzioni and Justin Bekelman

Session 3: Lawrence Shulman

Session 4: Elena Martinez and Chanita Hughes-Halbert

Session 5: Etta Pisano and Robert Winn



Session 1

Overview of Multicancer Detection Testing

KEY ISSUES IDENTIFIED BY SESSION SPEAKERS AND PANELISTS

- MCDs focus on diagnostic performance and not outcomes
 - Evolution of MCD technologies – different options/approaches
- Clinical utility of MCDs remain unknown in the real world and across populations
 - False positives, false negatives, over diagnosis (clinically insignificant cancers), extensive work-ups
- MCD tests present novel implementation challenges – how will they influence practice and care delivery –
- How do we evaluate MCDs in the context of our history of screening studies? – evidence based medicine
 - The long time it has taken to prove efficacy and low rates of screening
 - Standard screening and prevention of cancer (colon, cervical)
- What will the MCD tests mean for patient experience?
- How will MCD tests be explained or presented to patients?
- MCD tests for people at high and normal risk for cancer – what do we know?

Session 1

Overview of Multicancer Detection Testing

POLICY OPPORTUNITIES TO ADVANCE PROGRESS

- NCI Cancer Screening Research Network
 - Vanguard will launch in 2025 to study MCDs
 - How to use and evaluate MCDs
 - Issues of pt willingness, feasibility, reliability, timeliness
- Need to define the end-points that we will use to evaluate the clinical utility of MCDs
 - Attention to different risk populations, disparities, down-stream consequences
- Need to educate primary care providers and give them time to explain what we know – risk vs benefit, etc.
 - Is it possible to educate them and give them time
- Should MCDs only be offered as part of a clinical trial which would:
 - Require good communication via informed consent
 - Gather the critical data we need to evaluate MCDs

Session 2

MCD Test Validation

KEY ISSUES IDENTIFIED BY SESSION SPEAKERS AND PANELISTS

Diagnostic performance of screening tests including MCDs

- Determined by test developers and can be adjusted for different diagnostic settings and populations
- Need a new vocabulary to describe different sensitivity measures

MCD Trials with mortality endpoints

- More efficient trial designs (e.g intended effect) may make trials smaller
- Modeling may help to project expected mortality benefits and power of trials
- Lung cancer likely to dominate lives saved from MCD trials

Use of alternative trial endpoints – can we validly reduce the timeline of MCD trials?

- Late stage reduction reasonably correlates with mortality reduction for some but not all cancers studied in trials to date...
- But cancers vary in the extent to which mortality reduction matches late-stage reduction
- Field not yet ready to properly report and interpret a trial that uses late-stage reduction as endpoint
- Major issues with consistency of staging– must consistently stage cancers across trial arms

Projecting mortality outcomes from models based on stage reduction has limitations

- Opportunity for research to improve how we predict mortality from late-stage reduction in trials



Session 2

MCD Test Validation

POLICY OPPORTUNITIES TO ADVANCE PROGRESS

- Need to establish a standard for sensitivity measures that will be adequate for regulatory approval and projection of downstream outcomes of MCD screening protocols
- The field is facing pressure to change the established and accepted standard of cancer mortality as primary endpoint in screening trials. A consensus is needed about whether this is acceptable and how the standard should be changed. These decisions will impact future national recommendations regarding MCD screening
- Models have the potential to advance projection of benefits and harms and the acceptable use of models in combination with prospective screening studies and trials needs to be defined
- Screening is not one episode but rather the start of a diagnostic (and sometimes treatment) journey. Must make sure that if tests are rolled out we assure coverage for testing and subsequent steps or testing will not impact mortality equitably
- Important to ensure honest and accurate communication about benefits and harms of tests – need policies to guide the way this is done

Session 3

Examples of MCD Tests in Development and Clinical Use

KEY ISSUES IDENTIFIED BY SESSION SPEAKERS AND PANELISTS

- Current screening tests are variably utilized
- MCDs offer a chance to increase screening rates
- MCDs offer a chance to screen for cancers that there are no current screening
- MCDs are amalgams of varied technologies
- MCDs are better at discovering advanced cancers, and more aggressive cancers
- Finding cancers at earlier stage does not mean they will be more curable
- Uncertain correlation between reduced advanced stage patients with reduced mortality – correlations will be different for different cancers
- Sensitivity and specificity will vary cancer to cancer
- AI and machine learning will be helpful in sorting out MCD findings and patient results
- Different populations of patients – those at low risk, those at high risk, those with symptoms that could represent cancer
- Standard screening should continue, and particularly procedures that prevent future cancers – colonoscopy, cervical cancer screening



Session 3

Examples of MCD Tests in Development and Clinical Use

POLICY OPPORTUNITIES TO ADVANCE PROGRESS

- We need to learn from both clinical trials and from real world data (though we are not as good as we should be at tracking real world data)
- We need to better understand the relationship between stage distribution and mortality through these trials
- Need to better understand the implications of a positive and a negative test.
- We need to learn about optimal radiologic work-ups – what are the algorithms we should use? Should they vary by the MCD test finding suggesting organ of origin
- Are diagnostics and treatment options available
- Need to understand patient harms, psychological, physical from evaluation and/or treatment, financial



Session 4

Strategies for Implementing MCD Tests into Clinical Practice

KEY ISSUES IDENTIFIED BY SESSION SPEAKERS AND PANELISTS

- Additional empirical data are needed to enhance the delivery of MCD
- Systematic strategies are needed to deliver MCD testing in clinical settings
- Shared decision-making may be one approach for ensuring patient-provider communication and enhancing patient decisions about screening about on informed understanding



Session 4

Strategies for Implementing MCD Tests into Clinical Practice

POLICY OPPORTUNITIES TO ADVANCE PROGRESS

- Consider the screening process as one step that includes MCD testing and follow-up to diagnostic resolution for positive tests and ensure access to treatment for invasive cancers.
- Set up a registry of individuals who are undergoing MCD testing to include tracking of results and follow-up.

Session 5

Health System and Policy Considerations

KEY ISSUES IDENTIFIED BY SESSION SPEAKERS AND PANELISTS

- Screening is a process, not a one-time event – focus on the cancer care continuum.
- Marginalized populations have less access to cancer screening due to systemic inequities, resulting in higher cancer mortality.
- Current health disparities could be exacerbated by MCDs, if shared decision making is not well implemented, and if health insurance is not addressed early.
- Global market outlook for the MCD test market is expanding.
- MCD test implementation could produce higher workup costs and complications from invasive workups, but there are also potential savings from stage shift and cancer mortality, which may be outweighed by the cost of MCD test implementation.
- There are concerns about the effectiveness of MCD tests.
- The timeline to determine how to adopt and cover MCD through health insurance is too long.
- Need to consider who, when, and how health insurance covers follow-up testing and interventions after a positive test.
- Most payers do not see MCD test merits for cancers with existing screening and do not expect MCD tests to reduce disparities due to potential harm from overtreatment resulting from an MCD and barriers to downstream care.
- As technology advances, consider how and where can screening and prevention infrastructure be reorganized and how workforce can support these changes.

Session 5

Health System and Policy Considerations

POLICY OPPORTUNITIES TO ADVANCE PROGRESS

- To minimize the risk of exacerbating disparities, intentionally eliminate barriers to access at multiple levels, increase timeliness and quality of downstream diagnostics, and institute “equity by design”.
- Equity by design should consider: Investment in patient navigation, redefining of policy to cover screening and provide comprehensive coverage, Development of metrics to assess equity
- Clinical trial recruitment should prioritize equity. Consider the burden of disease, equitable distribution of benefits and burdens, biological and/or cultural differences, and adequacy of care.
- Communicate strategically to focus on equity in MCD use and patient outcomes.
- Cancer-specific models can be more granular, but require more effort in developing methodologies. Include assessments for health utility cost-effectiveness in these models.
- Insurance recommendations: Strategically design MCD tests depending on cancer characteristics. Limit the intended use to higher-risk individuals and focus on better performing cancer types. Develop frameworks/approaches for considering coverage/protocols of entire pathways.
- Access multiple possible coverage pathways
- Engage patients and payors in study design and dissemination