ACCELERATING UPTAKE of Lung Cancer Screening
A National Initiative

EXECUTIVE SUMMARY

July 19-20, 2022
The Mayflower Hotel
Washington, DC
Introduction

The American Cancer Society National Lung Cancer Roundtable (NLCRT) held its inaugural summit on Accelerating Uptake of Lung Cancer Screening on July 19-20, 2022, in Washington, DC. Increasing lung cancer screening has long been a priority of the NLCRT and its members. The goal of the summit was to accelerate the uptake of lung cancer screening by creating a shared understanding of the current state of screening, identifying key challenges and barriers, and developing and prioritizing strategies to build a comprehensive framework that engages key partners with actionable recommendations.

Lung cancer remains the largest cause of cancer death in the United States (U.S.), responsible for nearly 1 in 4 cancer deaths. Annual lung cancer screening (LCS) with low-dose CT (LDCT) is a powerful tool that will saves lives.

The Early Lung Cancer Action Project (ELCAP) in New York City was the first study to show that LDCT detects lung cancer at an earlier and more curable stage, and the subsequent NIH-funded National Lung Cancer Screening Trial (NLST) performed at sites across the U.S. was the first and largest randomized controlled screening trial to demonstrate a reduction in lung cancer mortality. Since then, the U.S. has been the worldwide leader in implementation of lung cancer screening, beginning in 2013 with a national recommendation for screening from the United States Preventive Services Task Force (USPSTF) leading to insurance coverage for screening through private payors guaranteed through the language in the Affordable Care Act. Medicare coverage for lung cancer screening began in 2015 and includes most state-based Medicaid programs (Medicaid Expansion states must cover LDCT screening without cost sharing), and also required a national quality registry of over 3,500 actively participating facilities and health systems. Lung cancer screening quality standards have been developed along with reporting tools for interpreting LDCTs to make recommendations more consistent and universal.

While high-quality evidence supports lung cancer screening and public and private insurance coverage is in place, only 6-10% of eligible individuals were screened in 2021, and only 1 in 5 individuals return for their second annual screening. The 2021 USPSTF lung cancer screening recommendation expanded the eligibility criteria and nearly doubled the number of individuals eligible for screening to nearly 15 million people, making the acceleration of lung cancer screening even more of an imperative to saving lives from lung cancer.

The purpose of this summit was to develop a strategic framework of partnership and collaboration to accelerate the uptake of lung cancer screening. Keynote speakers created a common level of understanding as a starting point, followed by multidisciplinary breakout groups that developed and ranked strategies to overcome the barriers to achieving higher screening rates among the eligible population. More than 100 participants representing 70 organizations contributed a broad range of perspectives to the summit discussions. Participants included clinicians, researchers, patient advocates, and public health professionals representing professional societies, advocacy organizations, cancer centers, health systems, academic institutions, state and federal government agencies, and pharmaceutical and diagnostic companies. The outcomes of the summit were core strategies for accelerating the uptake of lung cancer screening with the goal of saving lives and creating more lung cancer survivors.

This summit served as the launching platform for an upcoming series of strategy-based meetings to build out and implement tactics by the NLCRT, member organizations, and partners that can accelerate the uptake of lung cancer screening across the nation. Through collective actions, the NLCRT, member organizations, and partners will contribute to increased uptake of annual LDCT screening.
Overview of the Summit

Day 1: Tuesday, July 19, 2022

Opening Session

During the opening morning session, NLCRT Chair Ella Kazerooni, MD, MS, University of Michigan, welcomed participants and highlighted the work of the NLCRT as a leader in advancing lung cancer screening. Participants were presented with an overview of the screening summit objectives and the importance of accelerating screening uptake to reduce mortality, and importantly to improve health equity through broader access to lung cancer screening and tobacco cessation services among marginalized groups.

Next, Laura Makaroff, DO, American Cancer Society, welcomed participants on behalf of the American Cancer Society and gave three reasons why the summit work was important. First, the importance of working together to build medical neighborhoods for patients to receive the care they need; second, as a significant public health problem, it is important to continue using the interventions that are known to improve outcomes in lung cancer; and third, it is important to accelerate the uptake of lung cancer screening because early detection saves lives and creates more lung cancer survivors.

Last, John Williams, MD, FACS, Chair of the President’s Cancer Panel, gave a presentation on Closing the Gaps in Cancer Screening: Connecting People, Communities, and Systems to Improve Equity and Access. He described the recent work of the Presidents Cancer Panel, which met with 160 providers to identify the barriers and opportunities around breast, cervical, lung, and colorectal cancer screening, and discussed the four actionable recommendations from their report to improve the uptake of lung cancer screening. He also highlighted the critical role of Roundtables and encouraged the NLCRT to rely on their leadership and consensus as mechanisms for influencing healthcare policies around lung cancer and screening.

General Session – Panel 1

During General Session One, presentations were followed by extensive time for discussion between the panelist presenters and attendees, a model that was integral to all of the general sessions. Participants were brought up to date on the current state of lung cancer screening through short presentations on the influence of eligible populations on screening uptake and adherence, health equity considerations, impact of policy and health insurance coverage including Medicaid coverage for the 2021 USPSTF lung cancer screening recommendation, the primary care perspective on lung cancer screening, and how language and visual imagery promotes stigma, thereby creating a barrier to health care and resulting in harmful outcomes for individuals affected by lung cancer.

Robert Smith PhD, Senior Vice President of Early Cancer Detection Science at the American Cancer Society and the Principal Investigator of the NLCRT discussed measuring screening uptake. “What gets measured gets done,” and he suggested that if screening uptake was a quality measure, it would increase screening rates through the influence of incentives, payments, and accreditations.

General Breakout Session 1

In the first of three General Breakout Sessions, participants dispersed into pre-assigned small breakout groups. Throughout the Summit, each participant returned to the same topic-focused breakout group to move through understanding their topic – from brainstorming about important barriers, to developing and ultimately prioritizing strategies to address the barriers to lung cancer screening. At the conclusion of each round of small
breakout group sessions, participants returned to the general session room and co-chairs presented reports to all attendees for feedback and incorporation into their work. The six breakout topics were:

- Public Awareness and Community Outreach
- Health Equity and Population Gaps
- Information Technology and Electronic Health Records
- Strengthening Systems to Support Team-Based Care
- Health Policy
- Primary Care Practice

**General Session – Panel 2 & General Breakout Session 2**

During General Session Two, presentations focused on the role of the Centers for Disease Control and Prevention (CDC) National Comprehensive Cancer Control Program in cancer control and screening and the health equity imperative, followed by presentations from organizations working to increase access to lung cancer screening services, including the American Lung Cancer Screening Initiative, the Kentucky LEADS Collaborative, the Screen New Jersey program, and the Mississippi Lung Cancer Roundtable.

Next, in Breakout Session Two, participants gathered again in their same breakout groups to identify strategies to address the identified barriers within their essential topic areas, with group leaders reporting back on the strategies that were identified by their breakout groups in a general session for feedback from all summit attendees. The day ended with a short recap of the highlights from the day.

**Day 2: Wednesday, July 20, 2022**

**Opening Session**

During the opening session, participants first heard a summary and reflection on the events and highlights of Day 1, followed by a patient advocate story given by Ms. Denise Lee to remind everyone of the importance of access to lung cancer screening, and health equity.

**General Session - Panel 3**

This series of presentations focused on recognizing the importance of achieving health equity in lung cancer screening, with presentations covering the impact of social determinants of health, a programmatic approach to reducing population-level lung cancer mortality through the combination of an incidentally-detected lung nodule program with a lung cancer screen program, creating opportunities to make screening more accessible, how to give a voice to the unheard in lung cancer populations, and the Southeastern Consortium for Lung Cancer Health Equity’s collaborative approach to increase health equity in lung cancer.

**General Breakout Session 3**

Next in round three of the essential topic-focused sessions, participants regrouped into their breakout groups to rank and prioritize the strategies that their groups identified on Day 1 and began to identify tactics. After the breakout sessions, the summit participants reconvened to hear the breakout group leaders present the key strategies prioritized by their groups with discussion from the participants. The strategies were then ranked by all of the participants using a smartphone polling application that summarized participant votes.

The summit closed with sharing of the final ranking results and closing remarks with a call to action with next steps for moving forward.
Final Strategy Rankings

Final strategy rankings are shown below, with the **top three of the 18 strategies in blue**:

**IT/EHR** - National consensus on developing and standardizing core EHR elements (tobacco history, data sharing, best practice alerts (BPA), quality, risk models, communication, program orders, education for Healthcare Workers/Patients/Providers).

**Primary Care** - Implement LCS as a quality measure.

**Equity** - Co-develop a community engagement, outreach, and advocacy framework to prioritize health equity.

**Policy** - Change health insurance benefit design to eliminate out-of-pocket costs resulting from a positive screen.

**Awareness** - Develop, disseminate, and evaluate robust national public awareness campaign with local feel and impact (i.e., community champions, trusted voices, survivors/patient advocates, etc.)

**Systems** - Co-create a value proposition for each set of partners.

**Equity** - Develop, disseminate, and support health systems of all types to proactively and meaningfully use social determinants of health data to identify where disparities exist and inform continuous quality improvement to improve equity.

**Equity** - Increase awareness and eliminate knowledge gaps about LCS among and about priority populations.

**Awareness** - Increase community representation and develop community-led outreach efforts to build a sense of hope, empowerment, and respect for the community.

**IT/EHR** - Develop a LCS Quality Standards Act in collaboration with the NLCRT Policy Action Task Group.

**Policy** - Expand Medicaid availability and harmonize coverage across Medicaid clients.

**Primary Care** - Identify a more uniform/simplified way to obtain an appropriate tobacco history from patients.

**Primary Care** - Improve access as a way to increase primary care team education of LCS, specifically how to engage populations who are medically underserved.

**Policy** - Eliminating barriers to access LCS such as wraparound services to address social determinants of health (e.g., transportation, time off, care services, etc.).

**Awareness** - Co-create and implement efforts to incorporate language and culture and increase workforce diversity to earn trust in healthcare systems and measures.

**Systems** - Build an outreach and communication strategy for each set of partners to build trust and eliminate bias.

**IT/EHR** - Leveraging EHR to engage and educate patients about LCS and collect appropriate tobacco history data.

**Systems** - Co-create a common language that harmonizes and integrates a common standard for LCS.
Overview of Breakout Group Discussions

The six breakout groups addressed the following topics:

- Public Awareness and Community Outreach
- Health Equity and Population Gaps
- Information Technology and Electronic Health Records
- Strengthening Systems to Support Team-Based Care
- Health Policy
- Primary Care Practice

In the first breakout session, participants developed and refined lists of barriers. All members in each group ranked five to six barriers.

Barriers were defined as existing or potential challenges that hinder the achievement of accelerating the uptake of lung cancer screening. Health equity barriers to helping people who are not being reached and have the greatest need were considered especially important.

Health equity considerations were defined to include:

- Community culture, norms, and values
- Economic conditions, political and power structures
- Social networks, structural and social determinants
- Experiences with efforts from outside groups (e.g., lack of trust in the healthcare system)

In the second breakout session, participants in each group developed an initial list of strategies to overcome their barriers. They first discussed the additional insights that were provided by the large group discussion and revised their top barriers as needed. Then they used their top barriers as a guide for developing and prioritizing five to six strategies.

Strategies were defined as broad activities required to overcome barriers to accelerate the uptake of lung cancer screening. Conceptually, strategies reflect the effort direction, whereas tactics are the specific steps or tasks that achieve the strategy.

In the final breakout session, participants prioritized their strategies on a 2x2 impact-feasibility grid. The large group of all participants reviewed the strategies and placed them appropriately on the 2x2 grid. The “high impact + high feasibility” strategies were selected as the best candidates for increasing the uptake of lung cancer screening overall.
### Group 1 – Public Awareness and Outreach

<table>
<thead>
<tr>
<th>Participants</th>
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<tbody>
<tr>
<td><strong>Co-Chair:</strong> Anita Y. Kinney, PhD, RN, FAAN, FABMR, Rutgers Cancer Institute of New Jersey</td>
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<tr>
<td>Caleb Levell, MA (Facilitator) American Cancer Society</td>
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<tr>
<td>- David Tom Cooke, MD, FACS, University of Pennsylvania</td>
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<tr>
<td>- Lisa Cruz, MPA, Takeda</td>
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<td>- Annette Eyer, American Lung Association</td>
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<tr>
<td>- Kathleen Goss, PhD, American Cancer Society</td>
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<tr>
<td>- Nikki Hayes, MPH, Centers for Disease Control and Prevention</td>
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<tr>
<td>- Edith Mitchell, MD, MACP, FCPP, FRCP, Sidney Kimmel Cancer Center at Jefferson</td>
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<tr>
<td>- Isabel Nino, University of Michigan</td>
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<table>
<thead>
<tr>
<th>Barriers and Challenges</th>
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<tbody>
<tr>
<td>- Stigmatization and hesitation to address tobacco and cancer</td>
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<tr>
<td>- Health care institutions don’t prioritize lung cancer screening</td>
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<tr>
<td>- Lack of coordination of strength-based approaches with community input</td>
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<tr>
<td>- Mistrust of the health care system by the community</td>
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<tr>
<td>- Mistrust of the messenger by the community</td>
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<tr>
<td>- Lack of understanding of lung cancer statistics and facts; lung cancer can be curable, benefits of lung cancer screening</td>
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<thead>
<tr>
<th>Initial Strategies</th>
<th>Refined Strategies</th>
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<tbody>
<tr>
<td>- Increase community representation and develop community-led outreach efforts to build a sense of hope</td>
<td></td>
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<tr>
<td>- Devise and implement efforts to earn trust in the healthcare systems and messages</td>
<td></td>
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<tr>
<td>- Develop and disseminate a robust national public awareness campaign with local feel and impact, trusted voices, community champions, survivors</td>
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<tr>
<td>- Leverage existing networks/processes to connect eligible patients to lung cancer screening</td>
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<tr>
<td>- Increase community representation and develop community-led outreach efforts to build a sense of hope, empowerment, and respect for the community</td>
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<tr>
<td>- Co-create and implement efforts to incorporate language and culture and increase workforce diversity to earn trust in healthcare systems and measures</td>
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## Group 2 – Health Equity and Population Gaps

### Participants

<table>
<thead>
<tr>
<th>Jan Eberth, PhD, FACE</th>
<th>Raymond U. Osarogiagbon, MBBS, FACP</th>
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<tbody>
<tr>
<td>Director</td>
<td>Chief Scientist and Director</td>
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<tr>
<td>Rural &amp; Minority Health Research Center</td>
<td>Multidisciplinary Thoracic Oncology Program</td>
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<tr>
<td>Drexel University</td>
<td>Baptist Memorial Health Care Corporation</td>
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<thead>
<tr>
<th>Beth Dickson-Gavney, MA, MS (Facilitator)</th>
<th>American Cancer Society</th>
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<tr>
<td>Gissoo DeCotiis, Daiichi Sankyo, Inc.</td>
<td>Antoinette Percy-Laury, DrPH, MSPH</td>
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<tr>
<td>Loretta Erhumwunsee, MD, FACS, City of Hope National Medical Center</td>
<td>M. Patricia Rivera, MD, ATSF, FCCP, University of Rochester, Rochester NY</td>
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<tr>
<td>Cherie Erkmen, MD, FACS, Temple Thoracic Surgery</td>
<td>Liora Sahar, PhD, GISP, American Cancer Society</td>
</tr>
<tr>
<td>Efrén Flores, MD, Massachusetts General Hospital</td>
<td>Aparajita Sarkar, Johnson &amp; Johnson</td>
</tr>
<tr>
<td>Laura Makaroff, DO, American Cancer Society</td>
<td>Robert Winn, MD, VCU-Massey Cancer Center</td>
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<tr>
<td>Carol Ison, Appalachian Regional Healthcare</td>
<td>Aubrey Van Kirk Villalobos, DrPH, Med, National Cancer Institute</td>
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<td>Jalpa Patel, PharmD, AstraZeneca</td>
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### Barriers and Challenges

- Competing demands; multilevel clinical and social demands
- Access; multilevel barriers of insurance, geo-distribution of lung cancer screening centers, cost
- Awareness and knowledge
- Trust and mistrust; bias and stigma
- Eligibility criteria that underestimate the burden in some communities and populations
- There are few tested and proven interventions for priority populations

### Initial Strategies

- Embed continuous quality improvement
- Increase screening infrastructure, especially for vulnerable populations
- Co-develop a community engagement and outreach campaign
- Co-develop trusted messaging; culturally sensitive; destigmatizing and judgement-free
- Improve provider awareness and eliminate knowledge gaps related to vulnerable populations
- Increase advocacy for the disadvantaged, including at the institutional and policy levels

### Refined Strategies

- Co-develop a community engagement, outreach, and advocacy framework to prioritize health equity
- Develop, disseminate, and support health systems of all types to use social determinants of health (SDOH) data proactively and meaningfully to identify where disparities exist and inform continuous quality improvement
- Increase awareness and eliminate knowledge gaps about lung cancer screening among and about priority populations
# Group 3 – Information Technology (IT) and Electronic Health Records (EHR) Systems

## Participants

<table>
<thead>
<tr>
<th>Name</th>
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<tr>
<td>Tanner Caverly, MD, MPH</td>
<td>Assistant Professor, Internal Medicine, University of Michigan</td>
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<tr>
<td>Carey C. Thomson, MD, MPH, FCCP</td>
<td>Chair, Department of Medicine, Mount Auburn Hospital/Beth Israel Lahey Health</td>
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<tr>
<td>Hannah Burson (Facilitator)</td>
<td>American Cancer Society</td>
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<tr>
<td>Julie Barta, MD, ATSF, Thomas Jefferson University</td>
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<td>Maiyan Chau, PhD, AstraZeneca</td>
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<td>Ilya Gipp, MD, PhD, Philips</td>
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<td>Hormuzd Katki, PhD, MS, National Cancer Institute</td>
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<tr>
<td>Jane Kim, MD, MPH, Department of Veterans Affairs</td>
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<tr>
<td>Yamile Leon, RN, MSN, OCN, ONN-CG, ONN-CG(T), Academy of Oncology Nurse &amp; Patient Navigators</td>
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<tr>
<td>Philip Linden, MD, FACS, FCCP, University Hospitals Cleveland Medical Center</td>
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<td>Conan Noronha, MS, Epic</td>
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<tr>
<td>Jamie Ostroff, PhD, Memorial Sloan Kettering Cancer Center</td>
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<tr>
<td>Mary Pasquinelli, DNP, APRN, FNP-BC, University of Illinois - Chicago</td>
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<tr>
<td>Angela Rolle, MPH, American Cancer Society</td>
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<tr>
<td>Jonathan Sepulveda, Epic</td>
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<tr>
<td>Charles White, MD, FACR, University of Maryland</td>
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<tr>
<td>David Yankelevitz, MD, Icahn School of Medicine at Mount Sinai</td>
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## Barriers and Challenges

- Inconsistency and misclassification of current and former tobacco use status
- Suboptimal use of data; questions could be worded better; validated prediction models
- IT and operations disconnect
- EHRs are not designed to incorporate clinic decision support tools
- Information overload problem – for providers and patients
- Poor use of EHR systems to support adherence to screening
- Patients not using EHR patient portals to access information

## Initial Strategies

- Develop a national consensus for an LCS module across vendors
- Leveraging the EHR to engage patients; LCS education, collecting tobacco history, telemedicine
- Build IT systems for building future predictors (radiomics, biomarkers, tobacco treatment)
- Training healthcare workers to collect detailed tobacco use history
- Utilizing best practice alerts (BPA)

## Refined Strategies

- National consensus on developing core EHR elements and standards (tobacco history, data sharing, best practice alerts (BPA), quality, risk models, communication, program orders, education for healthcare workers, patients, and providers)
- Develop a Lung Cancer Screening Quality Standards Act in collaboration with the NLCRT Policy Action Task Group
- Leverage EHR to engage and educate patients about lung cancer screening and collect appropriate tobacco use history
## Group 4 – Strengthening Systems to Support Team-Based Care

### Participants

<table>
<thead>
<tr>
<th>Joelle T. Fathi, DNP, RN, ARNP, CTTS, FAAN</th>
<th>William R. Mayfield, MD, FACS, FCCP</th>
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<tbody>
<tr>
<td>Chief Healthcare Delivery Officer</td>
<td>Chief Surgical Officer</td>
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<tr>
<td>GO2 Foundation for Lung Cancer</td>
<td>Wellstar Health System</td>
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**Korey Hofmann, MPH (Facilitator) American Cancer Society**

- Leigh Boehmer, PharmD, Association of Community Cancer Centers
- Mark Lloyd Davies, PhD, Johnson & Johnson
- Pierre de Delva, MD, FACS, University of Mississippi Medical Center
- Paul Doria-Rose, DVM, PhD, National Cancer Institute
- Debra Dyer, MD, FACR, National Jewish Health
- Heather Bittner Fagan, MD, FAAFP, ChristianaCare
- Farhood Farjah, MD, MPH, FACS, University of Washington
- Andrea Ferris, MBA, LUNGevity Foundation
- Margaret (Meg) Harrison, MA, Genentech
- Gregory Kane, MD, MACP, Thomas Jefferson University
- Timothy Mullett, MD, MBA, University of Kentucky
- Rochelle Waddell, Appalachian Regional Medical Center
- Megan Wessel, MPH, American Cancer Society

### Barriers and Challenges

- Lack of financial incentives to collaborate on lung cancer efforts
- The financial value of revenue streams; not realizing the value of financial benefits of lung cancer care, early detection, and healthier populations
- Knowledge of eligibility criteria
- Availability of navigation services
- Workforce shortage; access and availability of providers; provider burnout; lack of diversity
- Lack of meaningful and timely coordination of care
- Lack of inter-system coordination

### Initial Strategies

- Financial priorities – developing a targeted value speech for key stakeholders
- Building and resourcing healthcare providers for efficient, effective, and timely care
- Understanding the accuracy and uptake of demographic information, who is missing, and how do we capture them
- Communication, collaboration, and team-based care – use and leverage technology
- Dissemination of knowledge and education to key partners - specialists, primary care providers, people at risk
- Outreach in communities - engaging community health workers, developing partnerships with clinician and advocacy groups, patient experience
- Integration of healthcare teams; partnerships, strategic relationships; alliances

### Refined Strategies

- Co-create a value proposition (the big why) for each set of stakeholders (clinical benefit/cost, financial benefit/cost, population benefit/cost)
- Build an outreach and communication strategy for each set of partners to build trust and eliminate bias
- Co-create a common language that harmonizes and integrates a common standard for lung cancer screening
## Group 5 – Health Policy

### Participants

<table>
<thead>
<tr>
<th><strong>Ruth Carlos, MD, MS, FACR</strong></th>
<th><strong>Catherine (Katie) McMahon, MPH</strong></th>
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<tbody>
<tr>
<td>Professor, Department of Radiology</td>
<td>Principal – <em>Policy Development (Prevention)</em></td>
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<tr>
<td>University of Michigan</td>
<td>American Cancer Society Cancer Action Network</td>
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</table>

**Brett Hansen (Facilitator) American College of Radiology**

- Mythreyi Chatfield, PhD, American College of Radiology
- Joseph Chin, MD, MS, Centers for Medicare and Medicaid Services
- Jill Feldman, EGFR Resisters
- Elizabeth Franklin, PhD, MSW, Sanofi
- Hannah Green, American Lung Association
- Denise Lee, American Lung Association
- Karl Lobo, MBA, Janssen Pharmaceuticals
- Timothy Merchant, RadNet
- Kristen Santiago, MS, LUNGevity Foundation
- Letitia Thompson, MPA, American Cancer Society
- Chi-Fu Jeffrey Yang, MD, Massachusetts General Hospital

### Barriers and Challenges

- Access to care - the eligible population has less access; what type of benefit is covered
- Provider support barriers – accountability, distribution of burden, lack of quality measures
- Patient barriers – cost, paid leave, sick leave, transportation
- Guidelines – are conflicted and complicated; they lack a unified message
- Competing policy issues today; other healthcare delivery issues; other issues like gun control; limited attention spans

### Initial Strategies

- Eliminating coverage gaps and increasing affordability; Medicaid expansion; screening to be considered an episode of care; statewide coverage to support needs such as transportation
- USPSTF reform with a diversification of representation; include patients, therapeutic providers
- Partnerships to support these strategic endeavors
- Essential organizations can serve as a convenor for multiple groups, providing consistency in messaging

### Refined Strategies

- Change health insurance benefit design to eliminate out-of-pocket costs for an episode of screening resulting from a positive screen
- Eliminating barriers to accessing screening such as wraparound services to address social determinants of health (including transportation, time off, and care services)
- Expand Medicaid availability and harmonize coverage across Medicaid clients
# Group 6 – Primary Care Practice

## Participants

<table>
<thead>
<tr>
<th>Michael R. Gieske, MD</th>
<th>Richard C. Wender, MD</th>
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<tbody>
<tr>
<td>Director, Lung Cancer Screening</td>
<td>Chair, Family Medicine &amp; Community Health</td>
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<tr>
<td>St. Elizabeth Healthcare</td>
<td>University of Pennsylvania</td>
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Tiffany Gowen, MHA (Facilitator) American College of Radiology

- Paula Aspiazu, MPH, American Cancer Society
- Lisa Carter, PhD, APRN, ANP-C, FAAN, Memorial Sloan Kettering Cancer Center
- Amy Copeland, MPH, Small Spark Consulting
- Sara Green, AstraZeneca
- Claudia Henschke, PhD, MD, Icahn School of Medicine at Mount Sinai
- Thomas Houston, MD, FAAFP, American Academy of Family Physicians
- Bruce Johnson, MD, FASCO, Dana-Farber Cancer Institute
- JoAnne Milazzo, DNP, RN, Novartis
- Ronald Myers, PhD, MSW, Thomas Jefferson University
- Dorothy Rhoades, MD, MPH, University of Oklahoma Health Sciences Center
- George Yang, Epic

## Barriers and Challenges

- Access to screening facilities; capacity of screening facilities
- Lack of education for primary care providers, e.g., shared decision making
- Stigma - primary care providers need education on destigmatizing language
- Quality measures – need HEDIS measure for lung cancer screening
- Shared decision-making - value it, low uptake
- Shared decision-making - necessary challenge/mandated, can create stigma
- IT/EHR - having health maintenance prompts, EHR set-up to capture CTs of the chest, and the accuracy of tobacco use history is critical

## Initial Strategies

- Recommend specific language of what should be in the LCS quality measure
- Design and disseminate a uniform/simplified way to obtain a tobacco use history from patients
- Creative ways to improve and increase primary care education; comprehensive, including medical school students
- Encourage EHR use in LCS across the spectrum of the problem, a comprehensive package of support
- Improve accessibility to screening in marginalized populations

## Refined Strategies

- Implement lung cancer screening as a quality measure
- Identify a more uniform/simplified way to obtain a tobacco use history from patients (details such as cigarettes versus cigars)
- Improve access to increase primary care team education on lung cancer screening; specifically, how to engage populations who are medically underserved
Overview of Panel Presentations with Links to Presentations

### Day 1: Accelerating Uptake of Lung Cancer Screening Summit

**Welcome Address**  
Ella Kazerooni, MD, MS, FCR, FACC, FSABI, NLCT Chair, University of Michigan  
Laura Makaroff, DO, SVP Prevention and Early Detection, American Cancer Society

**Closing Gaps in Cancer Screening**  
John Williams, MD, FACS, Chair, Presidents Cancer Panel

#### Panel 1: Lung Cancer Screening – What Do We Know?

**Lung Cancer Screening: Eligible Population and Impact on Increasing Uptake and Adherence**  
Gerard Silvestri, MD, MS, FCCP, Medical University of South Carolina

**Health Equity Considerations for Lung Cancer Screening**  
M. Patricia Rivera, MD, ATSF, FCCP, University of Rochester

**Policy and Health Insurance Coverage: Impacts on Lung Cancer Screening**  
Ruth Carlos, MD, MS, FACR, University of Michigan

**Medicaid Coverage of New Lung Cancer Screening Guidelines**  
Hannah Green, MPH, American Lung Association

**Primary Care Perspective in Lung Cancer Screening**  
Richard Wender, MD, University of Pennsylvania

**Stigma Exists: Importance of Language in Reaching Hearts and Minds**  
Jamie Studts, PhD, University of Colorado

**Measuring Lung Cancer Screening**  
Robert Smith, PhD, American Cancer Society

#### Panel 2: Coalition Opportunities and Success Stories

**CDC National Comprehensive Cancer Control Program**  
Nikki Hayes, MPH, Centers for Disease Control and Prevention

**American Lung Cancer Screening Initiative**  
Chi-Fu Jeffrey Yang, MD, Massachusetts General Hospital & Alexandra Potter, UC Berkeley

**Kentucky LEADS Collaborative**  
Timothy Mullett, MD, MBA, FACS, University of Kentucky

**ScreenNJ**  
Anita Kinney, PhD, RN, FAAN, FABMR, Rutgers Cancer Institute

**Mississippi Lung Cancer Roundtable**  
Pierre de Delva, MD, FACS, University of Mississippi Medical Center

### Day 2: Accelerating Uptake of Lung Cancer Screening Summit

#### Panel 3: Promoting Health Equity in Lung Cancer Screening

**The Impact of Social Determinants of Health on Lung Cancer**  
Efrén Flores, MD, Massachusetts General Hospital

**The Mid-South Miracle: A Program-Based Approach to Reducing Population-Level Lung Cancer Mortality**  
Raymond Osarogiagbon, MBBS, FACP, Baptist Health Care Corporation

**Creating Opportunities to Make Screening Accessible to Everyone**  
Cherie Erkmen, MD, FACS, Temple University

**Giving A Voice to the Unheard in Lung Cancer**  
Narjust Duma, MD, Dana-Farber Cancer Institute

**Southeastern Consortium for Lung Cancer Health Equity**  
Robert A. Winn, MD, Massey Cancer Center at Virginia Commonwealth University
Presentation Highlights for Day 1 - Panel 1

Dr. Gerard Silvestri discussed how the updated USPSTF recommendation changed the demographics of the screen-eligible population by adding an additional 6.5 million people to the original 8 million eligible individuals defined by the 2013 eligibility criteria, and how those who are getting screened differ from the overall eligible population.

Dr. Patricia Rivera discussed the incidence and mortality disparities in lung cancer based on important population differences in sex, race, ethnicity, smoking, socioeconomic status, and other risk factors. Although LDCT scanning is known to save lives, disparities still influence who gets screened.

Dr. Ruth Carlos discussed how insurance coverage affects the uptake of lung cancer screening and highlighted that screening coverage is not a panacea. Although screening is covered by insurance, out-of-pocket costs exist, are highly variable, and reduce the patient rate of adherence to annual screening and the number of visits in total.

Ms. Hannah Green discussed the results of an American Lung Association study that assessed the coverage of lung cancer screening within state Medicaid fee-for-service programs for the standard Medicaid population. The study showed that 46 states are now covering lung cancer screening for the standard Medicaid population, which is a significant improvement (+9 states) over the results from two years earlier in the 2020 survey.

Dr. Richard Wender discussed five barriers (and proposed solutions) that discourage primary care providers from promoting lung cancer screening: a gap in knowledge; screening not being a quality measure; difficulty of assessing eligibility; poor adherence to shared decision-making; and concerns by providers about cost and access barriers for patients.

Dr. Jaime Studts discussed how lung cancer stigma creates barriers to forming trusted relationships between clinicians and patients. Part of the solution is to find ways to use better language when communicating with patients; we need to use our knowledge and enthusiasm about lung cancer solutions to change societal perspectives around lung cancer stigma.

After the panel presentation, Dr. Robert Smith focused on the different measurements of screening uptake and showed how they differed by bias (national self-reported data) and quality (EHR records, claims). The measurement discussion had three parts: participation measures, screening and adherence measures, and outcomes that occurred after measurements were gathered.

Presentation Highlights for Day 1 - Panel 2

Ms. Nikki Hayes discussed the 1998 origin of the National Comprehensive Cancer Control Program (NCCCP) and its goal of seeking ways to help states organize their cancer prevention and control work so that they could work together more effectively. The NCCCP currently funds 68 state-level programs and coalitions.

Dr. Jeffrey Yang and Ms. Alexandra Potter described the American Lung Cancer Screening Initiative (ALCSI), a team of more than 200 college and medical students, doctors, and advisors. The goals of ALCSI are to raise awareness about lung cancer screening and to increase access to lung cancer screening among high-risk individuals.

Dr. Timothy Mullet described the Kentucky LEADS Collaborative, which was formed to address the status of Kentucky as the top-ranking state for many adverse health statistics around tobacco, smoking, and lung cancer incidence and mortality. The presentation highlighted some of the achievements of the Collaborative, new legislation, and improved lung cancer health statistics. Dr. Anita Kinney described the ScreenNJ program that initially focused on lung and colorectal cancer screening. The goals of the program are to improve cancer
prevention, screening, education, and awareness among providers and communities to improve health system demand while reducing disparities. ScreenNJ now has 331 sites and 193 partner organizations.

Dr. Pierre de Delva described the recently formed Mississippi Lung Cancer Roundtable, addressing the heavy lung cancer burden in the state, which ranks 47th worst for lung cancer incidence and 48th worst for mortality; about 21% of the population uses tobacco. Using the NLCRT model they are building their capacity based on an environmental scan for screening, developing state partnerships, and formulating marketing messages.

**Presentation Highlights for Day 2 - Panel 3**

Dr. Efrén Flores showed that many different social determinants of health and disparities affect a patient’s journey to and from a lung cancer screening exam and throughout the follow-up care process. Root cause inequities, institutional and structural drivers, living conditions and social drivers, and risk behaviors all play a role in the delivery of lung cancer screening and treatment.

Dr. Raymond Osarogiagbon described the Mid-South Miracle project in Mississippi. The project set a goal to reduce lung cancer mortality by more than 25% in 10 years by rigorously implementing seven specific clinical programs that focused on early detection and delivering multidisciplinary care.

Dr. Cherie Erkmen discussed four different types of strategies to increase lung cancer screening, including patient strategies (education and engagement), provider strategies (awareness, access, actionable protocols for follow-up, feedback, etc.), institutional strategies (invest in multidisciplinary teams for increased screening and downstream revenue), and macro-environmental policy strategies (to increase eligibility, access, and coverage).

Dr. Narjust Duma discussed how some smaller populations (such as the LGBTQIA+, incarcerated, and undocumented populations) experience disparities, discrimination, and disproportionately higher health risks because of their race, ethnicity, income, language, lifestyles, behaviors, transportation options, and living environments. Screening and diagnostic disparities also occur because they may not qualify or have access to free lung cancer screening services.

Dr. Robert A. Winn discussed the Southeastern Consortium for Lung Cancer Health Equity (in VA, NC, SC), which published an official statement paper in 2020 on how to best optimize current screening guidelines and promote equitable LCS implementation and dissemination. The paper also described the need for a multilevel, multimodal navigation approach to lung cancer screening.

**This Executive Summary was thoughtfully prepared by the ACS NLCRT Executive Leadership Team:**

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