NPI Cancer Moonshot
Major Recommendations

• Expand funding for clinical studies over the next 5 years employing existing noninvasive imaging technologies and companion molecular tests for early detection of cancer.

• Use coordinated public and private investments to expand funding for the development of new approaches for early detection and treatment of cancer where these technologies are needed.

• Provide the resources to develop a network for an IT medical infrastructure available to US health care providers and consumers.
Questions for Breakout Group A

• How can we best utilize the Cancer Moonshot Opportunity?
  Don’t just rely on the government for funding and action but use the moonshot to organize stakeholders.

• Who are the key stakeholders?
  – (gov. agencies, industry groups, academia, patients)

  CDC, FDA, CMS, NCI, NIST, DOD, ACR

• What are the best methods to create sustained conversation and activity?
  Workshops on early detection, Webinars and White papers

• Is a focus on diagnostic and therapeutic technology effective?
  Yes! But need to anticipate success and start planning reimbursement and patient engagement strategies. Past emphasis on drug development has not yielded sufficient progress.

• How can we expand the impact of our response to COPD and heart disease?
  – Education: The story is compelling and easy to explain. Three of the leading causes of early deaths are addressed by appropriate thoracic quantitative imaging!
  – Change payment and reimbursement models of Medicare
  – Make early detection a bigger priority- screenings save money in the lung run when cancer is detected at an early more treatable stage
IT Infrastructure Case Study

• The impact of an integrated IT infrastructure
  – Research access to population based image and molecular data from cancer patients for meta studies
  – Healthcare provider/specialists general access to image and molecular data within the hospital and clinical setting to eliminate/silo barriers
  – Patient access to image and molecular data to vividly illustrate their health status and disease progression/regression and to assist with compliance
  – Patient and provider remote access to all health data for treatment at multiple sites
Cancer Moonshot Breakout Session A

• Intro
  – Generally excited about moonshot’s ability to get the public interested but skeptical of how funding will shake out and what will actually change
  – Concerned about the strong emphasis on treatment vs. prevention and early detection to get more in front of the disease
• Positives
  – Regardless of the government’s plans, the research community has a tremendous opportunity to set up its own core areas, workshops, etc.
  – Set out what the direction of therapy should be
  – Government can help encourage private sector funding, research community can start its own fundraising because of the conversation
• NPI’s Work
  – Set 3 global recommendations
    • Organize and fund existing technology in more clinical trials
    • Fund development of new technologies
    • Build IT infrastructure to optimize data
  – Suggestions and questions:
    • Create a research component to the IT infrastructure
    • How cost effective will rapid learning be?
    • How will information be tabulated and indexed?
  – Identified key stakeholders:
    • Government agencies
    • Patient advocacy groups
    • Industry groups
    • Academia
    • Patients
• Communications Needs
  – Need communications experts to get message out to the everyday man, help everyone understand
    • Plan education campaign
    • NCI has been successful at getting the word out thus far
    • Work with Members of Congress
    • Create simple umbrella term for initiative, something more specific than “Cancer Moonshot”
• Work with Medicare
  – Change payment and reimbursement models of Medicare
  – Make early detection a bigger priority- screenings save money in the lung run when cancer is detected at an early more treatable stage
Cancer Management Spectrum

Lifestyle

Biopsy/analysis

Therapy

Early detection

Locating the tumor

Measuring response

Monitoring for recurrence
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- **Pollution Monitor**
- **UV Wrist Monitor**
- **Digital X-ray**
- **Ultra Sound**
- **MRI**
- **Image Guide Surgery**
- **Robotic Surgery**
- **Gene Expression**
- **Spiral CT**
- **DNA Analysis**
- **Proteomics**
- **Circulating Tumor Cells**