NPI Cancer Moonshot
Major Recommendations

- **Expand funding for clinical studies over the next 5 years employing <u>existing</u> noninvasive imaging technologies and companion molecular tests for <u>early detection of cancer</u>.**

- **Use coordinated public and private investments to expand funding for the development of <u>new approaches for early detection and treatment of cancer</u> where these technologies are needed.**

- **Provide the resources to <u>develop a network for an IT medical infrastructure</u> 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 <u>diagnostic and therapeutic technology</u> 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
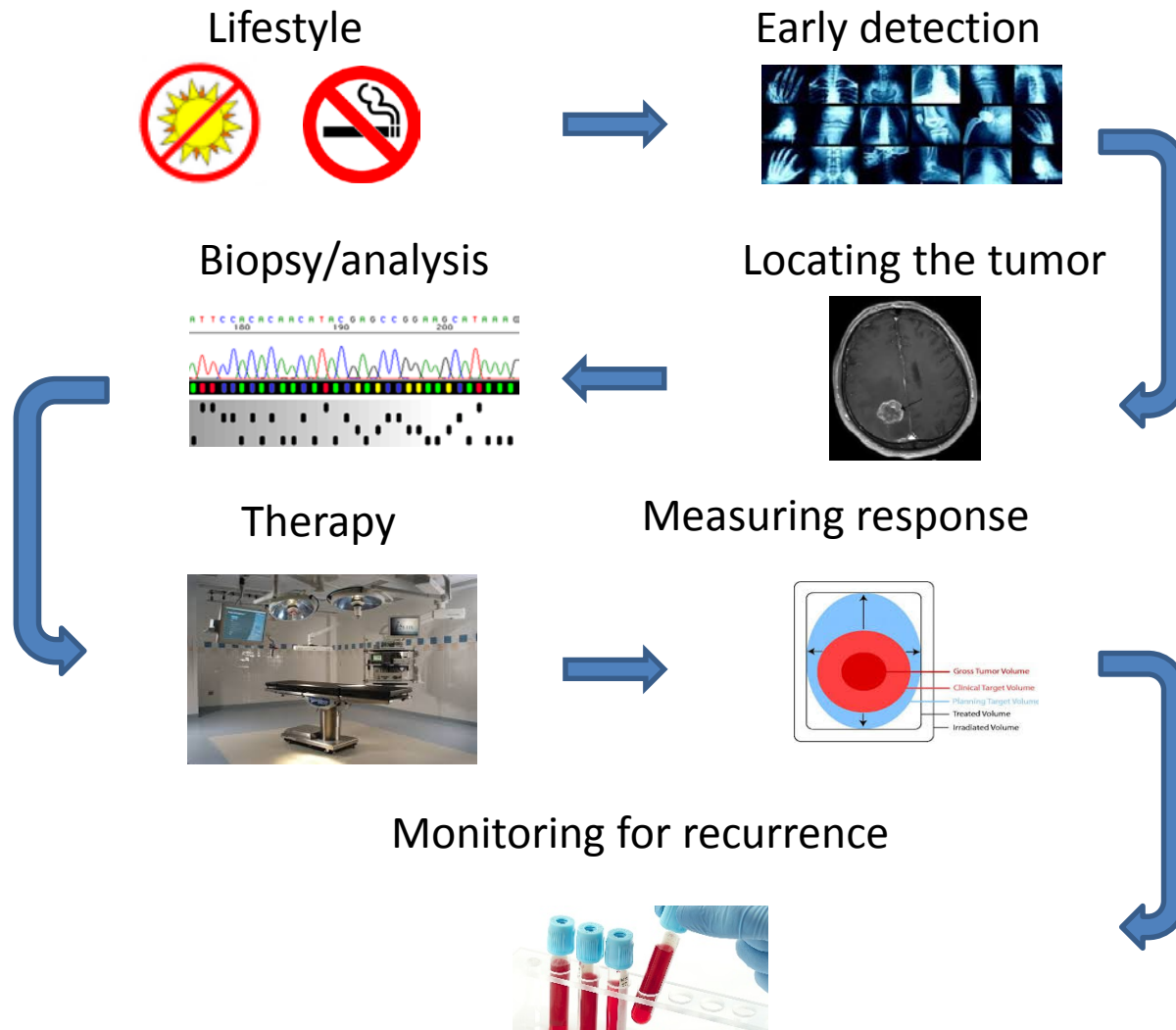
IT Infrastructure Case Study

- 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
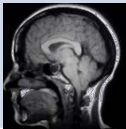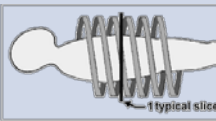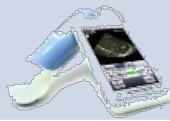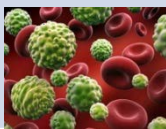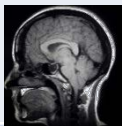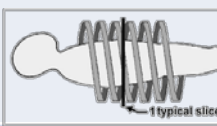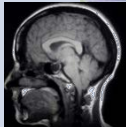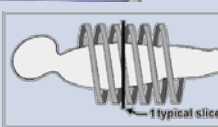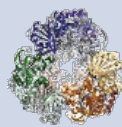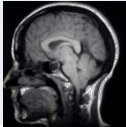
Cancer Moonshot Breakout Session A

- 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.
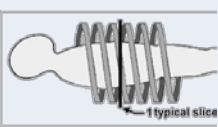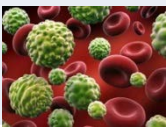 - Set out what the direction of therapy should be
  - Government can help encourage private sector funding, research community can start its own fundraising because of the conversation
- NPI's Work
  - Set 3 global recommendations
    - Organize and fund existing technology in more clinical trials
    - 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

Technology Impacts Across the Cancer Management Spectrum

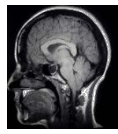|		
Lifestyle and environment		
Early detection/screening		
Locating the tumor		
Biopsy/molecular analysis		
Therapy		
Measuring response		
Monitoring for recurrence		

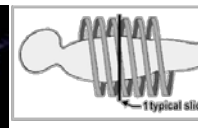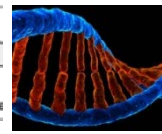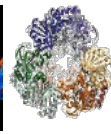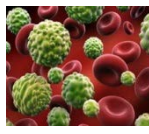Pollution Monitor | UV Wrist Monitor | Digital X-ray | Ultra Sound | MRI | Image Guide Surgery | Robotic Surgery | Gene Expression | Spiral CT | DNA Analysis | Proteomics | Circulating Tumor Cells