Lung Cancer 2016:
What We All Need to Know

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NO DISCLOSURES.

Agenda

• Epidemiology of Lung Cancer in Kentucky
• Evidence regarding Lung Cancer Screening
  • Early Detection
  • Risk reduction
  • Pulmonary Nodule Protocol
• Lung Cancer Screening Impact - 2016

Cancer statistics, 2014

Survivorship
Fatalistic Approach
- Survival is poor in many patients
- Survival is markedly better in early stage patients
- Should be a stimulus to shift stage to earlier disease

Nihilistic Approach
- Often presented as a self-inflicted disease
- While smoking is a dominant risk factor in lung cancer, it is not the only factor
- Heavy metals or other potential toxins are being defined for high risk areas (Appalachia)
- Although as many as 20% of patients never smoked

Difficult population to treat
- Older, multiple comorbid factors that complicate treatment
- Poor lung function, concomitant cardiac disease, etc.
- It is crucial that surgeons are involved in the treatment decisions and that assumptions are not being made with our potential patients

Stigmata of Lung Cancer

Data Source: CDC

Lung Cancer Mortality in Kentucky

Smoking Demographics

A land of opportunity...

Smoking rates do not fit the lung cancer distribution in Kentucky
Smoking as a risk factor

The Times They Are a'changin'...
-- Bob Dylan

CVS Pharmacy – A Case Study
• Stopped selling tobacco products
• $2 Billion Loss anticipated
• Described the incompatibility with being a 'health' company and selling tobacco

Lung Cancer Survival

To cure more lung cancer, we need to detect it in early stages, when curative therapies exist.

More than 75% of lung cancers are diagnosed in advanced stages.
Survival declines with Clinical Stage

Lung & Bronchus 5-year Survival % vs. Stage Distribution

- Localized Stages have improved survival
- Regional & Distant Stages have worst survival

Standardized Eligibility

- Males | Females
- 55-74 Yrs
- Asymptomatic
- Current or former smokers ≥ 30 pack yrs
- Former smokers have quit within 15 yrs
- No prior lung cancer
- No cancer within past 5 yrs
- No chest CT w/in prior 18 months

NLST design and time posts

- RCT
- 1:1 randomization to CT or CXR
- Launched in 08-2002 across ~ 33 sites

Stage Distribution for Lung Cancers by Screen Status

The largest randomized lung cancer screening trial completed, indicates screening high-risk populations saves lives.

- Population enrolled to NLST was ethnically diverse the applicability to other selected populations is not yet examined.
- Applicability of results to typical community based practice is mixed.
- Participating centers were comprised of NCI-designated cancer centers, large academic centers and satellite centers of these institutions.
- It has not been evaluated if there is an association between the screening setting and outcomes; however, variability in rates of false-positive scans, additional imaging, and follow-up procedures suggest that this should be examined.
The National Comprehensive Cancer Network recommends lung cancer screening.

All NCI designated cancer centers are operating lung cancer screening programs and many include research.

KLCRP Lung Cancer Screening Excellence Project

- will improve early detection of lung cancer, which will increase survival rates of Kentuckians.

Lung Cancer Screening will Save Lives of Kentuckians.

Risks of Lung Cancer Screening

- False alarms.
  - 25% of screened patients
  - additional CTs, bronchoscopies, or biopsies.
  - Distress
  - Risks of invasive procedures
- Radiation exposure.
  - Although the risk is low, some people develop radiation-induced cancers.
  - The test could pick up a cancer that is unlikely to cause problems in your lifetime.
- Availability of quality testing. It’s important to have CT screening at a medical center that has experience in lung cancer screening and treatment and that offers follow-up counseling based on your results.

Components of Lung Cancer Screening Excellence.

- Evidence-based information to candidates.
- Board-Certified Multidisciplinary team.
- Smoking Cessation
- Timely Results to patients & referring physicians
- Facility standards
- Multidisciplinary continuum of care.
• CMS/Payers are recognizing/reimbursing for LCS
• Multiple centers have initiated lung cancer screening
  • Most are centered around a CT Scan
  • Not patient Centric
• Governor Beshear Issues Kentucky Health Now Goals
  • 2 of the 9 goals are addressed by effective lung cancer screening
  • Reduce KY Smoking Rate by 10%
  • Reduce KY Cancer Mortality by 10%

Medicare Reimbursement Levels for Lung Cancer Screening and Shared Decision Making in 2016

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Kentucky LEADS Collaborative

• “Dedicated to reducing the burden of lung cancer in Kentucky and beyond through development, evaluation, and dissemination of novel, community-based interventions to promote provider education, survivorship care, and prevention and early detection regarding lung cancer.”
Kentucky LEADS Collaborative

Integrated & Interdisciplinary

Lung Cancer Survivorship in Kentucky

"Kentucky LEADS Collaborative: Lung Cancer Education, Awareness, Detection, Survivorship"

Consists of three distinct studies:

1. Primary Care Provider Education, led by Dr. Goetz Kloecker at the University of Louisville, Brown Cancer Center and Connie Sorrel Kentucky Cancer Program West,
2. Survivorship Care, led by Dr. Jamie Studts at the University of Kentucky, Markey Cancer Center,
3. Prevention and Early Detection (Screening), led by Dr. Tim Mullett and Dr. Jennifer Knight at the University of Kentucky, Markey Cancer Center.

Implementation of Quality Lung Cancer Screening in Kentucky

- We hypothesize that the program will demonstrate greater implementation of quality indicators for lung cancer screening, including:
  - optimal referral patterns for evidence-based lung cancer care,
  - use of strong patient navigation,
  - integration of evidence-based tobacco treatment,
  - use of shared decision making,
  - established protocols for follow-up services and program retention.

It takes an average of 17 years for only 14% of research to translate into practice

- People may thus experience a significant delay in, or never be offered, interventions that have been proven to improve health. (Balas, 1998).
- Implementation Science:
  - study of methods that influence the integration of evidence-based interventions into practice settings.
  - addresses how health interventions can be delivered with efficacy and effectiveness within real-world public health and clinical service systems. (NCI, Implementation Science, part of NCI’s Division of Cancer Control and Population Science)
  - enhances the extent to which intervention research is generalizable, representative, and comprehensive in order to increase public health impact.
Study Goal: Facilitate lung cancer care through collaborative efforts with lung cancer screening programs/sites to implement best practices

- Best practices include the integration of key components into screening programs
  - High-risk individuals
  - Screening protocols
  - Tobacco treatment
  - Shared decision making
  - Patient navigation
  - Reduce exposure to second-hand smoke
  - Radon prevention
- Share & Learn with Collaborative Sites
  - To help guide and refine best practices for Kentucky

Early Detection saves lives...the principle motivation for screening

- Early diagnoses can curb costs, as early-stage patients are less expensive to treat than late-stage patients.
- Screening can lead to growth
  - Through downstream service utilization
  - Creating a new entry point for patients who have not previously sought care from your health system
- We can attract the very patients who are most at risk
  - Cancer
  - Heart Disease
  - Vascular Disease/Stroke
- These patients are least likely to utilize primary care

The aim is to reduce the burden of lung cancer in Kentucky, employing a range of novel set of multi-level interventions
- Design for dissemination/implementation
- Scalable for broader application
- Consider future opportunities with BMS-F and NCI for testing our interventions

There are three ways you should make the financial case for lung screening:
- First, understand any direct revenue—out-of-pocket fees, reimbursements—generated by the program, but know that direct revenue is unlikely to cover your costs.
- Next, look at downstream revenue generated by the program. Depending on your organization, this can be a significant figure.
- Last, explore options to document cost savings generated by screening.

The LDCT is Covered by ACA-Compliant Payors
- Based on Grade B Recommendation from UPMSTF
- Has been perceived as the largest impediment to screening
- CMS has approved an S Code for billing. Actual reimbursement is expected to begin in June/July
- Reimburse for qualified tobacco treatment specialist services
- Nutrition/Rehab Services
- Follow-up Diagnostic Scans
- Incidental diagnoses – specialty services referrals
- Increased capture for primary care services referrals

Engagement of partners are important factors to success.
QUESTIONS?