

Increasing Lung Cancer Screening at Ground Zero: An Eastern KY QI Initiative

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Description: Primary care practices and training programs, and community health centers engaged in a quality improvement initiative to increase lung cancer screening and tobacco cessation counseling in Eastern Kentucky, which has some of the highest rates of smoking and lung cancer in the United States.

Aim: Increase referral for lung cancer screening/tobacco cessation treatment in primary care practices.

Actions Taken: Eighteen health care provider teams completed a practice assessment survey and participated in a live training program on the epidemiology and clinical science of lung cancer screening and tobacco use/cessation, as well as quality improvement methodology and shared decision making. Over the next 6 months, the champions implemented related PDSAs.

Summary of Results: Most practices routinely identified tobacco use but did not track at-risk patients, provide tobacco cessation services, or refer for screening. Transportation, fatalism and costs were identified as patient barriers. EHRs did not calculate prerequisite smoking pack years data. PDSAs targeted pack year estimation and revised workflows for screening referrals.

WHO

By County Age-Adjusted to the 2000 U.S. Standard Million Population
Kentucky Rate: 93.5 / per 100,000

- 58.6 - 87.5
- 88.5 - 98.7
- 99.3 - 113.8
- 114.1 - 179.7

Participants

- University of Kentucky Rural Morehead Family Practice Residency with main practice site in St. Claire Family Medicine Morehead
- The residency in St. Claire Family Medicine Osteopathic Residency with practice site in St. Claire Family Medicine Elliot County
- Internal Medicine and Family Medicine programs and Lake Cumberland Medical Associates, a primary care group affiliated with Lake Cumberland Regional Hospital and the Residency
- Clover Fork Clinic
 - Including Clover Fork Clinic of East, KY and Clover Fork Clinic of Harlan, KY
 - Consisted a FQHC was also
 - NSIC (NSIC Combined Level 2)
- Smoking Health Solutions
 - Multiple locations including Mount Sterling, Carlisle, Owsongville
 - Federally Qualified Health Center (FQHC)
 - NSIC (NSIC Combined Level 2)
- Grace Community Health Center
 - Clinic in Gray, Manchester, Prentiss, Carter, Indian
 - Federally Qualified Health Center (FQHC)
 - NSIC (NSIC Level 2)

Faculty

- Gregory A. Hood, MD, MACP, Dr. Borders, Hood & Associates
- Robert L. Bratton, MD, MMM, CEO, Lexington Clinic
- Phillip F. Bressoud, MD, MS, FACP, Past Governor, Kentucky Chapter of American College of Physicians and University of Louisville Healthcare
- Timothy W. Mullert, MD, FACS, Professor of Surgery, University of Kentucky College of Medicine
- Kayla D. Rose, MA, RRT, PMP, Director of Practice Improvement Programs, Kentucky Primary Care Association
- Tom Weaver, MD, Assistant Dean, University of Kentucky Morehead Regional Site, St. Claire Regional Medical Center Morehead
- Morel Jones, MPH, PMP, Project Manager for Kentucky LEADS at the Kentucky Cancer Program
- Ruth Mattingly, MPA, Co-Investigator, Kentucky LEADS, Assistant Director for Special Initiatives, Kentucky Cancer Program University of Louisville
- Ataf Mikhail, MD, FACP, Radiology Associate of Northern Kentucky University of Louisville
- Lisa Carter-Harris, PhD, APRN, ANP-C, Assistant Professor, Science of Nursing Care Department, Indiana University School of Nursing, Member, Cancer Prevention & Control Program, Indiana University Mahesh & Bern Simon Cancer Center
- Kathrina M. Hood, MD, FAAP, Partner, Pediatric and Adolescent Associates
- Laura Zimmerman, MD, FACP, Rush University Medical Center, Chicago, IL

WHAT

QI Program Timeline

Planning: Jan – April, 2018
Advisory group selection and meeting
Participating practice selection
Training material development
Evaluation plan

Implementation: May– November, 2018
Quality and Equity Advocate Training
QI activity implementation

Evaluation: December, 2018
NNS publication
Project evaluation

What Components of the Cancer Care Continuum Apply to Primary Care and Smoking Cessation and Lung Cancer Screening and Follow-up

Prevention and Risk Reduction: Smoking cessation counseling, referral for pharmacologic therapies, community education

Screening: SDM discussion about lung cancer screening, referral to screening

Diagnosis: Arrange for patient navigation, provide patient education on testing sites or specialty care

Treatment: Ongoing tobacco cessation support, ongoing communication with specialists

Survivorship: Refer to patient relationship resources

End of Life Care: Refer to palliative care or hospice

Your Practice and QI

Practice quality improvement (QI) activities: How often do you implement the following strategies to assist your patients in accessing specialty care and testing?

Practice quality improvement (QI) activities: How often do you implement the following strategies for patients who have been diagnosed and received treatment for lung cancer?

WHY

Practice Assessment: Current Screening Efforts

How often do you implement the following tobacco cessation and lung cancer screening recommendations in your practice?

Do high-risk patients for ID and track patients for screening

Uses EHR to ID patients who routinely use tobacco

ID patients who routinely use tobacco

ID tobacco cessation programs in your community

Provide educational materials on tobacco cessation

Provide tobacco cessation counseling

Refer patients to tobacco cessation or education

Provide or education on lung cancer screening

Provide community education and awareness of lung cancer screening

How often do you implement the following strategies to assist your patients in accessing specialty care and testing?

Use patient navigators

Establish relationships with regional specialists

ID lung cancer screening locations in your region

Use protocols to refer/follow-up with specialists

Provide patient education on testing sites and specialty care

How often do you implement the following strategies for patients who have been diagnosed and received treatment for lung cancer?

Refer patients to patient survivorship resources and support groups

Attend to special needs of cancer survivors (e.g., pain management, smoking cessation)

Refer patients to hospice/palliative care

HOW

SHC QI Approach

Advisory group with local participation

SHC Index Predictive modeling report

Practice assessment

Ongoing Coaching

PDSAs/Rapid Cycle Improvement in Practices

Quality and Equity Champion Training

Evaluation

Publication/Dissemination

What do you think your practice would like to focus on to improve tobacco cessation and lung cancer screening and follow-up?

Following screening guidelines; more effective tobacco cessation

Making cessation more accessible, as many state that they cannot afford cessation. I also feel that the importance of lung cancer screening using LDCT should be emphasized.

A variety of Tobacco Cessation Resources

More effective tobacco cessation programs

Establish a standard process for risk assessment and screening; improve utilization of community smoking cessation partners.

Population management of patients eligible for lung cancer screening

Awareness of the need to link lung cancer screening to multidisciplinary care

Cessation education and identifying patient's eligible for screening

Sample QI Project

Data Collection: Survey of practice clinicians' knowledge of screening guidelines, implementation and ordering practices. Number of current LDCT ordered per clinician (1/2/18 - 6/2/18)

Completion by: 1/31/19

Reflection of Data: Completed by: 9/7/18 - 12/31/18

Intervention: Grand Rounds by Dr. Timothy Mullert expounding lung cancer screening methods for our practicing clinicians. Addition of pack year to EHR, prompting entering on each patient.