DE Cancer Consortium and Screening for Life Statewide Lung Cancer Screening Program Status

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DE Cancer Consortium Retreat
GOAL 1: Continue to promote breast, cervical, colorectal, lung, and prostate cancer screening.

| OBJECTIVE 1D: Decrease the number of late-stage (distant) lung cancer diagnoses by 20%. |
|---------------------------------------------|-----------------|-----------------|-----------------|
| **Task/Actions** | **Responsible Party** | **Data Source** | **Timeframe** |
| Determine baseline number of late-stage lung cancers diagnosed. | DPH | DCR | Year 1 |
| Support patient navigators to support lung cancer screening. | ED&P Committee and DPH | Contracts | Year 1 |
| Maintain current and establish new relationships with primary care providers to increase screening rates for Medicare patients. | DPH and Navigators | MOU | Year 1–5 |
| Enhance relationships with Medicaid and FQHCs to increase screening rates. | DPH | Organization data | Year 1–5 |
| Increase the number of screenings performed in areas where late-stage lung cancers are more predominately diagnosed. | Navigators and DPH | Cancer Incidence and Mortality data | Year 1 |
| Explore expanding lung cancer screenings to those with occupational exposure and/or those exposed to secondhand smoke. | DCC | National lung cancer screening guidelines | Year 3 |
| Conduct targeted media campaign aimed at educating providers and consumers on the importance of lung cancer screening. | DPH | National lung data | Year 1 and ongoing |
Lung Cancer in Delaware

• Lung cancer is the #1 cancer killer in Delaware
  • 14% of all newly-diagnosed cancer
  • 30% of all cancer deaths

• 3965 cases of lung cancer were diagnosed among Delawareans and 2,839 Delawareans died from the disease between 2010-2014

• Delaware ranked 10th in the U.S. for lung cancer incidence and 13th in the U.S for lung cancer mortality
Delaware Lung Cancer Screening Potential

- Potential of 113 deaths avoided annually
  - 2839 Lung Cancer Deaths from 2010-2014
  - 567 deaths annually
  - Screening can reduce mortality by 20%
  - Estimated 35,500 Delawareans eligible for Lung Screening
Lung Screening Program

• Two State Wide Nurse Navigators –
  • Christiana Care and Bayhealth
  • Coordination with each site

• The Delaware Screening for Life Program (SFL) covers uninsured for lung CA screening
  • Low Dose Helical CT and interpretation
  • Multi Disciplinary Team (MDT) evaluation and subsequent testing
  • If cancer, then coverage transfers to Delaware Cancer Treatment Program

• Radiology Contracting at Christiana Care, Bayhealth, Beebe, Nanticoke, and Delaware Imaging Network

• Multidisciplinary Teams at the above institutions
CMS:  
- Age 55 – 74 years  
- \(\geq\) 30 Pack Years  
- Current or quit \(\leq\) 15 years  
- Written Order for LDCT  
- Shared decision documentation  
- Radiologist & Imaging Center Qualifications  
- Data Collection  

DELAWARE:  
- Age 55 – 80 years  
- \(\geq\) 30 Pack Years  
- Current of quit \(\leq\) 15 years  
- Written Order for LDCT  
- Shared decision with NN  
- Radiologist and Imaging Qualifications  
- Data Collection  
- Reporting and Therapy Algorithms  
- Multidisciplinary Referral
Lung Screening Program Status

- Data Collection by Nurse Navigators and Storage at the DE Registry (I-ELCAP)
  - Bayhealth, Beebe, and Nanticoke using ACR registry
- Marketing by AB+C
- Smoking Cessation Links – Quitline Refer
- First Enrollment through SFL 3/15/2015
- 328 persons screened through SFL Navigator (12/31/2018)
  - 3.9% - SFL
Lung Cancer Campaign: Fall 2018

- **Timeframe**: September-November 2018

- **Tactics included**:
  - Print ads in Delaware Medical Journal, Delaware Family Doc, DNA Reporter
  - Branded pharmacy bags
  - Provider email blast
  - Digital ads
  - Pandora :30 radio
  - Facebook
Lung Cancer Campaign: Creative
Lung Cancer Campaign: Spring 2019

- **Timeframe:** April-June 2019

- **Tactics include:**
  - *NEW* :30 video for Comcast Cable, Network TV, physician offices
  - Banner stands at supermarkets, community centers, senior centers, walk-in clinics
  - Liquor store stands and floor clings
  - Branded pharmacy bags
  - Print ads in Letters from CAMP Rehoboth, Independent Newspaper, Milford Chronicle, Sussex Post, etc.
  - Pandora :30 radio
  - Facebook & Instagram video ad
  - Native and display banners
  - Keyword and text ads
Finding Our Eligible Population

- 2018 Behavioral Risk Factor Surveillance Survey (BRFSS) includes pack year questions:
  - How old were you when you first started smoking cigarettes regularly?
  - How old were you when you last smoked cigarettes regularly? What was your age at that time?
  - When you smoked, about how many cigarettes did you smoke daily?
  - In the last 12 months, did you have a CT or CAT scan? If so, what was the reason?

- Will provide us with the data needed to measure screening rates
Finding Our Eligible Population

In the last 12 months, did you have a CT or CAT scan?

• Answer choices include:
  ✓ Yes, to check for lung cancer
  ✓ No (did not have a CT scan
  ✓ Had a CT scan, but for some other reason
Delaware Lung Screening Results 2015-2018
Screenings per Year

- 2015: 720
- 2016: 1807
- 2017: 2602
- 2018: 3384
Eligible vs Screened by Percentage
2 Sites

- 2015-2016: 65%
- 2017: 82%
- 2018: 96%
Detected Lung Cancers

- **DE 121 Cancers diagnosed through 2018**
  - 117 Non-small cell (96.7%)
  - 3 small cell (2.5%)
  - 1 in-situ (0.8%)

- **National Lung Screening Trial (NLST)**
  - 92% non small cell
  - 7% small cell
  - 1% carcinoid

- **Cancer Detection Rate for three years of screening**
  - DE: 121 cancers / 8513 screening exams = 1.42%
  - NLST: 649 cancers / 75126 screening exams = 0.86%
## Lung Cancers Diagnosed From LDCT

<table>
<thead>
<tr>
<th>Year</th>
<th>Total LDCT Performed</th>
<th>Total Cancers Detected</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>720</td>
<td>12</td>
<td>1.7%</td>
</tr>
<tr>
<td>2016</td>
<td>1807</td>
<td>33</td>
<td>1.8%</td>
</tr>
<tr>
<td>2017</td>
<td>2602</td>
<td>39</td>
<td>1.5%</td>
</tr>
<tr>
<td>2018</td>
<td>3385</td>
<td>37</td>
<td>1.1%</td>
</tr>
<tr>
<td>Total</td>
<td>8514</td>
<td>121</td>
<td>1.4%</td>
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</table>
Lung Cancers Diagnosed by Year

<table>
<thead>
<tr>
<th>Year</th>
<th># Cancers Detected</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>12</td>
</tr>
<tr>
<td>2016</td>
<td>33</td>
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<td>2017</td>
<td>39</td>
</tr>
<tr>
<td>2018</td>
<td>37</td>
</tr>
</tbody>
</table>
Lung Cancer Stage at Diagnosis Between 2015-2018

Stage at Diagnosis 2015-2018

- Stage I: 60
- Stage II: 15
- Stage III: 16
- Stage IV: 13

# Diagnosed
Lung Cancer Stage at Diagnosis by Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Early Stage</th>
<th>Late Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>2016</td>
<td>23</td>
<td>8</td>
</tr>
<tr>
<td>2017</td>
<td>25</td>
<td>7</td>
</tr>
<tr>
<td>2018</td>
<td>20</td>
<td>10</td>
</tr>
</tbody>
</table>

Early Stage: Stages 1 and 2  Late Stage: Stages 3 and 4
Stage Distribution Comparison of Detected Lung Cancers

Screening Trial Results
- Stage I: 63%
- Stage II: 7%
- Stage III: 17%
- Stage IV: 13%

Delaware Results
- Stage I: 55%
- Stage II: 14%
- Stage III: 15%
- Stage IV: 11%
- Unknown: 5%
DE Lung Cancer Screening Conclusions

• Lung Cancer Screening in DE has increased at greater than 30% per year since inception in 2015.
• Extrapolated DE screening data suggests that 10% to 12% of estimated eligible participants have entered screening by 2018.
• Screening compliance rates of eligible patients reporting to screening programs has increased annually is now greater than 95%.
• DE screening is detecting cancers at early stages and is favorably comparable to the NLST trial.
• DE cancer detection rates appear higher than the NSLT.
DE Lung Screening Challenges

• Data Collection and Consistency
  • Multiple screening data repositories (ACR, I-ELCAP)
  • Imaging Site insurance information
  • Eligibility information
  • Administrative burden

• Coordination with tumor registry data

• Increase Lung Screening Rate (Breast & Gyn > 90%, CRC 75%)
Next Steps

- Develop the ability to work with ACR data
- Examine BRFSS data to understand how well outreach has permeated the eligible population of Delaware
- Longitudinal tracking of stage of diagnosis and mortality
- Further educate Health Care Providers about LDCT screening for early lung cancer detection
• The First State remains the **only state** with a state wide comprehensive lung cancer screening program

• DE is recognized again for **innovative state wide cancer control**

• Early data points toward the ultimate outcome of **reduced lung cancer mortality**

• Congratulations to all that contribute to this successful program
Special Thanks to the Members of the DCC Early Detection and Prevention Committee and Support Staff

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Thank you!