Collaborating on a Multi-Component Intervention to Increase Lung Cancer Screening Uptake in Vermont

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Background

- Cancer is a leading cause of death in Vermont; lung cancer is the leading cause of cancer-related deaths in the state. 1
- Most lung cancers being identified at a late stage when prognosis is poorer. 1
- Lung cancer screening (LCS) has been shown to reduce lung cancer-related deaths and all-cause mortality, but uptake remains low nationally and in Vermont. 2
- Only 14.5% of eligible Vermonsters were up-to-date with screening in 2018. 3
- Reasons for low LCS uptake in Vermont include:
  1. Lack of patient knowledge
  2. Transportation challenges (limited public transportation system, difficult terrain, and long periods of inclement weather)
  3. Lack of provider referrals 4
- Although here are seven American College of Radiology Accredited LCS sites in Vermont and the locations are well distributed, 5 the utilization remains low. 2

Locations of Lung Cancer Screening Sites using CT in VT 6

<table>
<thead>
<tr>
<th>Accredited Lung Cancer Screening Site using CT</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fletcher Allen Health Center - MCHV Campus</td>
<td>Burlington</td>
</tr>
<tr>
<td>2. Mt. Ascutney Hospital and Health Center</td>
<td>Windsor</td>
</tr>
<tr>
<td>3. North County Hospital</td>
<td>Newport</td>
</tr>
<tr>
<td>4. Northeastern Vermont Regional Hospital</td>
<td>St. Johnsbury</td>
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<tr>
<td>5. Northwestern Medical Center</td>
<td>St. Albans</td>
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<tr>
<td>6. Rutland Regional Medical Center</td>
<td>Rutland</td>
</tr>
<tr>
<td>7. University of Vermont Medical Center – Fanny Allen Campus</td>
<td>Burlington</td>
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</tbody>
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Intervention Details

Stakeholders including a statewide cancer coalition, Vermonters Taking Action Against Cancer (VTAAC), Vermont Department of Health, and the University of Vermont Cancer Center and the University of Vermont Medical Center partnered with Dartmouth Cancer Center to address the barriers to LCS uptake by developing a multi-component intervention.

The partnership initiative will serve as a model for future collaborations relevant to the cancer control needs of Vermont.

1 Community Education
- Campaign using small, social and mass media
- Call to action: Talk to your doctor about LCS
- Supported by an educational webpage, community educational forums, and proactive outreach

2 Transportation Support
- Partnering with key lung cancer screening centers
- Providing gas cards to qualified patients

3 Provider Outreach and Education
- Continuing medical education sessions for primary care and pulmonology providers
- Piloting EMR reminders at a partner primary care clinic at University of Vermont Medical Center

Examples of Media Campaign: Flyer (left) and Webpage Material (right)

Evaluation Methods

In collaboration with coalition partners, and Professional Data Analysts (PDA) a Minnesota-based program evaluation firm, a multi-pronged evaluation plan will be implemented:

- **Formative**
  - Community Engagement Studio was held with the target audience to tailor media campaign, messaging, and dissemination plan

- **Process**
  - Reach will be measured through:
    1. # of media messages disseminated and # of webpage hits
    2. # of gas cards distributed
    3. # of educational forums; # of provider and community members educated

- **Outcome**
  - Change in knowledge and intentions among providers
  - Percent change in number of LCS appointments
  - Number of providers referring for LCS

Sustainability

To sustain the enhanced partnership, project leaders will:

- Support coalition leaders in identifying future cancer plan implementation priorities.
- Develop new task force(s) aligned with those priorities, and
- Engage investigators from our academic institutions in the task force(s).

References


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