Comprehensive Cancer Control
Collaborating to Conquer Cancer

COMPREHENSIVE CANCER CONTROL PLAN

TIP SHEET

LUNG CANCER SCREENING

The Comprehensive Cancer Control National Partnership (CCCNP) is a 20+ year collaboration of diverse national organizations working together to build and strengthen Comprehensive Cancer Control (CCC) efforts across the nation. This Tip Sheet is part of a series offered through the CCCNP to assist CCC programs charged with developing, implementing, and evaluating cancer control plans tailored to their state/tribe/territory/jurisdiction. CCC Plans focus coalition efforts on evidence-based interventions (EBIs) that impact cancer prevention and control across the cancer continuum.

How to Use This Tip Sheet

Tip Sheets are designed to help CCC program staff, coalition staff, and volunteers update CCC plans. Each tip sheet focuses on a specific topic (e.g., colorectal cancer screening, tobacco control, risk factors for cancer survivors). Follow the steps throughout the Tip Sheet to help guide your process in updating your cancer plan for that specific topic area. Some ideas:

- Incorporate the Tip Sheet into your plan update process – share it with your coalition workgroups and use it to help guide your decisions.
- Identify a lead person to ensure that the Tip Sheet is used by the workgroup or team assigned to update the plan section that addresses each Tip Sheet topic.
- Use the Tip Sheet to check that the topic is appropriately addressed in your plan and that the elements outlined on the next page are covered (objective, data, strategies).
- Use the **worksheet** at the end of this document with your partners to ask and answer critical questions related to the topic as you update your plan.

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Definitions

- **SMART Objective** – is an objective in the cancer plan that is Specific, Measurable, Achievable, Relevant, and Time-bound.
- **Evidence-Based Strategy** – is a specific activity that is designed to achieve the objective and is based on evidence that the strategy is expected to work in your situation, i.e., it has been evaluated and shown to work.
- **Crude vs. Age-adjusted Rates** – Crude rates are influenced by the age distribution of the state's population. Even if two states have the same age-adjusted rates, the state with the relatively older population will generally have higher crude rates because incidence or death rates for most cancers increase with age. Age-adjusting the rates ensures that differences in incidence or deaths from one year to another, or between one geographic area and another, are not due to differences in the age distribution of the populations being compared. Find out more **here**.
- **Populations of Focus** – are those groups experiencing the greatest cancer disparities in your region. Disparities might include higher cancer incidence or mortality; greater challenges to accessing cancer screening, treatment, and/or survivorship care services; or populations experiencing bias in society and the healthcare system.
- **Health Equity** – occurs when every person has the opportunity to attain their full health potential and no one is disadvantaged from achieving this potential because of social position or other socially determined circumstances.
- **Health Disparity** – is a type of difference in health that is closely linked with social or economic disadvantage. Health disparities negatively affect groups of people who have systemically experienced greater social or economic obstacles to health. These obstacles stem from discrimination or exclusion that is historically linked to characteristics such as race or ethnicity, socioeconomic status, disability, sexual orientation, and many other factors.[1]
- **Social Determinants of Health (SDoH)** – are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.[2]

Tips for Updating Your CCC Plan

- **Use your current cancer plan as a starting point:** Think of this process as updating the current plan instead of starting a new plan from scratch.
- **Be systematic:** Assign workgroups to review and update certain sections of the plan. Create a process that is common across all workgroups tasked with updating the plan, which should include a standard set of criteria for the inclusion of plan goals, objectives, and strategies.
- **Focus workgroups on assessing and updating the core aspects of the plan:** the goals, objectives, and strategies.
- **Identify someone to take the lead** on writing the introduction, connecting text, and putting the document together for publication.
- **Use data to determine the focus of the plan:** Which cancers are most prevalent in the population? What subpopulations experience the most disparities?
- **View through a health equity lens:** Be intentional and proactive in keeping health equity issues at the forefront in every step of the cancer plan process – when engaging partners, collecting data, and setting goals. Include representatives from your population of focus in the writing of your cancer plan.

Use these resources to explore more cancer control planning tips and examples:

- **Nine Habits of Successful CCC Coalitions**
- **CCC Implementation Building Blocks** (see page 7 in the CCC Implementation Building Blocks Guide for more tips on updating your plan)

Additional resources you can use:

- Search other CCC plans to get ideas – **CDC's CCC Plan Map and Search Tool**
- **CDC Cancer Plan Self-Assessment Tool**
- **GW State Cancer Plans Priority Alignment Resource Guide and Tool**
- **A Practitioner's Guide for Advancing Health Equity: Community Strategies for Preventing Chronic Disease**

Checklist for Updating Your CCC Plan

- ☐ **Ensure that your workgroup is familiar with your current cancer plan.**
- ☐ **Create a systematic process for the workgroup to follow that is intentional about addressing health equity.**
- ☐ **Use data to focus on the populations with the highest cancer burdens.**
- ☐ **Focus workgroups on assessing and updating goals, objectives, and strategies.**
- ☐ **Identify someone to write the introduction and assemble the final document.**

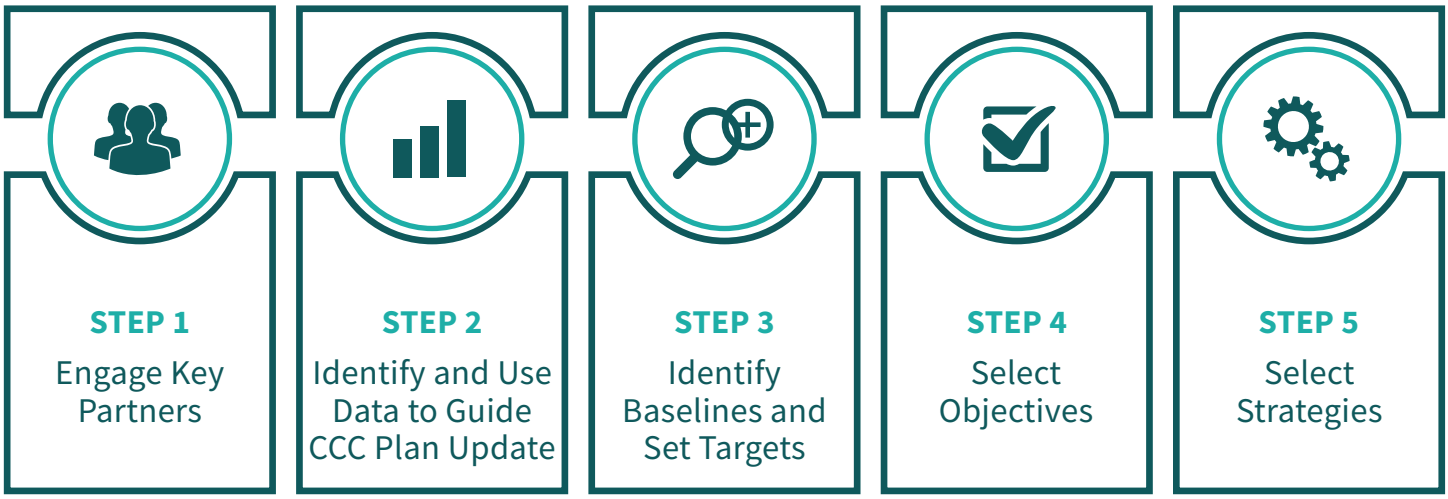
COMPREHENSIVE CANCER CONTROL PLAN UPDATE TIP SHEET

Lung Cancer Screening

Why Lung Cancer Screening is an Important Part of Your CCC Plan

- Lung cancer is the second most common cancer and the leading cause of cancer death among men and women.[3]
- The most significant risk factor for lung cancer is smoking. Smoking is estimated to account for about 90% of all lung cancer cases, with a relative risk of lung cancer approximately 20-fold higher in individuals who smoke than in individuals who do not smoke.[3]
- Adults aged 50 to 80 years who have a 20 pack-year smoking history and currently smoke or who have quit within the past 15 years should be screened with low-dose computed tomography (LDCT) every year. Screening can stop once a person has not smoked for 15 years or has a health problem that limits life. All persons enrolled in a screening program who currently smoke should receive smoking cessation interventions.[4]
- CCC coalitions are increasingly taking an active role in promoting quality lung cancer screening. Coalitions have an opportunity to drive screening by including screening objectives and strategies in cancer plans and collaborating with key health system partners to make lung cancer screening available.

While the overall lung cancer survival rate is only a little over 20%, early stage-lung cancer has a much better survival rate (59%) and is easier to treat. Annual screening with low-dose computed tomography (LDCT) has been shown to be effective at detecting lung cancer early in at-risk populations.[3]



STEP 1
Engage Key Partners

Engage experts in lung cancer screening, organizations and agencies who have access to the data you need, and partners who will be critical to implementing your lung cancer screening strategies. Consider key roles that will be helpful during your planning — subject matter experts in prevention, detection, survivorship, and advocacy; organizations who can convene partners; and those who will help manage the process and keep it moving forward.

- **American Cancer Society**
- **ACS Cancer Action Network (ACS-CAN)**
- **American College of Radiology** (local chapter)
- **American College of Surgeons (ACOS)** Commission on Cancer (CoC) State Chair, along with the Cancer Liaison Physicians and the health systems they work in
- **American Lung Association (ALA)**
- Cancer centers and academic partners with an interest in lung cancer-related research
- Current coalition workgroup or advisory group members focused on lung cancer screening
- **GO_2 Foundation for Lung Cancer Screening Centers of Excellence**
- Health plans and insurance providers
- Local medical associations that include the following practice areas: pulmonary medicine, thoracic radiology, thoracic surgery, radiation oncology, medical oncology, primary care, nurses, and navigators
- Medical coders/billers – as they are a link between patients, providers, and insurers
- **National Behavioral Health Network for Tobacco and Cancer Control**
- Organizations and individuals that represent communities experiencing disparities in lung cancer
- Provider champions
- State health insurance commissioner's office
- State Medicaid and Medicare offices
- Radiology facilities accredited to provide LDCT
- Tobacco control **programs**, including program staff managing state **Quitline** services
- Your central cancer registry (**National Program of Cancer Registries [NPCR]**) and **Surveillance, Epidemiology, and End Results (SEER)**

STEP 2

Identify and Use Data to Guide CCC Plan Update

Data is essential to your cancer plan in several ways, including:

- Identifying populations that have higher incidence and mortality rates of lung cancer and lower screening rates. It is helpful to examine this at minimum by gender, race/ethnicity, health insurance status, and geographic area.
- Identifying your lung cancer screening rates, progress, and trends over time to identify specific areas for focus. While a single data source for lung cancer screening rates may not exist at the state level, you can work with individual health systems and your health department data experts to find the best data available.
- Identifying availability and types of providers, cancer services and ancillary support (survivor programs, etc.) in different geographic areas and population groups to inform your objectives and strategies in this topic area.
- Comparing local data with national data to highlight key areas of need or lagging progress.
- Laying a foundation to measure progress over the life of the plan (e.g., baselines and targets).

CCC coalitions can:

- Provide data in easy-to-understand formats to communicate the importance and benefits of lung cancer screening.
- Collect and share information about where lung cancer screening is available in the state, tribe, or territory.
- Strongly encourage electronic medical records systems to add information on pack-years smoked.
- Information on cigarette pack-years is necessary to identify screening eligibility.
- Analyze health care provider survey data on knowledge, attitudes, and practices about lung cancer screening and smoking cessation counseling among primary care providers.

It is best to use data from your own state, tribe, or territory, but national data can help you set targets and see how your region compares to national trends.

Local data sources:

- Your central cancer registry (**National Program of Cancer Registries [NPCR]**) and **Surveillance, Epidemiology, and End Results (SEER)** and the **National Health Interview Survey**
- In addition, some states' **Behavioral Risk Factor Surveillance System (BRFSS)** programs collect lung cancer screening data. CCC coalitions can collaborate with state BRFSS coordinators to add questions to enable calculation of smoking pack-years. It is anticipated that the BRFSS will soon include a lung cancer screening module in its rotating core set of questions, where all states collect the information every two years.

National data sources for national and state-level estimates:

- **American Cancer Society's Cancer Statistics Center** (direct link to **Lung Cancer page**).
- **American Cancer Society Facts and Figures**.
- **American College of Radiology** (annual statistics for state level comparisons of baseline and annual follow-up exams).
- **American Lung Association's State of Lung Cancer** shows the impact of lung cancer by state.
- **Health Information National Trends Survey (HINTS)** collects data about the American public's use of cancer-related information.
- **National Cancer Institute (NCI) Cancer Trends Progress Report** summarizes national progress against cancer (including lung) in relation to Healthy People targets, with data from across the cancer continuum.
- **National Lung Cancer Roundtable Lung Cancer Atlas** is an interactive geographic view of data pertaining to lung cancer in the U.S.
- **State Cancer Profiles (NCI & CDC)** provides quick and easy access to descriptive cancer statistics collected from public health surveillance systems.
- **U.S. Cancer Statistics** (CDC) compiles official federal cancer statistics.

STEP 3
Identify Baselines and Set Targets

The questions in the worksheet at the end of this document can guide you through the data gathering, decision-making, and priority setting processes. Think about the following as you work through the questions:

- Set targets for increases in lung cancer screening or early stage diagnosis based on your data, stakeholder input, and local/national targets.
- Identify if there are priority areas based on data in specific populations.
- Consult **Healthy People 2030** goals or your health department's chronic disease plan to see what baselines and targets are already being used by your partners—remember to cite your data sources.

STEP 4
Select Objectives

It is helpful to show how your CCC plan goals contribute to national goals. Create a **primary objective** that mirrors national priorities, such as those in Healthy People 2030, and identify 1-2 other **complementary health equity objectives** that support specific needs within your communities, including a special focus on subpopulations that experience health disparities.

Healthy People 2030 Lung Cancer Screening Objective:

Objective: Increase the proportion of adults who receive a lung cancer screening based on the most recent USPSTF guidelines*[4]

Baseline: 4.5 percent of adults aged 55 to 80 years received a lung cancer screening based on the most recent guidelines in 2015 (age adjusted to the year 2000 standard population)

Target: 7.5 percent

Note: This target is based on NHIS data from 2015 and is likely too low compared to targets for other cancer screening. Please consult your state Healthy People 2030 goals and discuss with data experts what a reasonable target rate might be for your state, tribe, or territory; you may be able to increase the target depending on current rates, services available, and other factors.

EXAMPLES OF PRIMARY OBJECTIVES

- Increase low dose CT scan screening among persons at high risk for lung cancer from X% to Y% by 2025 (BRFSS).
- Increase risk-appropriate screening for lung, breast, cervical, and colorectal cancers, with a separate baseline and target for each cancer, e.g., By 2025, increase lung cancer screening among those who meet USPSTF eligibility requirements from X% to Y% (BRFSS)
- Reduce mortality from lung cancer from X deaths per 100,000 to Y deaths per 100,000 (state cancer registry).
- Increase the percentage of lung cancer screening patients who receive tobacco cessation treatment if they are current smokers from X% to Y%. (BRFSS).
- Increase the percentage of those diagnosed at an early stage (Stage 1 or 2) of lung cancer from X% to Y% by 2025 (state cancer registry).

EXAMPLE OF COMPLEMENTARY HEALTH EQUITY OBJECTIVE

- Increase lung cancer screening among Black men from X% to Y% by 2025 (BRFSS).

*The USPSTF recommends annual screening for lung cancer with low-dose computed tomography (LDCT) in adults aged 50 to 80 years who have a 20 pack-year smoking history and currently smoke or have quit within the past 15 years. Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery. 4

STEP 5
Select Strategies

When choosing strategies that can help address needs you have identified, think about existing networks, programs, and services you can leverage, enhance, or expand. Also consider if the strategy is realistic and feasible given current support for addressing this issue, as well as available resources to implement the strategy.

For lung cancer screening, ensure that your strategies are supportive of nationally recognized lung cancer screening guidelines, such as the **U.S. Preventive Services Task Force recommendations**.

Evidence-based strategies have not yet been identified for community implementation of lung cancer screening with LDCT. The following strategies are examples of promising practices found in CCC plans:

Strategies to Increase Community Demand

- Raise awareness by working with health system partners that offer lung cancer screening to promote availability of screening.
- Utilize client reminders to promote baseline and annual follow-up lung cancer screenings
- Work with the state Quitline to promote lung cancer screening availability to those who call the Quitline.

Strategies to Increase Community Access

- Train and utilize community health workers or lay patient navigators, especially in underserved communities to assist with reducing structural barriers, including assisting with scheduling appointments, providing transportation, providing language translation, or providing childcare.
- Assess availability of LDCT and promote availability among providers for referrals.
- Train and utilize patient navigators in lung cancer screening programs to help schedule baseline and annual follow-up exams, refer current smokers to stop smoking resources, and schedule appropriate follow-up care for patients with LDCT abnormalities.

Strategies to Increase Provider Delivery

- Work with health insurance providers to examine claims data to identify providers with low screening utilization rates and high lung cancer incidence. Use findings to guide provider and community education and outreach.
- Encourage insurers and providers to adopt the 2021 USPSTF lung cancer screening recommendations.
- Educate health systems about the importance of collecting information on current cigarette smoking status and smoking pack years in their medical record systems.
- Implement provider reminder and recall processes in health systems that identify and monitor persons at high risk for lung cancer.
- Utilize provider assessment and feedback and conduct provider education.

Often, using a combination of these strategies is more effective than implementing a single strategy.

For health systems changes, establishing a relationship and shared outcomes with the system is important to consider upfront. It's also helpful to have a clinical champion who can energize clinic staff and keep everyone focused on improving lung cancer screening rates. Periodically monitoring clinic-level lung cancer screening rates is an important activity when implementing health system interventions, so approaches can be adjusted as needed. Electronic health record (EHR) data may need to go through a validation process to ensure screening estimates are reasonably accurate, given that most EHRs are not optimized to produce screening rate estimates. Clinics may need to work with their information technology (IT) or health informatics staff member to examine potential issues with data entry, documentation of completed screening, inclusion/exclusion criteria for numerators and denominators, and other issues.

References

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3. SEER Cancer Stat Facts: Lung and Bronchus. Accessed on 8.22.21.
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Resources

Clinical practice guidelines for treating tobacco use and dependence, including among older individuals who smoke, are available for health care providers

National Lung Cancer Roundtable

NCCN Guidelines for Patients: Lung Cancer Screening

American College of Radiology

LUCA Educational Training Network on Lung Cancer Screening (for primary care providers)

Worksheet: Questions to Ask and Answer

Use this worksheet to help you and your lung cancer screening coalition partners identify gaps, opportunities, and challenges that should be reflected in your CCC plan objectives and strategies. Record your answers and use the information to help inform your selection of objectives and strategies for your updated plan.

1. Overall, how are we doing in lung cancer screening compared to the national rates, our neighboring states, and our own rates in previous years?

   What primary objectives do we want to set, given our analysis of this data?

2. What populations and communities have lagging screening rates? Do we know why? If we do not know why, how do we find out?

   What complementary health disparity objectives do we want to set, given our analysis of this data?

3. What partners can we engage to help implement policy and system changes to support lung cancer screening uptake over time? Do we have existing connections with them? How can we engage these partners? Why will they want to be involved? What is the value proposition for them?

What strategies should we select, given the answers to the questions?

4. Are lung cancer screening and/or diagnostic services easily accessible to all populations? Is there a geographic area or sub-population with less convenient access or greater barriers to accessing services?

What strategies should we select, given the answers to these questions?

5. What existing services, networks or programs could we leverage to increase lung cancer screening rates?

What strategies should we select, given the answers to these questions?

6. What lung cancer screening policies do we want to champion or promote?

What strategies should we select, given the answers to this question?

7. What gets measured is what gets done. How can we best track lung cancer screening outcomes? How do we know we are making progress along the way?

Are there strategies we should select related to the answers to these questions?

8. What should we communicate to policymakers? How should we communicate this information?

Are there strategies we should select related to the answers to these questions?

9. How will our selected strategies elevate health outcomes for those who have historically experienced health outcome disparities (or populations of focus)?