CHAPTER 2 ------Role of the patient navigator in lung cancer screening

Objectives:

1) Understand the role of patient navigation in lung cancer screening.

2) Examine how patient navigation fits into the healthcare team.

3) Describe how patient navigation has been successfully used to improve lung cancer screening process and outcomes in real-world studies and programs.

Role of patient navigation in lung cancer screening

In the cancer care continuum, the scope of patient navigation extends from prevention and detection to diagnosis, treatment, and survivorship through end of life¹. Since this toolkit focuses on lung cancer screening, we provide helpful information for how a navigator can assist with the 5 steps of the screening process; 1) In reach/ outreach, 2) patient eligibility and engagement, 3) the shared decision-making and tobacco cessation requirements, 4) the low-dose CT scan, and 5) follow-up of CT results. It is absolutely imperative to actively engage patients, clinicians, and the imaging center throughout the entire screening process!



<u>Step 1 - In-reach/ outreach</u>: Lung cancer screening is a relatively new cancer screening tool and many people are not aware of the screening process and eligibility. Patient navigators can play a crucial role in educating providers, potential screening participants, and the community about lung cancer screening.

In-reach is the process of finding potentially eligible individuals that are already established patients of your health care clinic or system. These potential screening candidates can be found from the electronic medical record or clinic lists. **Outreach** involves reaching outside your clinic or system to reach potentially eligible individuals about lung cancer screening. This can be accomplished through a variety of avenues, such as having a booth at a health fair, hanging posters at a community center, or holding informational fairs within your community.

A note about cigarette smoking documentation in the electronic medical record

It is important to note that a history of cigarette smoking is often not accurately captured in the medical record. One study found that only 53% of patients screened in their program would have been eligible for screening if eligibility relied on the accuracy of pack years in the electronic medical record.² This is a problem for patient navigators because it makes finding potentially eligible candidates difficult for in-reach approaches. Navigators may need to identify a large list of potential screening candidates and then contact them to gauge interest, offer education, and verify smoking history to establish eligibility.

Other ways that patient navigators can help find potentially eligible patients and increase awareness of lung cancer screening in their community, include:

 \checkmark Talk to the providers in your office to figure out the best way to help them find eligible screening patients. Engagement of PCPs is critically important as patients are much more likely to seek out preventive care recommended by their PCP.

 \checkmark Hold community informational meetings with physician champions available for questions. Informational meetings allow patients to bring their family and talk to clinicians about screening.

✓ Place posters and brochures about lung cancer screening in the medical office waiting room.

 \checkmark Mail postcards to potentially eligible patients to invite them to a community informational meeting, include navigator contact information, and encourage patients to discuss screening with their PCPs

Step 2 - Participant eligibility/ education:

In lung cancer screening, patient navigators play an important role in helping determine screening eligibility and educating a potential candidate about the screening process so they feel comfortable about making an appointment to discuss lung cancer screening with a clinician. Remember that the patient navigator cannot perform the shared decision-making visit, but rather introduce the topic so interested individuals are educated and can make an informed decision about discussing screening with their provider.

Lung cancer screening is currently only recommended for high-risk individuals with a heavy cigarette smoking history as outlined in Chapter 1. Verifying eligibility and collecting an accurate smoking history is important to select appropriate individuals for lung cancer screening as screening ineligible people may do harm than good.



See the 'Patient Eligibility Checklist' tool for a checklist of questions to determine eligibility and read about tips to collect an accurate cigarette smoking history.



This website may be helpful to help you collect an accurate smoking history!

www.smokingpackyears.com/

Additionally, navigators can educate potential candidates about the screening process, risks, benefits, and address potential concerns. When discussing lung cancer screening with an individual remember to be empathetic to their feelings and concerns. Remember this is a population that is often stigmatized about smoking cigarettes and may also feel ashamed about being screened for lung cancer. Navigators can share the message that lung cancer screening has the same goal as colorectal, breast, cervical, and prostate cancer screenings - to catch any potential cancers at an early stage when curable treatment options exist.

The patient navigator role for shared decision-making

Remember that current Medicare reimbursement guidelines require that the shared decision-making conversation is completed by a physician or advanced practice provider (physician assistant, nurse practitioner, advanced practice nurse). Patient navigators cannot provide shared decision-making counseling. However, patient navigators can help determine participant eligibility and educate potential candidates about the risks and benefits of screening to prepare individuals to actively engage in the counseling conversation.



Examples of ways patient navigators can engage screening candidates in lung cancer screening include:

✓ Mail or email an informational brochure or video for the screening candidate to look over before the shared decision-making visit.

✓ Realize that a patient may not be ready to be screened for lung cancer right now and that's ok! Ask if you can call them back at a later time (in 3 or 6 months).

✓ If individuals seem hesitate about screening, remember not to force them into a decision. This may make someone say no just to get off the phone. Instead, try to find out what they are hesitate about so you can educate or help address barriers to screening.



Find education resources for screening candidates in the resources section!



See the 'Patient Navigator Outreach Tip Sheet' tool to learn more about person-first language and tips on how to reduce the stigma of cigarette smoking.



Visit the companion navigator training to learn more about the OARS approach to talking with potential screening candidates.



Go to Chapter 4 to learn more about potential barriers and solutions candidates may face to complete lung cancer screening. <u>Step 3 – Shared decision-making/ tobacco cessation counseling:</u> A requirement for Medicare reimbursement of the low-dose CT procedure is that a shared decision-making visit is completed by the potential participant and a clinician (an MD or advanced practice provider) to confirm screening eligibility and go over the risks and benefits of screening. The shared decision-making visit must be completed with the use of a decision aid so the screening candidate and clinician can weigh the benefits and harms of screening. Additionally, tobacco cessation counseling, services, or resources must be offered to individuals who currently smoke cigarette to meet Medicare reimbursement requirements. After shared decision-making and tobacco cessation are complete, the ordering clinician/ provider must provide a written order (electronic or paper) for the low dose CT scan, preferably at an imaging facility accredited by the American College of Radiology.

Patient navigators can facilitate the shared decision-making and tobacco cessation counseling requirements by:

✓ Scheduling potential screening candidates for a shared decision-making visit.

✓Linking screening candidates with tobacco cessation services or resources.

 \checkmark Confirming that shared decision-making and tobacco cessation are documented in the medical record.

✓ Helping screening candidates find an American College of Radiology accredited imaging facility that is convenient and offers extended hours if needed.

 \checkmark Confirming that the written order for the low-dose CT scan is complete and contains all the required information.

 \checkmark Addressing any additional barriers that may hinder the screening candidate from making or keeping an appointment for the low dose CT scan.



<u>Step 4 – Low dose CT scan</u>: Following shared decision-making and tobacco cessation, the screening candidate is confirmed as eligible and interested in proceeding with lung cancer screening. The next step in the screening process is the low-dose CT procedure completed at a radiology or imaging facility, preferably accredited by the American College of Radiology. There is paperwork that is transferred between the ordering provider to streamline the screening process and help collect information that is required to be sent to the Lung Cancer Screening Registry. All of this information can easily be collected in the CT written order provided by the ordering provider and sent to the imaging facility electronically or by paper.

Patient navigators can streamline the low-dose CT procedure by:

✓ Verifying the written order is complete and has been received at the imaging facility.

✓ Foster positive working relationships with contacts at imaging centers in your area so you know who to contact if problems arise in the future.

✓ Remind screening participants about their imaging appointment and address any applicable barriers.

✓ Follow-up if an individual does not show up for their imaging appointment.



See examples of written low-dose CT orders in the resources section.



<u>Step 5 – Results follow-up and data tracking:</u> There are three general categories of results follow-up and data tracking that a lung cancer screening program can take part in, 1) Tracking of the screening process and follow-up of Lung-RADs results, 2) Data collection for the American College of Radiology Lung Cancer Registry, and 3) Program metrics for evaluation and quality improvement initiatives.

1) Tracking of the screening process and follow-up of Lung-RADs results. Since the screening process involves many steps required for reimbursement and the flow of information between the ordering provider and imaging center, it is a good idea to be able to track flow of each patient through the screening process. Additionally, after the low-dose CT scan is complete and read by a radiologist, the results will come back to the ordering provider and the screening participant. Next steps and follow-up for each screening participant will be determined by the CT results and recommendations by the radiologist and the ordering clinician. To ensure timely follow-up and decrease time to possible diagnosis or treatment, healthcare clinics or systems should have a process in place to help track and remind when individuals are due for follow-up. Patient navigators can help with tracking and results follow-up by:

✓Knowing which steps of the screening process have been completed for each patient.

✓ Ensuring results have been received back from the imaging center and provided to both the ordering provider and the screening participant.

✓ Follow-up with screening participants to ensure they understand the CT results and next steps.

✓ Track, remind, and assess barriers for timely follow-up and next steps for each screening participant.

Tracking for individual patient will depend on the type of lung cancer screening exam (baseline or index), Lung-RADs result, and follow-up of incidental findings, if indicated. Types of follow-up may include.

- Screening Progress for Baseline Scans
- Lung-RADs 1 & 2 Follow-up
- Lung-RADs 3 Follow-up
- Lung-RADs 4 Follow-up
- Incidental Findings Follow-up
- Malignant Diagnosis Detail
- Benign Diagnosis Detail



See examples of tracking tables for each of these follow-up types in the 'Individual Follow-up Tables' tool.

2) Data collection for the American College of Radiology Lung Cancer Registry. The Centers for Medicare and Medicaid Services requires that information and results of screening are reported through an approved registry for Medicare beneficiary reimbursement. Reporting of this information is required for reimbursement purposes. The only Medicare approved registry is the American College of Radiology Lung Cancer Screening Registry. The Lung Cancer Screening Registry collects data to enable providers to meet quality reporting requirements. Data collected includes both required and optional data points, and falls into six categories:

- 1) Screening facility and patient information
- 2) General, Appropriateness of Screening
- 3) Study Data About the Exam
- 4) Follow-up within 1 year
- 5) Follow-up Lung Cancer Incidence
- 6) Additional Risk Factors

Most information collected for the Lung Cancer Screening Registry will be completed by the imaging center, but there are several required data that should accompany the patient information and written order to the imaging or radiology center. Optional data elements can also be collected and sent to the imaging center.

<u>Required Data Elements</u>: Required data elements fall into two categories: 1) elements that are required by Medicare, and 2) elements that are required by the registry. Table 2-1 shows the data elements required for information to be transmitted to Medicare via the registry.

| Data Type | Minimum Required Data Elements | Data Source |
|--|---|---|
| Required variables for Medicare reimbursement purposes | | |
| Facility | Identifier | Imaging Facility |
| Radiologist (reading) | National Provider Identifier (NPI) | Imaging Facility |
| Patient | Identifier (Medicare Beneficiary Number, Name, Medical Record Number, etc.) | Ordering provider |
| Ordering Practitioner | National Provider Identifier (NPI) | Ordering provider |
| CT scanner | Manufacturer, Model | Imaging Facility |
| Indication | Lung cancer low dose CT screening - absence of signs or symptoms of lung cancer | Ordering provider |
| System | Lung nodule identification, classification and reporting system | Imaging Facility |
| Smoking history | Current status (current, former, never). For individuals that formerly smoke cigarettes, years since quitting. Pack-years as reported by ordering practitioner. For Individuals that currently smoke cigarettes, smoking cessation interventions available | Ordering provider |
| Effective radiation Dose | CT Dose Index (CTDivol) | Imaging Facility |
| Screening | Screen date - Initial screen or subsequent (annual) screen. | Imaging Facility |
| Additional required variables for quality improvement and monitoring benefits of lung cancer screening | | |
| Patient Age | Patient's Date of Birth | Ordering Provider |
| Patient Sex | Patient's Sex (Male, Female, Other, Unknown) | Ordering Provider |
| Shared Decision- Making | Documentation of shared decision-making (Yes, No, Unknown) | Ordering Provider |
| Patient Size | Patient height and weight | Ordering Provider |
| Low dose CT protocol selected | Modality (type) of chest CT | Imaging Facility |
| DLP (mGy*cm) Radiation dose monitoring | Radiation dose index field | Imaging Facility |
| Resolution and nodule characterization | Reconstructed width of CT images | Imaging Facility |
| Follow-up exam information related to lung cancer screening | Date of follow-up Type of follow-up diagnostic Tissue diagnosis (if applicable) Tissue diagnosis method (if applicable) Location from which sample was obtained (if applicable) Histology (if applicable) Stage – Clinical or pathologic (if applicable) Overall stage (if applicable) Period of follow-up for incidence (months) | Dependent on location of diagnostic follow- up |

Table 2-1 Required Lung Cancer Screening Registry Data Elements

Data elements required from the ordering the ordering physician include patient date of birth, pack years, current smoking status, years since quit (for Individuals that formerly smoke cigarettes), ordering physician National Provider Identifier (NPI), documentation of shared decision making, and indication that patient does not have any signs or symptoms of lung cancer. These data elements are usually included in the required written order that is sent to the imaging center after shared decision-making.

<u>Optional Data Elements:</u> The Lung Cancer Screening Registry collects optional data elements to better aid in the clinical benefits of lung cancer screening. Similar to the required elements, many of the optional elements are collected by the imaging center, but many are also patient oriented. Your screening program may choose to collect these elements in electronic or paper format to send to the imaging facility for upload to the registry. Patient level data elements include additional demographic, clinical, and other risk factor information.

3) Program metrics for evaluation and quality improvement initiatives. Patient navigators can also play an important role in the success of their screening program by collecting data elements to evaluate the program for follow-up and work-up metrics. This data collection can be time consuming but can lead to improved program processes and outcomes. Questions your program can answer by collecting evaluation metrics include:

• What are the characteristics of the participants in this screening program?

• How many lung cancer diagnoses have been found through this screening program? What are the stages and histology of these diagnoses?



Learn more about the Lung Cancer Screening Registry in the 'American College of Radiology Lung Cancer Screening Registry Summary Tip Sheet' tool



See examples of written low-dose CT orders in the resources section.

- Are all screening participants receiving shared decision-making and tobacco cessation services?
- · How many participants are being adherent to their recommended follow-up?
- How many participants are deciding to have the low dose CT procedure after the shared decisionmaking conversation?

Metric reporting to support program performance

Patient navigators should consider providing monthly statistics to your practice manager and physician champions to provide an ongoing snapshot of how your lung cancer screening program is performing. Consider collecting and reporting the fields highlighted in yellow in the 'Lung Cancer Screening Evaluation Metrics' tool at a minimum.

Link to the 'Lung Cancer Screening Evaluation Metrics' tool for a list of suggested evaluation metrics template format.

Navigation Key Points

• There are ample opportunities for patient navigation throughout the screening process. Acting as a liaison between screening participants and providers is vital!

• Remember navigation is not a role, but rather a process! Use the 'Lung Cancer Screening Patient Navigation Roles' tool to decide who in your organization will be responsible for each key component.



The role of navigation in your screening program The National Cancer Institute defines a patient navigator as:

"A person who helps guide a patient through the healthcare system. This includes help going through the screening, diagnosis, treatment, and follow-up of a medical condition, such as cancer. A patient navigator helps patients communicate with their healthcare providers so they get the information they need to make decisions about their health care. Patient navigators may also help patients set up appointments for doctor visits and medical tests and get financial, legal, and social support. They may also work with insurance companies, employers, case managers, lawyers, and others who may have an effect on a patient's healthcare needs. Also called patient advocate."³

Applying this definition to lung cancer screening, we can envision how the process of screening is dependent on important tasks that require maintaining contact with the screening participant, the ordering provider, and the imaging center through all steps of the process. The 'Lung Cancer Screening Patient Navigation Roles' tool provides a table with all suggested navigation duties needed for quality lung cancer screening. Not all steps will be necessary for all screening programs, take time to review the table and reflect on how each suggested component aligns and integrates with your current clinic flow and processes.

Next, remember that navigation is a proven healthcare strategy used to eliminate barriers at the patient and provider level, thus reducing obstacles to uptake of quality lung cancer screening. Patient navigation is most successful when a team-based approach is utilized and the patient navigator is an integrated part of the

heath care team. It is not imperative that the entire lung cancer screening patient navigation process is completed by one patient navigator role. If it makes sense for your setting, consider having different people be responsible for different components of the screening process. For example, a scheduler can help schedule shared decision-making appointments, a radiology coordinator can help liaison with the imaging center, and a medical assistant can help make sure required elements are documented in the medical record. Depending on the orientation of the health care clinic or system, patient population, among other factors, it is the responsibility each program to consider who should cover aspects of the navigation role.



The role of the patient navigator in the healthcare system

Patient navigation requires a team-based approach with successful navigation involving administrators to champion the program, supervisors to provide clinical and administrative support, and patient navigators with a defined role within the healthcare team. Common healthcare team members include:

- Doctors
- Physician Assistants
- Nurses
- Pharmacists
- Dentists
- Technologists and technicians
- Therapists and rehabilitation specialists
- Emotional, social and spiritual support providers
- · Administrative and support staff
- Community health workers and patient navigators



Visit the Patient Navigator Training Collaborative to learn more about each team member role:

patientnavigatortraining.org/who-is-on-the-healthcare-team/

Limitations of the Patient Navigator Role

While navigators are a vital part of the healthcare team, there are certain duties that are outside the scope of the navigator role,⁴ including:

- Provide direct "hands-on" patient care
- · Provide physical assessments, diagnoses, or treatments
- Offer opinions about a diagnosis, treatment, or health care service
- Give information about treatments other than approved basic information from medical sources

Additionally, as a navigator, you will become involved in patients' lives. However, to be an effective navigator you need to set clear boundaries when dealing with patients. It is important for you to define these boundaries before you begin. The following are some examples of actions beyond the scope of a patient navigator.^{4,5}

- · Giving your own money to patients
- · Personally driving patients to and from appointments
- · Personally visiting patients in their homes

Patient navigation for lung cancer screening among current smokers in community health centers a randomized controlled trial

Percac-Lima S, Ashburner JM, Rigotti NA, Park ER, Chang Y, Kuchukhidze S, and Atlas SJ *Cancer Medicine*. 2018 Mar; 7(3): 894–902

Study Synopsis

A patient navigation program intervention was developed and tested to promote lung cancer screening among low socioeconomic status individuals currently smoking cigarettes and receiving primary care in community health centers affiliated with an academic primary care network. The intervention was implemented by parttime lay person navigators and included determining screening eligibility, educating eligible patients on the risks and benefits of screening, arranging shared decision-making appointments, providing brief tobacco cessation, helped with barrier reduction, reminder patients about appointments, and facilitated timely follow-up for abnormal scan results. This study showed that patient navigation in community health centers increased completion of lung cancer screening among persons who currently smoke cigarettes.

Study Highlights

<u>Purpose:</u> Designed to promote lung cancer screening.
<u>Age:</u> 55-77 years of age (eligible for lung cancer screening based on Medicare guidelines)
<u>Sex:</u> Male, Female
<u>Race/ ethnicity:</u> Asian, Black, Hispanic, White, Other/ Unknown
<u>Population Focus:</u> Individuals that currently smoke cigarettes identified through the electronic medical record. *Individuals that formerly smoked cigarettes were not a focus of this navigation study.*<u>Community Type:</u> Community health centers affiliated with an academic primary care network.
<u>Delivery location:</u> Clinical

<u>Training</u>: Lay patient navigators with bachelor's degrees received training in lung cancer and screening with low-dose CT, how to communicate results to patients and arrange for appropriate follow-up, smoking cessation, and motivational interviewing.

<u>Environment</u>: Lung cancer screening navigation was added to an already established patient navigation program.

<u>Collaboration</u>: Navigators worked closely with primary care providers to arrange and track follow-up and track procedures through a population health management IT registry tool.

<u>Procedure:</u> Patient navigators contacted patients by telephone to introduce lung cancer screening, verify eligibility, discuss the benefits, and address concerns and barriers. If interested, the navigator scheduled a shared decision-making visit with the patient's primary care provider and performed brief tobacco cessation and facilitated additional resources, if needed. Patient navigators additionally helped follow-up on abnormal screening CTs by notifying PCPs and ensuring timely follow-up for the patient.

Key Results

Patient navigation significantly increased lung cancer screening among high-risk individuals who currently smoke cigarettes. Patients randomized to the patient navigation intervention had significantly higher rates of receiving a chest CT (either screening or diagnostic) during the study period (31% in the intervention arm and 17% in the usual care arm).

Strength of the Evidence

This study used a randomized controlled trial design, often considered the gold standard to determine efficacy or effectiveness of an intervention, to randomize 400 patients to the intervention (patient navigation) and 800 patients to the control arm (usual care). This study design allowed for each arm to have similar distribution across demographics and clinical characteristics (such as age, sex, insurance type, and education), helping to eliminate bias in the results. It is important to note that this study did not assess lung cancer screening in individuals that formerly smoked cigarettes because this information was not available in the electronic health record.

Chapter 2 References

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