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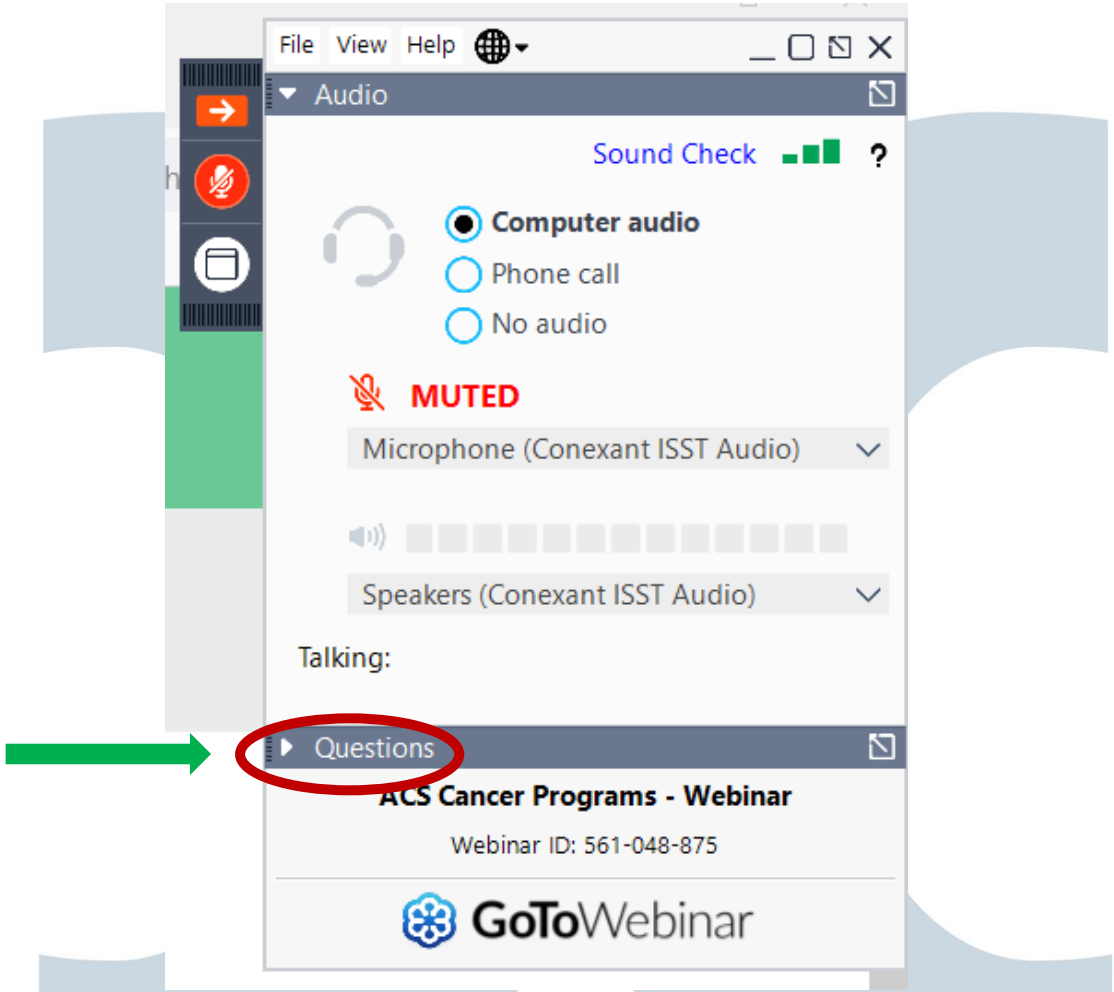
American College of Surgeons

Standards 5.8 Lung NODES Quality Improvement Initiative

March 22, 2024

ACS CoC **Commission on Cancer**
American College of Surgeons

- All participants are muted during the webinar
- Questions – including technical issues you may be experiencing – should be submitted through the question pane
- Questions will be answered as time permits; additional questions and answers will be posted on the website
- Please complete the post-webinar evaluation you will receive via email



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Introducing our Moderator and Panelists

Kelley Chan, MD
General Surgery Resident, Loyola
Clinical Scholar, ACS Cancer Programs

David Odell, MD, MS, FACS
Section Head, Thoracic Surgery
Department of Surgery
University of Michigan

Anthony D Yang, MD, MS, FACS
Professor, Division of Surgical Oncology
Department of Surgery
Indiana University Health

Agenda

- Review of Goals, Timeline, and What is next?
- Root Cause Tools
  - A Guided Example
- Writing Problem and Aim Statements for 5.8
- Data Collection Strategy
- A Review of Resources
- Q &A (All)

Goals:

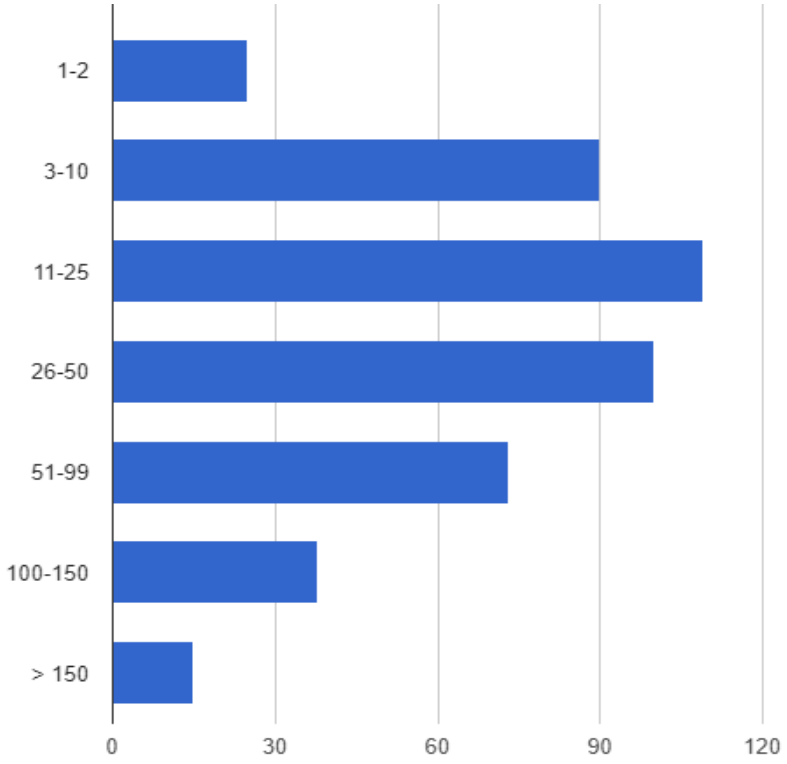
- Improve the quality of cancer care and patient outcomes by accomplishing assessment of hilar and mediastinal lymph nodes for all patients undergoing lung cancer surgery
- Assist programs to identify root cause challenges in achieving compliance
- Develop a standardized way for programs to assess and monitor their compliance with Standard 5.8
- Identify and implement successful and sustainable solutions
- Support participating programs to achieve > 80% overall adherence and/or improve adherence to Standard 5.8 by an absolute value of >20%

Who is participating?

CoC Program Designation

Category	N
CCCP	180
INCP	141
ACAD	59
CCP	51
NCI, HACP	17

Estimated number of curative lung resections (in 2023)



Why do you want to participate

- Maintain/improve compliance
- Collaborate with others to improve processes
- Understand “why” the standard has not been met
- Optimize surgical workflow
- Deepen communication between surgeons and pathologists
- Learn from other programs
- Work collaboratively to examine current practice, learn more about best practice, and apply a template or checklist to ensure compliance at each applicable surgery.

As part of participation, programs agree to:

- ✓ Form a core QI team with at least 3 individuals
- ✓ Provide a signature of support from physician champion and cancer committee chair
- ✓ Attend and actively share/participate on calls
  - ✓ (at least 1 person from each program should attend every call or view at a later date if clinical care interferes)
- ✓ Review and submit data measuring compliance
  - ✓ (no patient or provider facing data collected)

Important dates to remember

Date	Event
December 7	Informational webinar at 12pm CT, Application opens
Feb 29	Pre-survey due
March	Form and begin meeting as a team Webinar or asynchronous video on data collection and root cause analysis becomes available
April 30	Baseline and Ongoing data due (includes 2023 or earlier cases)
May	Cohort call
June 10	Data due (eligible cases from March-May)
July	Cohort call
Sept 10	Data due (eligible cases June-Aug)
October	Cohort Call
Dec 10	Data due (eligible cases Sept-Nov)
January 2025	Webinar

You Are Here

- April 30- Initial survey and ongoing data (chart review) due
- May XX- Next call
  - All join call for project updates
  - Self select into breakout rooms by topic
- At the end of year 1, if all requirements are met
  - Primary contact will receive a survey link that will serve as an attestation of meaningful participation.
  - Download a copy and save this form
  - Upload to PRQ when appropriate.

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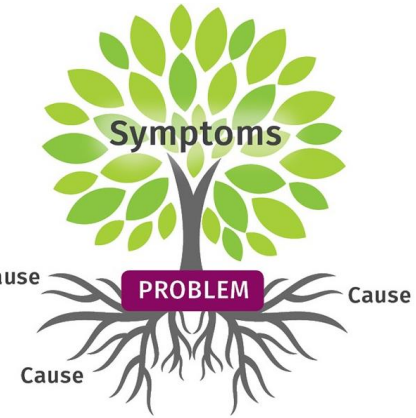
Understanding the Root Causes of Your Problems with Standard 5.8 *(a.k.a. this is gonna take some work)*

Dr Yang

Identifying the Root Cause

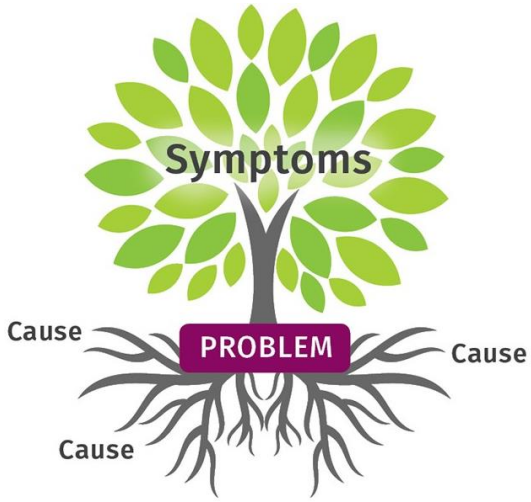
- **Root Cause: The true, underlying reason for the problem**

- **Standard 5.8 Application: Determine direct causes of breakdown in the process to report Standard 5.8 correctly, then identify and understand the underlying root causes that lead to the direct cause of failure**



Understanding Root Causes Requires Good Data

- **To expose the underlying (root) causes of a problem, the <u>current state of the process</u> intended to achieve a specific outcome must be thoroughly understood**
- Requires collecting reliable data on details of, and adherence to, the steps of the process
- Obtaining reliable data requires:
  - ❑ Data Collection Plan
  - ❑ Reliable baseline data & metrics
  - ❑ Fully developed current-state process map, **<u>including identification of variability in the process</u>**



Key Steps to Identify Root Causes

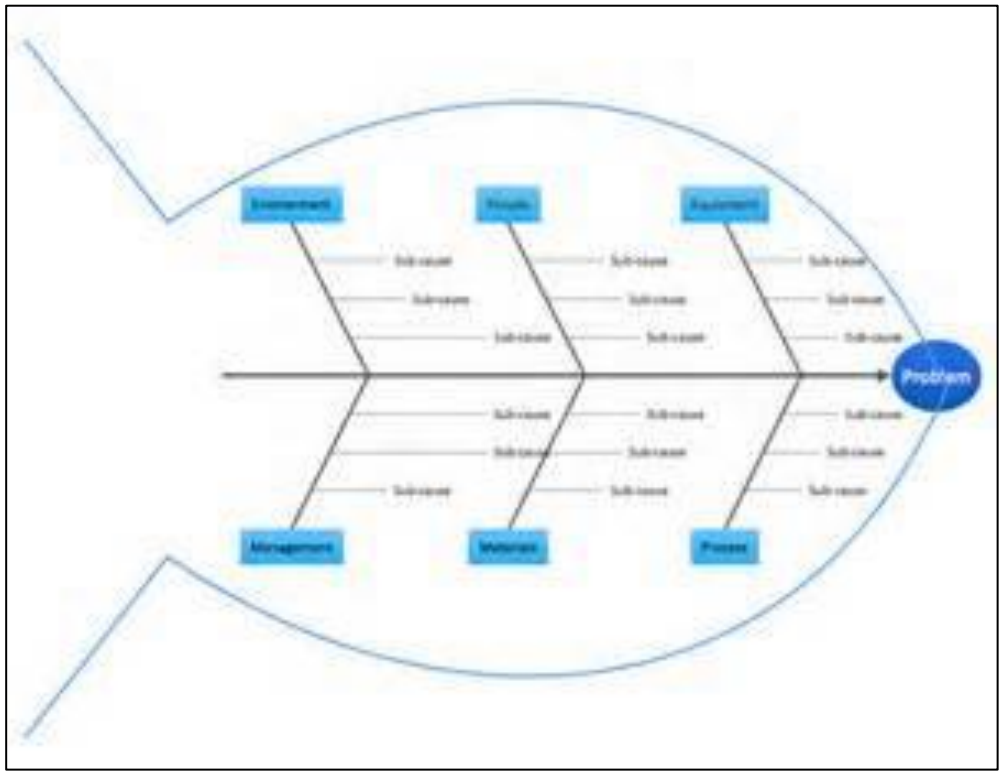
- Key steps:
  - ❑ **Process mapping**
  - ❑ **Data** analysis
  - ❑ **Process** analysis
  - ❑ **Determine and prioritize root causes**

Getting Down and Dirty: Direct Causes vs. Root Causes

- **Direct Cause** —initial reason, often mistaken for the root cause
- **Root Cause** — underlying cause of the problem, not usually understood without deeper investigation
- **Improvements often fail because we solve direct cause rather than root cause**
- **Resist the tendency to jump to solutions that may not address the root causes of the problem**

Root Cause Analysis Tools

- Ishikawa (Fishbone) diagram
- Stakeholder Brainstorm
- 5 Whys
- Failure Modes and Effects Analysis (FMEA)



*To learn more in depth and get practical tools, check out the ACS QI Basics Course

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Detailed Example

Dr Odell

My example: AUDIT PROBLEMS!

- Site visit in mid 2022
  - 2 program citations
- Standard 5.8 was most problematic!

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An example: We had audit problems

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  - Opportunity provide better care

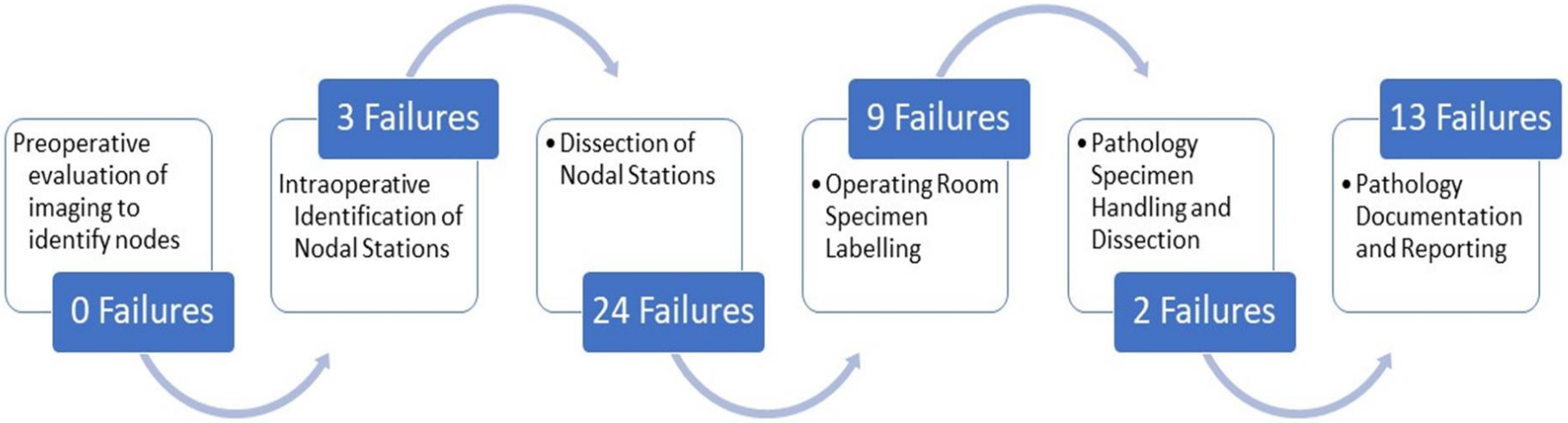
An example: We had audit problems

- Site visit in mid 2022 – 2 citations
- Standard 5.8 was most problematic!
  - Embarrassing to be flagged
  - Opportunity provide better care
  - Contribute to scientific community

How to Build Your Understanding

- Worked with our Cancer Registrars to identify cases
  - Identified all non-compliant cases
- 2 Auditors did chart-level reviews to identify reasons for non-compliance
- Built data into a process-based QI framework

Understand barriers to standard adherence



- Developed a **process map** to describe staging
  - Understand current practice
- **Categorize common failure** points and their importance (FMECA)
  - Guide development of interventions

Target resources for improvement

- Education
  - Station locations, value of node staging, etc.
- Technical Skills
  - Video review, coaching
- Systems and Processes
  - OR to pathology handoffs, specimen labelling, team communication, etc.
- Pathology
  - Specimen node dissection, general/specialty pathologist training
- Reporting
  - Synoptic documentation, ease of interpretation

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Writing Problem and Aim Statements for Standard 5.8

Dr Chan

Problem Statement: Dos and Don’ts

Dos:

- Detail the “current state”
- Narrow scope, patient centered
- Quantifiable impact of the problem
- Consider the business case

Don’ts:

- At this stage, you are not defining your aim or “future state”
- Avoid language that assumes cause

Tool: 5 Wh + 1 H Questions

Who	does the problem affect or impact?
When	was the problem found (or did it begin)?
Where	is the problem happening?
What	is happening (that shouldn't be)?
What	didn't happen (that should have)?
How	often is the problem happening?

Problem Statement: Example

In the **past 1 year**, the **thoracic oncology department** has noticed a 20% decrease in adequate lymphadenectomy for **patients with lung cancer.** Each month there were 2 cases that were non-compliant. **Surgeons have been completing their cases before the pathologist confirms the specimen.**

- Who? Patients with lung cancer
- When? 1 year ago
- Where? Thoracic oncology department
- What is happening? Inadequate lymphadenectomy
- What didn’t happen? Specimen is not confirmed
- How often? 2 cases a month

Aim Statement: Criteria

What	are we trying to accomplish?
Why	is it important?
Who	is the specific target population?
When	will this be completed?
How	will this be carried out?
What	is/are our measurable goal(s)?

Tool: SMART

Aim Statement: Template

To increase / decrease: _____ (process/outcome)

from: _____ (baseline %, rate, #, etc.)

to: _____ (goal/target %, rate, #)

by: _____ (date)

in: _____ (population impacted)

Example: To increase the percentage of patients receiving adequate lymphadenectomy from 50% to 80% by 12/31/2024 for patients with lung cancer receiving curative intent pulmonary resections.

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Data Collection

Dr Odell

An Overview of Data Collection tools

- Initial Survey
  - Survey on current state, perceived barriers and facilitators, etc
  - Completed pre/post only
- Pre-ongoing data collection questions
  - Numbers of total cases, number of compliant cases
  - Occasional questions about root cause, problem statement, feedback from calls, etc
- Ongoing data collection (or “Chart Review” tool)
  - Ongoing- will complete up to 20x per data collection cycle

NOTE: While not required for the PRQ, if you want a copy of your responses, please record this information or copy elsewhere. We are unable to provide a copy of the chart review responses at this time

Inclusion/Exclusion Criteria

Include:

This standard applies to all primary pulmonary resections performed with curative intent for non-small cell lung cancer (NSCLC), small cell lung cancer (SCLC), or carcinoid tumors of the lung. This standard applies to all operative approaches.

- Pulmonary resections for primary lung malignancy include lymph nodes from at least one (named and/or numbered) hilar station and at least three distinct (named and/or numbered) mediastinal stations.
- Pathology reports for curative pulmonary resection document the nodal stations examined by the pathologist documented in synoptic format.

Exclude:

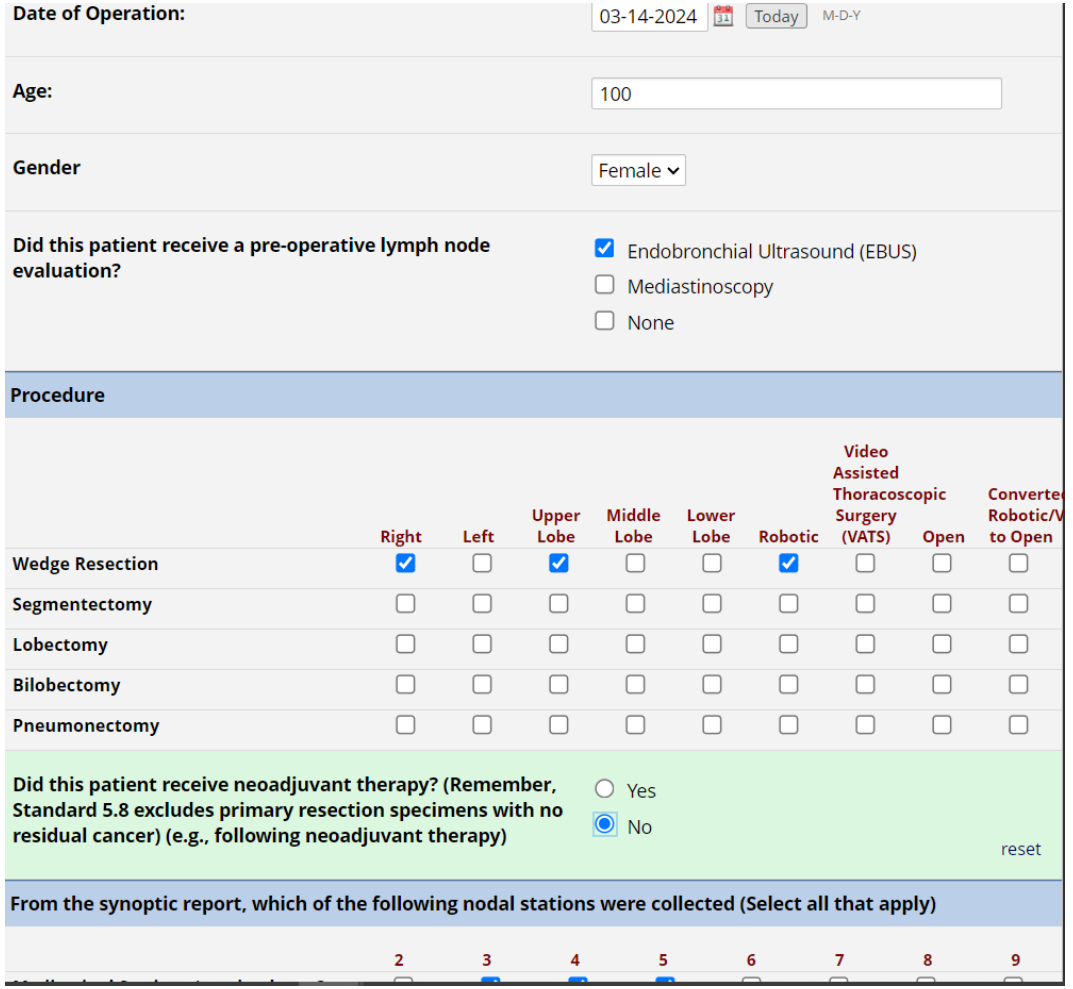
- Patients undergoing lung resections for non-cancer diagnoses
- Patients undergoing lung resection without curative intent (e.g., biopsy)
- Patients undergoing lung resection for metastatic cancer to the lung

Noncompliance means:

- Patient did not receive appropriate pulmonary nodal staging (at least one hilar station and at least three mediastinal stations)
- Required elements/responses were not documented in pathology report or not documented in synoptic format

How do we submit data?

- REDCap is a web-based interface secure to the American College of Surgeons.
- You do not need to purchase software to enter data into REDCap
- A link will be sent to the primary contact's email at all data collection intervals
- Sample form can be found on the project website



Date of Operation: 03-14-2024 Today M-D-Y

Age: 100

Gender Female

Did this patient receive a pre-operative lymph node evaluation?
- [x] Endobronchial Ultrasound (EBUS)
- [ ] Mediastinoscopy
- [ ] None

Procedure

	Right	Left	Upper Lobe	Middle Lobe	Lower Lobe	Robotic	Video Assisted Thoracoscopic Surgery (VATS)	Open	Converte Robotic/V to Open
Wedge Resection	☑	☐	☑	☐	☐	☑	☐	☐	☐
Segmentectomy	☐	☐	☐	☐	☐	☐	☐	☐	☐
Lobectomy	☐	☐	☐	☐	☐	☐	☐	☐	☐
Bilobectomy	☐	☐	☐	☐	☐	☐	☐	☐	☐
Pneumonectomy	☐	☐	☐	☐	☐	☐	☐	☐	☐

Did this patient receive neoadjuvant therapy? (Remember, Standard 5.8 excludes primary resection specimens with no residual cancer) (e.g., following neoadjuvant therapy)
- ( ) Yes
- (•) No

reset

From the synoptic report, which of the following nodal stations were collected (Select all that apply)

	2	3	4	5	6	7	8	9

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Review of Resources

Dr Chan

Quality Improvement Resources

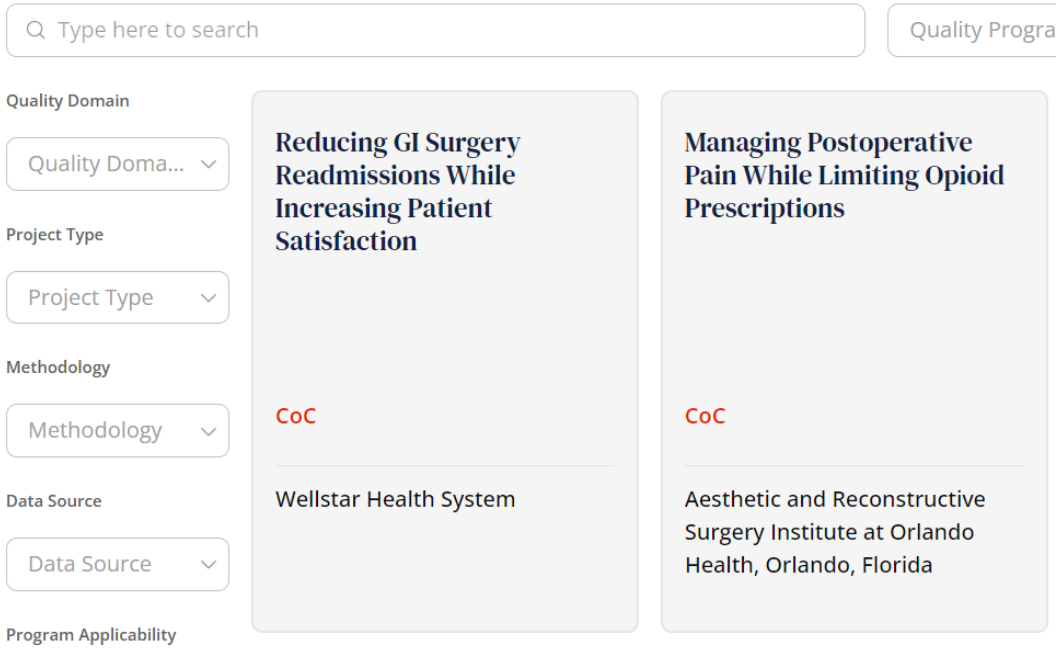
- ACS Quality Framework: Webinar, Framework, Tools, Project Charter, Communication Plan, Data Plan

The ACS Quality Framework Components & Criteria

Component #1: Problem Detailing

Criterion	Definition
1.1 Local Issue	Describe how the issue was discovered at your institution. Include: a. The timeframe in which the issue was discovered b. The data sources that informed the identification of the issue
1.2 Problem Statement	Define a problem statement that presents a clinical reason to pursue the project. The problem statement should address: a. Who does the problem affect or impact? b. When was the problem found (or did it begin)? c. Where is the problem happening? d. How often is the problem happening?

Quality Improvement Resources



ACS QI Course:

The Basics

Case Study Repository

Standard 5.8 Resources

CANCER PROGRAMS

Standard 5.8 Lung NODES National Quality Improvement Project

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Standard 5.8 Lung Nodal, Operative, Dissection, Evaluation, and Staging (NODES) National Quality Improvement Project is a 2-year long (1+1) national quality improvement (QI) project sponsored by ACS Cancer Programs beginning February 2024. The project seeks to aid and assist programs in identifying areas for improvement in compliance for Standard 5.8, which is intended to improve the quality of care and outcomes for patients with lung cancer.

As a participant, you will have the opportunity to learn from national experts and peer programs from around the country and receive extensive support from the CoC and ACS Cancer programs for your local QI efforts.

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Q and A

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