



Getting Tissue for Molecular Testing: An NSCLC Strategic Initiative

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Background

- Collaborators
 - Temple University School of Medicine
 - Fox Chase Cancer Center
 - Association of Community Cancer Centers (ACCC)
 - MCM Education
- Commercial supporter: Pfizer

Overview of CME/QI Initiative

Getting Tissue for Molecular Testing: An NSCLC Strategic Initiative

Gather and Review Baseline Data, Conduct Focus Group

- Determine % of molecular testing in NSCLC patients
- Utilize available registries
- Conduct focus groups and surveys within the center to identify key barriers
- Determine key strategies for improvement

Interdisciplinary Workshop #1

- Review data and current process for molecular testing
- Identify barriers and strategies to overcome them
 - Plan for improvement

Activities Tailored Specifically for:

Radiologists,
Pulmonologists,
Surgeons

Medical
Oncologists

Pathologists

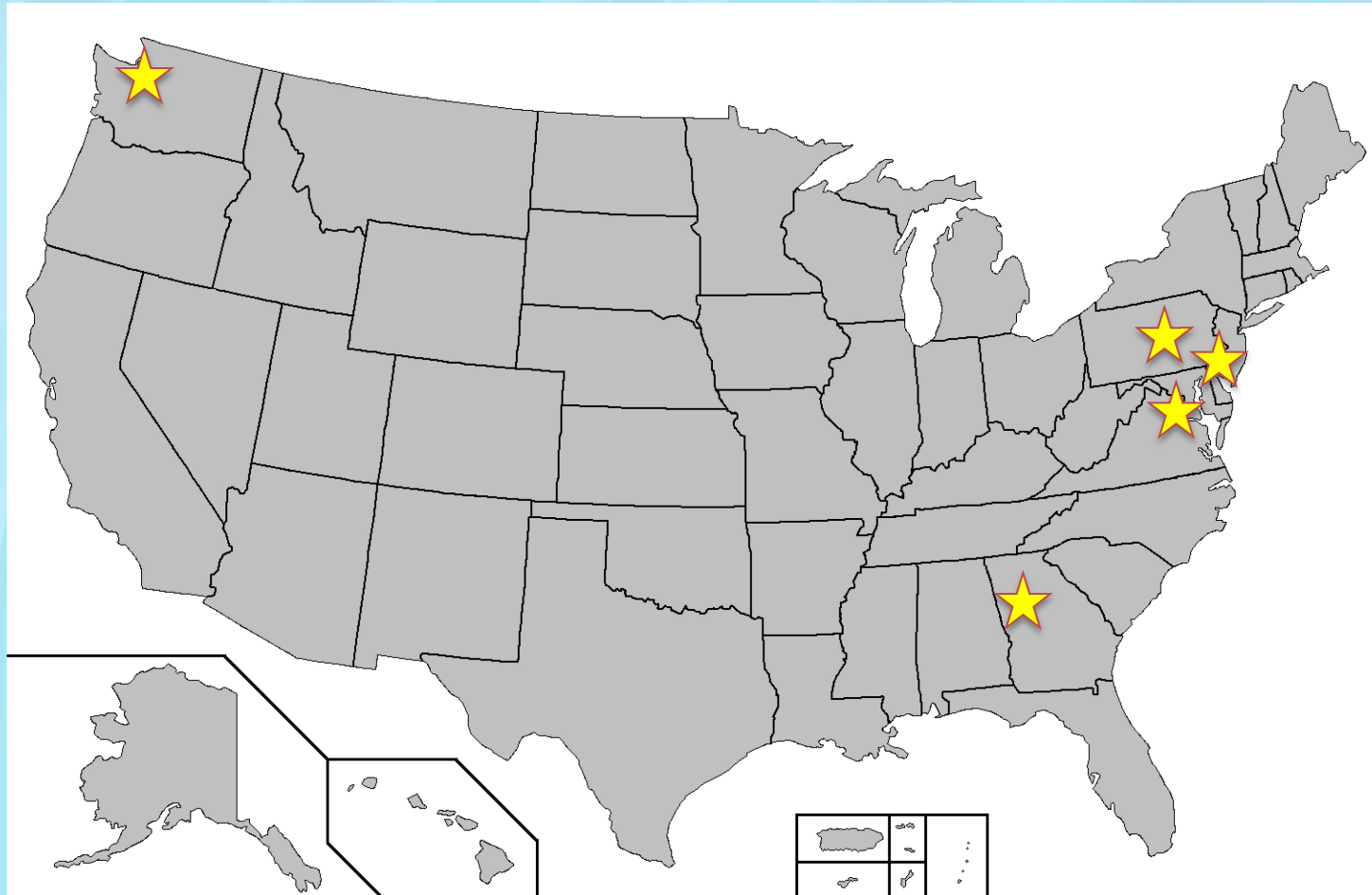
Interdisciplinary Tumor Board

- Case discussions around NSCLC patients (2-3 cases)
- Discuss the application of molecular testing results

Interdisciplinary Workshop #2

- Review processes for molecular testing
- Share outcomes/results
- Discuss future strategies for continuing improvement

Recruit 5 Cancer Centers



- ✓ PA
- ✓ PA
- ✓ MD
- ✓ GA
- ✓ WA

All cancer centers are members of the Association of Community Cancer Centers

Baseline Data & Focus Group

Baseline Data:

- Each cancer center obtained baseline data (12 months) from their cancer registry, electronic health record, and pathology database.

Focus Group:

- Each center identified a clinical champion and primary administrative point of contact.
- We spent time discussing their baseline data and their clinical processes and workflows around molecular testing in lung cancer.
- We identified potential opportunities for QI.

Baseline Data

| Cancer Center | # of NSCLC patients treated/yr | # of medical oncologists | # of pathologists | # of radiologists |
|---------------|--------------------------------|--------------------------|-------------------|-------------------|
| 1 | 151/yr | 17 | 8 | 6 |
| 2 | 129/yr | 4 | 8 | 6 |
| 3 | 79/yr | 12 | 5 | 7 |
| 4 | 54/yr | 3 | 5 | 8 |
| 5 | 52/yr | 5 | 2 | 4 |

Baseline Data

| Cancer Center | # of stage IV adenocarcinoma patients treated/yr | % of stage IV adenocarcinoma that received molecular testing | Lung biopsies mostly performed by |
|---------------|--|--|-----------------------------------|
| 1 | 68 | 65% | Radiology |
| 2 | 84 | 84% | Radiology |
| 3 | 19 | 53% | Radiology |
| 4 | 37 | 76% | Pulmonary |
| 5 | 8 | 62% | Radiology |

Molecular Testing Rates: Pre (Baseline) vs. Post (Follow-Up)

| | Fox Chase Cancer Center | Lancaster General Hospital | Harbin Clinic | Skagit Valley Hospital | Holy Cross Hospital | Average |
|--|---------------------------------|------------------------------------|----------------------------------|--------------------------------|--------------------------------|---------|
| Baseline data time period | Jan 2011- Dec 2012 (24 months) | Jan 2011 – Dec 2012 (24 months) | Jan 2011 – June 2012 (18 months) | Jan – Dec 2012 (12 months) | Jan – Dec 2012 (12 months) | |
| NSCLC total | 259 | 303 | 81 | 52 | 79 | |
| NSCLC per year | 129 | 151 | 54 | 52 | 79 | 93 |
| Stage IV lung adenocarcinoma | 84 | 68 | 37 | 8 | 19 | 43.2 |
| Molecular testing rate (Stage IV lung adenocarcinoma) | 84% | 65% | 76% | 62% | 53% | 68% |
| | | | | | | |
| Follow-up data time period | Jan 2013 – Oct 2014 (22 months) | Jan 2013 – August 2014 (20 months) | June 2013- June 2014 (13 months) | Nov 2013 – May 2014 (7 months) | Jan 2014 – May 2014 (5 months) | |
| Stage IV lung adenocarcinoma | 117 | 37 | 16 | 11 | 32 | |
| Molecular testing rate (Stage IV lung adenocarcinoma) | 100% | 81% | 75% | 91% | 100% | 89% |

Summary

- Many clinicians in the community are not in the regular habit of planning, developing, and implementing QI strategies.
- We have helped these five centers to develop a culture of continuous QI by using the PDSA cycle:
 - Evaluate their own performance data
 - Reflect on ways to improve
 - Then Plan, Do, Study, and Act