



State Scorecard

State Medicaid Coverage Policy and Impact on Lung Cancer Outcomes

March 2020

Table of Contents

Introduction	3
Report Insights & Recommendations	4
Access to High Quality Cancer Care	5
Access to Comprehensive Biomarker Testing	6
Regional Analysis of Coverage	7
Incidence Rates	8
5-Year Survival Rates	9
Medicaid Expansion by State	10
Medicaid Coverage for the Routine Costs of Clinical Trials ...	11
State Scorecard and Snapshots	12

Introduction

LUNGevity is the nation’s leading lung cancer organization investing in lifesaving, translational research and providing support services and education for patients and caregivers. LUNGevity’s goals are three-fold: (1) accelerate research to patients, (2) empower patients to be active participants in their treatment decisions, and (3) remove barriers that patients face in accessing the right treatments.

We are committed to increasing patient access to optimal care because it is essential to ensuring the best possible outcome – survivorship. LUNGevity undertook a state-by-state study, comparing access to screening, comprehensive biomarker testing, and access to clinical trials, as well as the state incidence and survival rates to uncover disparities in lung cancer patient care based on location, and to offer viable solutions to achieve healthcare equity. LUNGevity is proud to share our findings with the release of the Lung Cancer Scorecard, which clearly illustrates the causes of disparities in access to lung cancer treatment in the U.S.

We recognize there is a lot of work to do. The Scorecard establishes a baseline to measure improvements (or lack thereof) in how lung cancer care is delivered, and to identify pain points and opportunities in the system that we can address to improve patient access to better care including precision medicine treatments. LUNGevity is excited to see the great advances we can make with the roadmap laid by this report.

About LUNGevity Foundation

LUNGevity Foundation is firmly committed to making an immediate impact on increasing quality of life and survivorship of people with lung cancer by funding and accelerating research into early detection and more effective treatments, as well as by providing community, support, and education for all those affected by the disease. LUNGevity’s comprehensive resources include a medically vetted website, a toll-free HELPLine in partnership with CancerCare®, a unique Lung Cancer Navigator app, peer-to-peer mentoring for patients and caregivers (LUNGevity LifeLine), and survivorship conferences. LUNGevity also helps patients find and navigate clinical trials through our Clinical Trial Finder tool, a Clinical Trial Ambassador program, and participation with EmergingMed.

Our vision is a world where no one dies of lung cancer. For more information about LUNGevity Foundation, a four-star Charity Navigator organization, please visit www.LUNGevity.org.

Report Insights & Recommendations

Lung cancer remains the most common cause of cancer death and is arguably the biggest public health cancer challenge. Lung cancer survival has clearly improved, but given advances in early detection and treatment, the degree of improvement in survival is modest at best. LUNGevity examined the incidence and survival rates for lung cancer in all 50 states and Washington D.C. We then attempted to determine the state commitment to improving these outcomes by examining state coverage policy for clinical care, including coverage policy for lung cancer screening, routine costs of clinical trials, and personalized approaches to lung cancer therapy as evidenced by coverage of comprehensive biomarker testing. We have graded states on their performance in these areas and identified areas that are in need of improvement, as well as proposed solutions that states may adopt. We assigned states a “lung cancer performance score” based on five factors: coverage for lung cancer screening; coverage for comprehensive biomarker testing; Medicaid expansion; lung cancer incidence; and lung cancer survival.

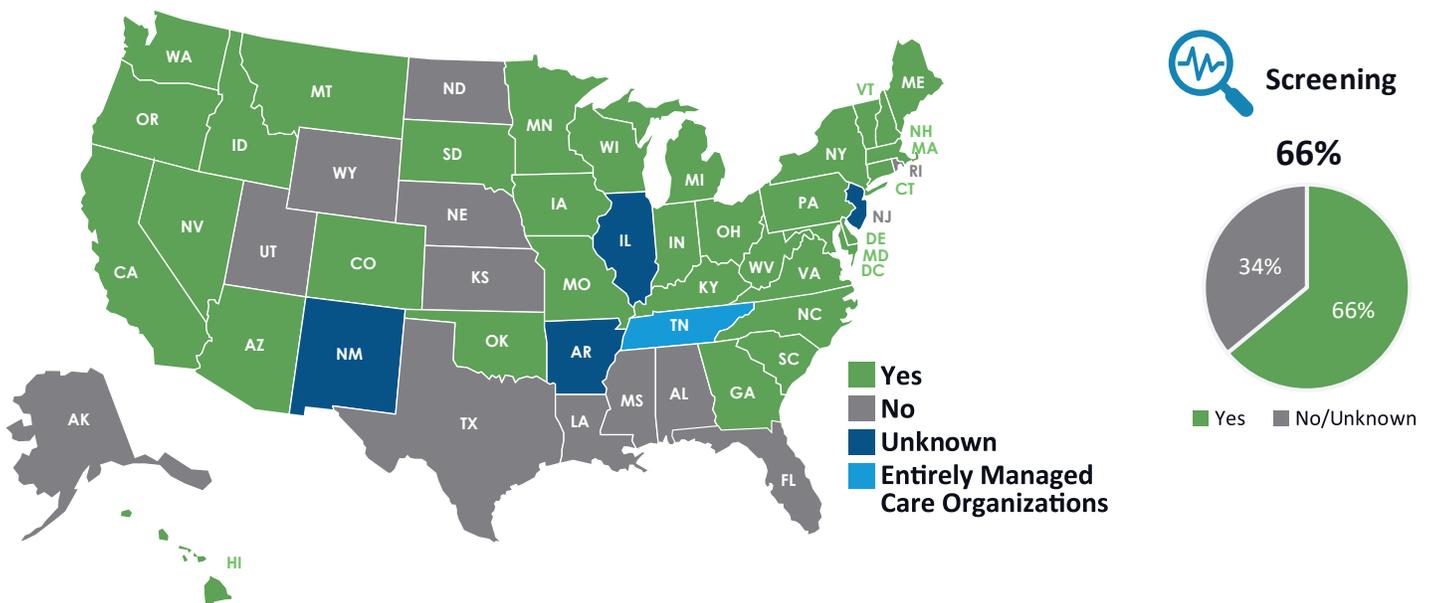
- 1: States do recognize the importance of lung cancer as a public health priority as evidenced by presence in state cancer plans.
- 2: Coverage for lung cancer screening can and should be improved. This has the potential to yield substantial public health benefits.
- 3: Coverage for comprehensive biomarker testing must improve or Medicaid patients risk an inferior outcome.
- 4: Low coverage for routine costs of cancer clinical trials represents an opportunity. States must recognize the vital role these trials play in improving the care of lung cancer patients. All impediments to patient participation in lung cancer clinical trials should be removed, and aggressive state policies promoting clinical trial participation should be enacted.
- 5: An ongoing dialogue with state Medicaid agencies has the potential to yield substantial population benefits with only modest changes to Medicaid lung cancer coverage policy and modest associated costs.

Access to High Quality Cancer Care

Lung Cancer Screening

Access to high-quality lung cancer care has significant room for improvement. Lung cancer screening, using low-dose computed tomography (LDCT), is recognized by the US Preventive Services Task Force (USPSTF) with a grade B rating, and therefore is a covered health benefit for Medicare and commercial insurance beneficiaries; it is not mandated for Medicaid. Unfortunately, around one-third of states do not cover lung cancer screening.

Is lung cancer screening covered by Medicaid Fee-For-Service program?



Source: American Lung Association State Lung Cancer Screening Coverage Project (Data as of January 2019 and available at: www.lung.org/lung-cancer-coverage).

ADVI supplemented coverage information from direct provider conversations and state Medicaid data in four states: DE, HI, MD, RI and the District of Columbia.

as of October 2019

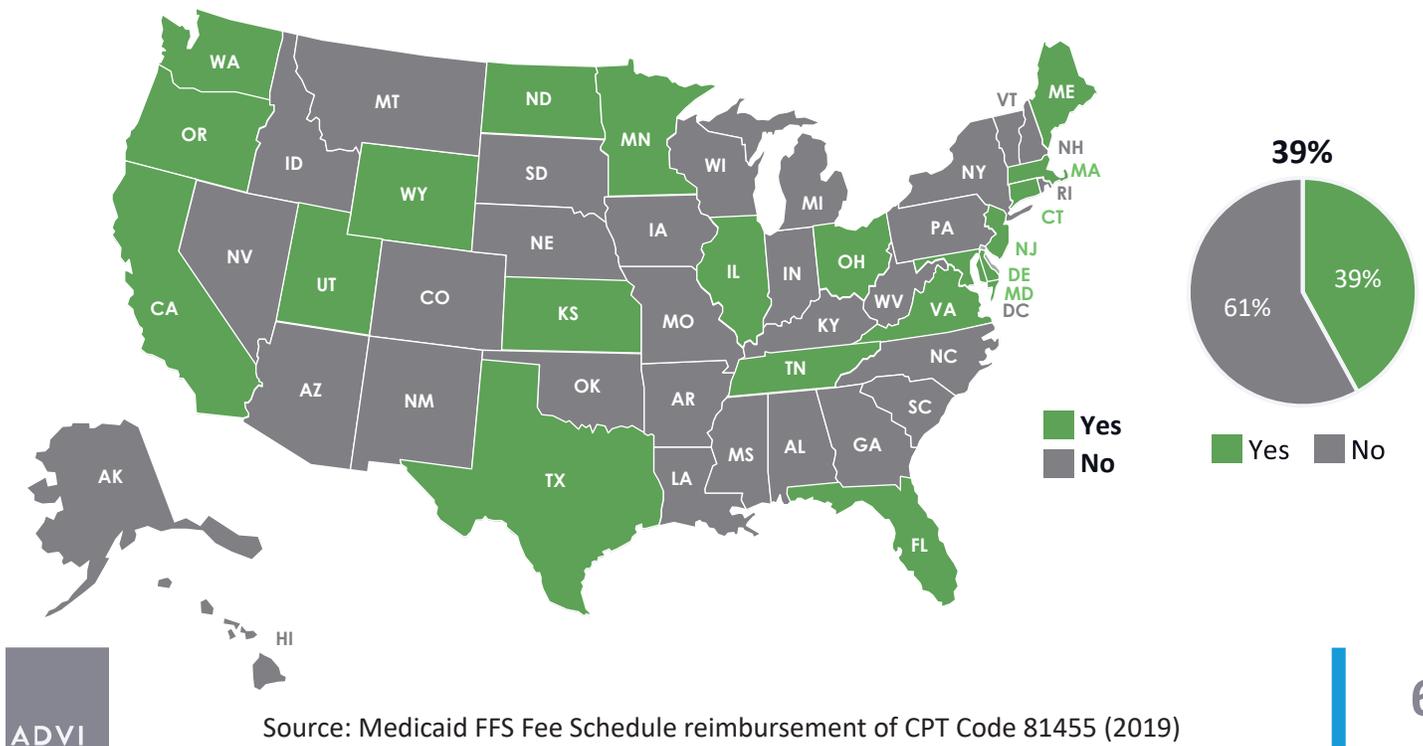
Access to Comprehensive Biomarker Testing

Personalized medicine is at the core of quality lung cancer care. The rapid growth in the development of therapies that target specific mutations or can be used effectively, dependent on a patient’s PD-L1 status, are among the greatest achievements in lung cancer treatment in the last 15 years. These mutation/targeted therapy associations are codified in the regulatory framework of companion diagnostics. These companion diagnostics are uniformly recognized in medical coverage policy by Medicare and commercial insurers and are covered medical benefits.

As the number of these companion diagnostics has grown, a practical approach for testing tumors for multiple mutations on a single platform has become necessary. These somatic mutation panels, performed by next generation sequencing, are widely commercially available. Last year, Medicare issued a National Coverage Decision (NCD) validating the clinical utility of NGS panels for somatic mutation analysis in advanced malignancies (including lung cancer) and establishing coverage and payment for FDA approved panels. Many, although not all, commercial insurers cover these panels as a medical benefit in lung cancer. Medicaid, however, is not bound by either Medicare NCDs or commercial payer policy.

We examined state Medicaid coverage policy for comprehensive biomarker testing in lung cancer. We found that many Medicaid carriers are silent on medical policy regarding comprehensive biomarker testing. This is not unusual in Medicaid (or Medicare in many cases), and this silence does not capture whether the test/treatment is in fact covered and paid (or not). Therefore, when the policy was silent (as it frequently was), we investigated this payment policy. We found that the vast majority of states did not have explicit coverage policy for comprehensive biomarker testing, but that about 40% did provide coverage (as evidenced by paid claims) as a medical benefit.

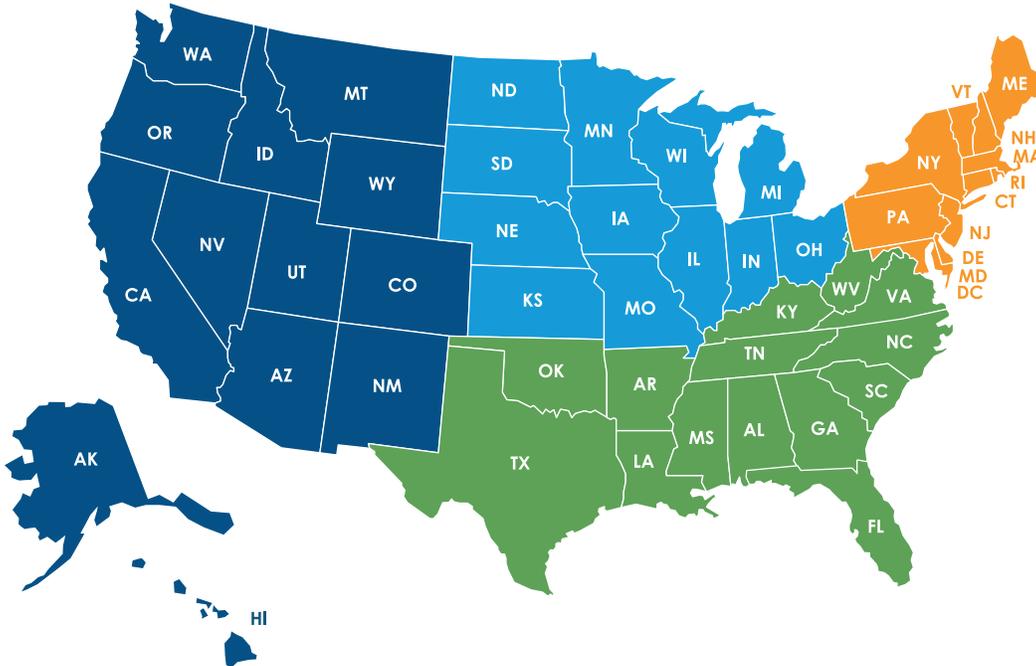
Is comprehensive biomarker testing covered by Fee-For-Service Medicaid?



Source: Medicaid FFS Fee Schedule reimbursement of CPT Code 81455 (2019)
As of October 2019

Regional Analysis of Coverage

Coverage of lung cancer screening, comprehensive biomarker testing (CBT), and clinical trials



Northeast (CT, DE, DC, MA, MD, ME, NH, NJ, NY, PA, RI, VT)
Medicaid expansion: 100%

 **Screening** 83%
  **Clinical Trials** 25%
  **CBT** 50%

Midwest (IA, IL, IN, KS, MI, MN, MO, NE, ND, OH, SD, WI)
Medicaid expansion: 58%

 **Screening** 66%
  **Clinical Trials** 16%
  **CBT** 42%

South (AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV)
Medicaid expansion: 33%

 **Screening** 50%
  **Clinical Trials** 29%
  **CBT** 26%

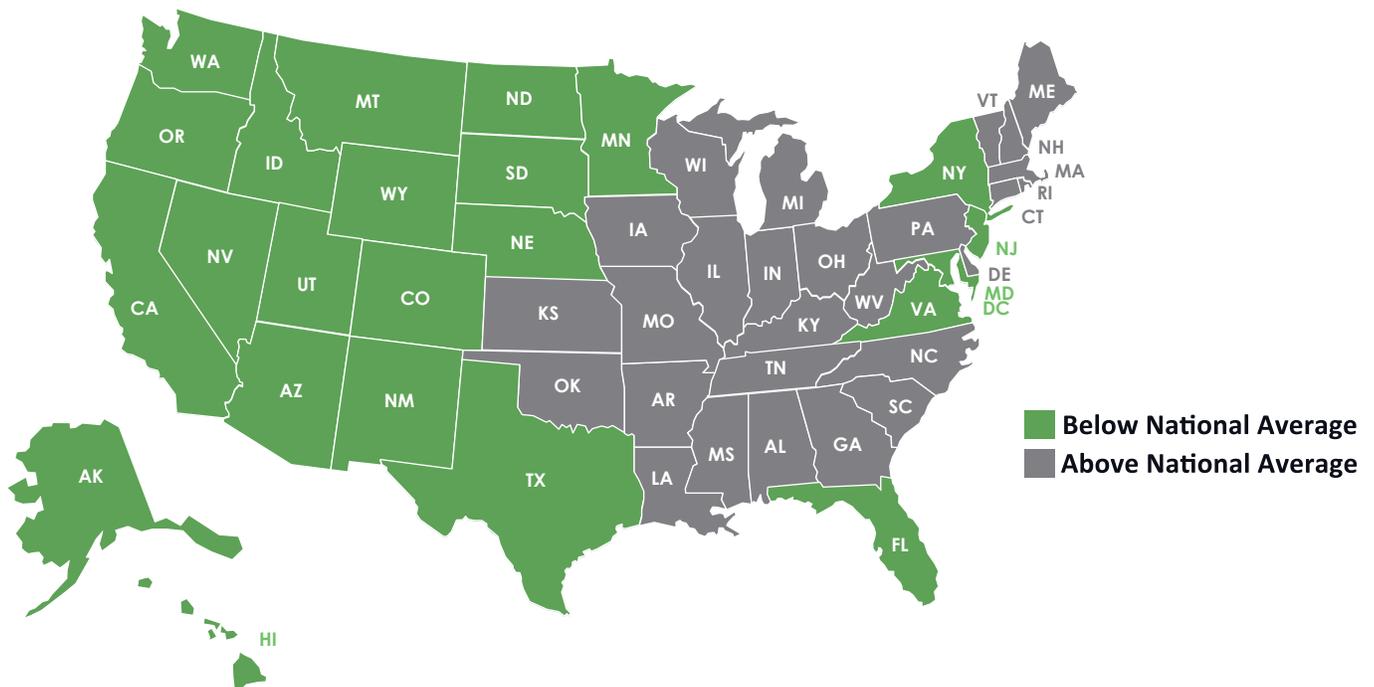
West (AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY)
Medicaid expansion: 69%

 **Screening** 69%
  **Clinical Trials** 31%
  **CBT** 38%

Incidence Rates

Data regarding cancer incidence, or the number of new cancer diagnoses in a year, and survival are available from the National Program of Cancer Registries, funded by the Centers for Disease Control and Prevention (CDC). Most states submit tumor registry data that include incidence and survival. Incidence data are complete through 2016, with the data submission in November 2018. Over 230,000 new cases of lung cancer in the US were diagnosed in 2018, representing about 13% of all cancer diagnoses nationwide.

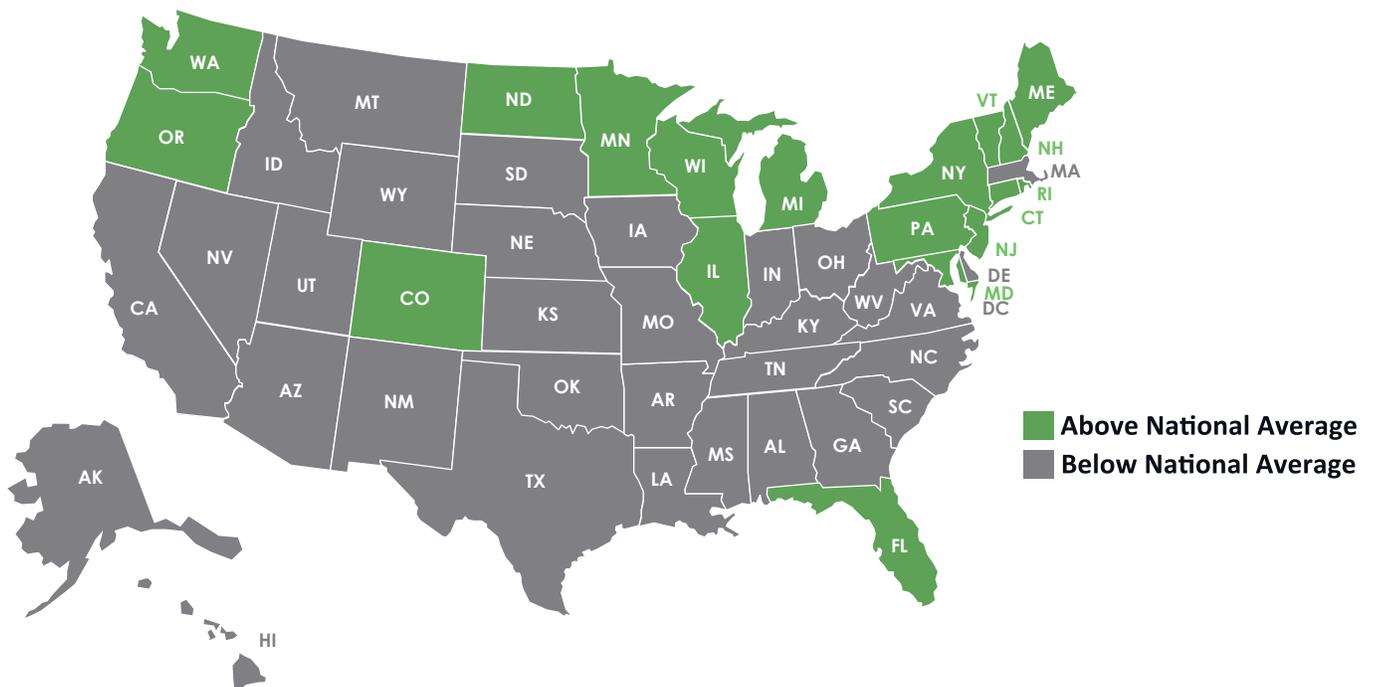
State lung cancer incidence vs. the national average:



5-Year Survival Rates

The 5-year survival rates are the percentage of people still alive five years after being diagnosed with lung cancer. The national average is 21.7%. Analysis by the American Cancer Society (January 2020) shows that lung cancer survival has been steadily improving, with the rate of improvement accelerating over the last 5 years.

State 5-year survival rate vs. the national average:

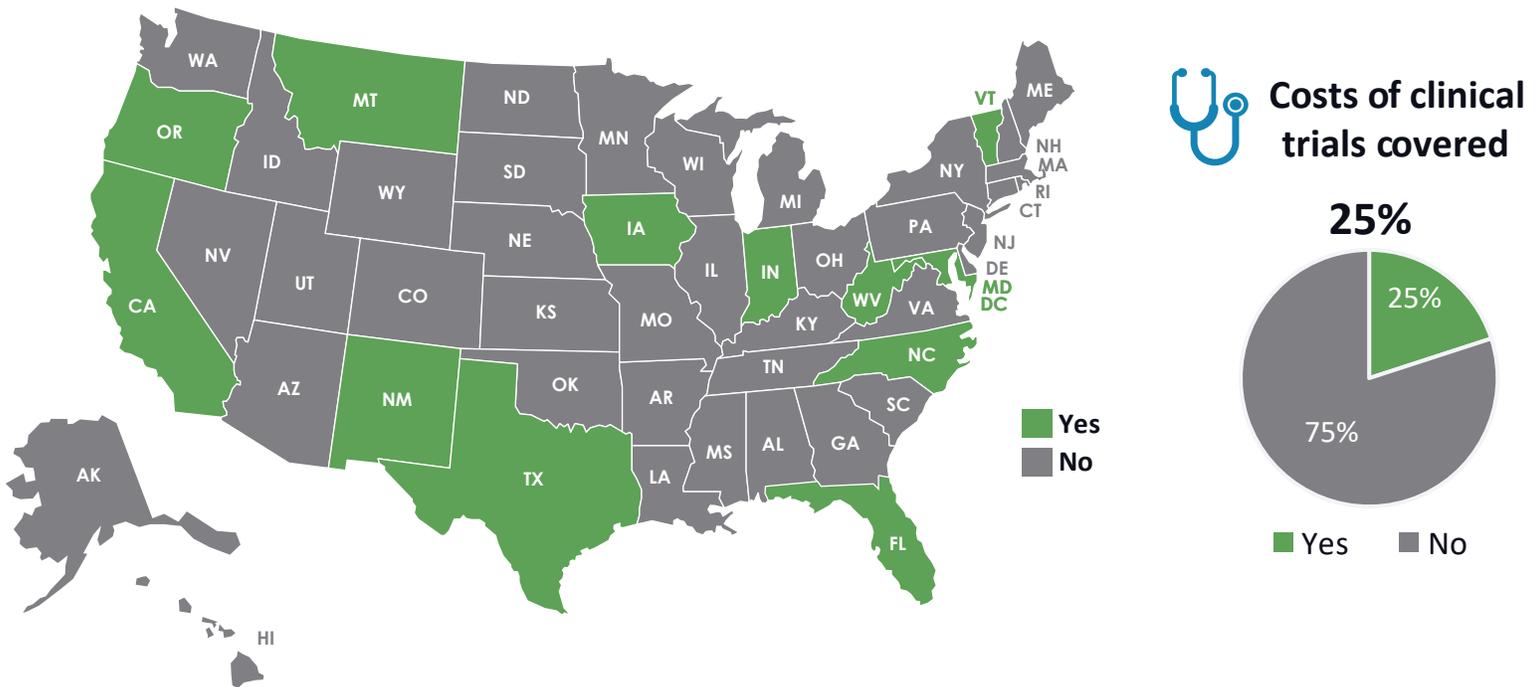


Source: American Lung Association report "State of Lung Cancer" (2019, [link](#));
Unknown for DC, KS, IN, MA, NV, SD; As of October 2019

Medicaid Coverage for the Routine Costs of Clinical Trials

Medicaid coverage for the routine costs of clinical trials is the exception rather than the rule. The ACA mandates this coverage for Medicare and commercial insurance beneficiaries, but it is not mandated for Medicaid. The routine cost of clinical trials includes the cost of procedures and services needed while in the trial, but not the cost of the treatment itself. Only 25% of states and DC provided this coverage.

Are costs of clinical trials covered?



States with written policies on Medicaid coverage for clinical trial participants Source: ASCO

“Medicaid Enrollees Need Clinical Trial Access” (2020. [link](#));

Conversations with ASCO policy team;

Alaska and Michigan are not reliably providing coverage despite written policies, according to ASCO; As of March 2020

Highest Ranked States

Only 5 metrics were used in the scoring. Information in italics was taking into consideration in determining key takeaways.

Score: A Maryland

Incidence rate: **18th lowest**

5 year survival rate: **25.6%**

Medicaid expansion state: **Y**

Is screening covered? **Y**

Is biomarker testing covered? **Y**

Clinical trials covered in Medicaid? Y

Step therapy law enacted: Y



Score: A Minnesota

Incidence rate: **16th lowest**

5 year survival rate: **26.0%**

Medicaid expansion state: **Y**

Is screening covered? **Y**

Is biomarker testing covered? **Y**

Clinical trials covered in Medicaid? N

Step therapy law enacted: Y



Score: A Oregon

Incidence rate: **11th lowest**

5 year survival rate: **22.7%**

Medicaid expansion state: **Y**

Is screening covered? **Y**

Is biomarker testing covered? **Y**

Clinical trials covered in Medicaid? Y

Step therapy law enacted: N



Score: A Washington

Incidence rate: **14th lowest**

5 year survival rate: **22.5%**

Medicaid expansion state: **Y**

Is screening covered? **Y**

Is biomarker testing covered? **Y**

Clinical trials covered in Medicaid? N

Step therapy law enacted: Y



High Ranked States

Score: B

California

Incidence rate: **3rd lowest**
 5 year survival rate: **21.5%**
 Medicaid expansion state: **Y**
 Is screening covered? **Y**
 Is biomarker testing covered? **Y**
Clinical trials covered in Medicaid? Y
Step therapy law enacted: Y



Score: B

Colorado

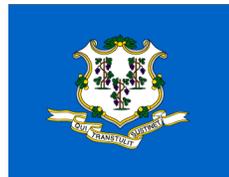
Incidence rate: **4th lowest**
 5 year survival rate: **25.3%**
 Medicaid expansion state: **Y**
 Is screening covered? **Y**
 Is biomarker testing covered? **N**
Clinical trials covered in Medicaid? N
Step therapy law enacted: Y



Score: B

Connecticut

Incidence rate: **26th lowest**
 5 year survival rate: **26.4%**
 Medicaid expansion state: **Y**
 Is screening covered? **Y**
 Is biomarker testing covered? **Y**
Clinical trials covered in Medicaid? N
Step therapy law enacted: Y



Score: B

Maine

Incidence rate: **46th lowest**
 5 year survival rate: **21.9%**
 Medicaid expansion state: **Y**
 Is screening covered? **Y**
 Is biomarker testing covered? **Y**
Clinical trials covered in Medicaid? N
Step therapy law enacted: Y



Score: B

New Jersey

Incidence rate: **17th lowest**
 5 year survival rate: **25.0%**
 Medicaid expansion state: **Y**
 Is screening covered? **Unknown**
 Is biomarker testing covered? **Y**
Clinical trials covered in Medicaid? N
Step therapy law enacted: Y



Score: B

New York

Incidence rate: **22nd lowest**
 5 year survival rate: **26.4%**
 Medicaid expansion state: **Y**
 Is screening covered? **Y**
 Is biomarker testing covered? **N**
Clinical trials covered in Medicaid? N
Step therapy law enacted: Y



Score: B

North Dakota

Incidence rate: **19th lowest**
 5 year survival rate: **23.3%**
 Medicaid expansion state: **Y**
 Is screening covered? **N**
 Is biomarker testing covered? **Y**
Clinical trials covered in Medicaid? N
Step therapy law enacted: N



Score: B

Virginia

Incidence rate: **21st lowest**
 5 year survival rate: **21.4%**
 Medicaid expansion state: **Y**
 Is screening covered? **Y**
 Is biomarker testing covered? **Y**
Clinical trials covered in Medicaid? N
Step therapy law enacted: Y



Mid-range States

Score: C Arizona

Incidence rate: **7th lowest**
 5 year survival rate: **21.4%**
 Medicaid expansion state: **Y**
 Is screening covered? **Y**
 Is biomarker testing covered? **N**
Clinical trials covered in Medicaid? N
Step therapy law enacted: N



Score: C Delaware

Incidence rate: **42nd lowest**
 5 year survival rate: **21.6%**
 Medicaid expansion state: **Y**
 Is screening covered? **Y**
 Is biomarker testing covered? **Y**
Clinical trials covered in Medicaid? N
Step therapy law enacted: Y



Score: C District of Columbia

Incidence rate: **10th lowest**
 5 year survival rate: **N/A**
 Medicaid expansion state: **Y**
 Is screening covered? **Y**
 Is biomarker testing covered? **N**
Clinical trials covered in Medicaid? Y
Step therapy law enacted: N



Score: C Florida

Incidence rate: **23rd lowest**
 5 year survival rate: **23.1%**
 Medicaid expansion state: **N**
 Is screening covered? **N**
 Is biomarker testing covered? **Y**
Clinical trials covered in Medicaid? Y
Step therapy law enacted: Y



Score: C Hawaii

Incidence rate: **6th lowest**
 5 year survival rate: **18.7%**
 Medicaid expansion state: **Y**
 Is screening covered? **Y**
 Is biomarker testing covered? **N**
Clinical trials covered in Medicaid? N
Step therapy law enacted: N



Score: C Illinois

Incidence rate: **35th lowest**
 5 year survival rate: **23.8%**
 Medicaid expansion state: **Y**
 Is screening covered? **Unknown**
 Is biomarker testing covered? **Y**
Clinical trials covered in Medicaid? N
Step therapy law enacted: Y



Score: C Massachusetts

Incidence rate: **28th lowest**
 5 year survival rate: **N/A**
 Medicaid expansion state: **Y**
 Is screening covered? **Y**
 Is biomarker testing covered? **Y**
Clinical trials covered in Medicaid? N
Step therapy law enacted: N



Score: C Michigan

Incidence rate: **32nd lowest**
 5 year survival rate: **23.2%**
 Medicaid expansion state: **Y**
 Is screening covered? **Y**
 Is biomarker testing covered? **N**
Clinical trials covered in Medicaid? N
Step therapy law enacted: N



Score: C Nevada

Incidence rate: **13th lowest**

5 year survival rate: **N/A**

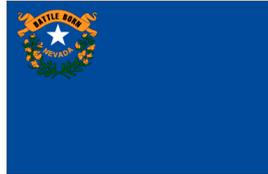
Medicaid expansion state: **Y**

Is screening covered? **Y**

Is biomarker testing covered? **N**

Clinical trials covered in Medicaid? **N**

Step therapy law enacted: **N**



Score: C Ohio

Incidence rate: **39th lowest**

5 year survival rate: **20.0%**

Medicaid expansion state: **Y**

Is screening covered? **Y**

Is biomarker testing covered? **Y**

Clinical trials covered in Medicaid? **N**

Step therapy law enacted: **Y**



Score: C Pennsylvania

Incidence rate: **31st lowest**

5 year survival rate: **22.6%**

Medicaid expansion state: **Y**

Is screening covered? **Y**

Is biomarker testing covered? **N**

Clinical trials covered in Medicaid? **N**

Step therapy law enacted: **N**



Score: C Vermont

Incidence rate: **29th lowest**

5 year survival rate: **23.1%**

Medicaid expansion state: **Y**

Is screening covered? **Y**

Is biomarker testing covered? **N**

Clinical trials covered in Medicaid? **Y**

Step therapy law enacted: **N**



Low Ranked States

Score: D Alaska

Incidence rate: **15th lowest**
 5 year survival rate: **17.6%**
 Medicaid expansion state: **Y**
 Is screening covered? **N**
 Is biomarker testing covered? **N**
Clinical trials covered in Medicaid? N
Step therapy law enacted: N



Score: D Indiana

Incidence rate: **44th lowest**
 5 year survival rate: **N/A**
 Medicaid expansion state: **Y**
 Is screening covered? **Y**
 Is biomarker testing covered? **N**
Clinical trials covered in Medicaid? Y
Step therapy law enacted: N



Score: D Iowa

Incidence rate: **30th lowest**
 5 year survival rate: **19.1%**
 Medicaid expansion state: **Y**
 Is screening covered? **Y**
 Is biomarker testing covered? **N**
Clinical trials covered in Medicaid? Y
Step therapy law enacted: N



Score: D Montana

Incidence rate: **12th lowest**
 5 year survival rate: **20.0%**
 Medicaid expansion state: **Y**
 Is screening covered? **Y**
 Is biomarker testing covered? **N**
Clinical trials covered in Medicaid? Y
Step therapy law enacted: N



Score: D New Hampshire

Incidence rate: **34th lowest**
 5 year survival rate: **21.6%**
 Medicaid expansion state: **Y**
 Is screening covered? **Y**
 Is biomarker testing covered? **N**
Clinical trials covered in Medicaid? N
Step therapy law enacted: Y



Score: D New Mexico

Incidence rate: **2nd lowest**
 5 year survival rate: **19.6%**
 Medicaid expansion state: **Y**
 Is screening covered? **Unknown**
 Is biomarker testing covered? **N**
Clinical trials covered in Medicaid? Y
Step therapy law enacted: Y



Score: D Rhode Island

Incidence rate: **43rd lowest**
 5 year survival rate: **23.7%**
 Medicaid expansion state: **Y**
 Is screening covered? **N**
 Is biomarker testing covered? **N**
Clinical trials covered in Medicaid? N
Step therapy law enacted: N



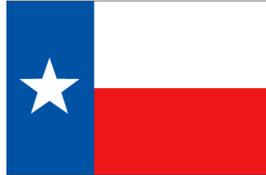
Score: D South Dakota

Incidence rate: **24th lowest**
 5 year survival rate: **N/A**
 Medicaid expansion state: **N**
 Is screening covered? **Y**
 Is biomarker testing covered? **N**
Clinical trials covered in Medicaid? N
Step therapy law enacted: N



Score: D Texas

Incidence rate: **9th lowest**
 5 year survival rate: **20.9%**
 Medicaid expansion state: **N**
 Is screening covered? **N**
 Is biomarker testing covered? **Y**
Clinical trials covered in Medicaid? Y
Step therapy law enacted: Y



Score: D Utah

Incidence rate: **1st lowest**
 5 year survival rate: **21.4%**
 Medicaid expansion state: **Y**
 Is screening covered? **N**
 Is biomarker testing covered? **Y**
Clinical trials covered in Medicaid? N
Step therapy law enacted: N



Score: D West Virginia

Incidence rate: **50th lowest**
 5 year survival rate: **18.2%**
 Medicaid expansion state: **Y**
 Is screening covered? **Y**
 Is biomarker testing covered? **N**
Clinical trials covered in Medicaid? Y
Step therapy law enacted: Y



Score: D Wisconsin

Incidence rate: **25th lowest**
 5 year survival rate: **22.3%**
 Medicaid expansion state: **N**
 Is screening covered? **Y**
 Is biomarker testing covered? **N**
Clinical trials covered in Medicaid? N
Step therapy law enacted: Y



Score: D Wyoming

Incidence rate: **5th lowest**
 5 year survival rate: **19.2%**
 Medicaid expansion state: **N**
 Is screening covered? **N**
 Is biomarker testing covered? **Y**
Clinical trials covered in Medicaid? N
Step therapy law enacted: N



Lowest Ranked States

Score: F Alabama

Incidence rate: **37th lowest**

5 year survival rate: **16.8%**

Medicaid expansion state: **N**

Is screening covered? **N**

Is biomarker testing covered? **N**

Clinical trials covered in Medicaid? N

Step therapy law enacted: N



Score: F Arkansas

Incidence rate: **49th lowest**

5 year survival rate: **18.1%**

Medicaid expansion state: **Y**

Is screening covered? **Unknown**

Is biomarker testing covered? **N**

Clinical trials covered in Medicaid? N

Step therapy law enacted: Y



Score: F Georgia

Incidence rate: **33rd lowest**

5 year survival rate: **19.3%**

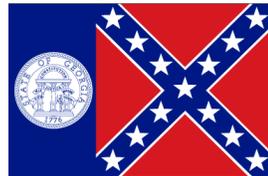
Medicaid expansion state: **N**

Is screening covered? **Y**

Is biomarker testing covered? **N**

Clinical trials covered in Medicaid? N

Step therapy law enacted: Y



Score: F Idaho

Incidence rate: **8th lowest**

5 year survival rate: **20.7%**

Medicaid expansion state: **Y**

Is screening covered? **N**

Is biomarker testing covered? **N**

Clinical trials covered in Medicaid? N

Step therapy law enacted: N



Score: F Kansas

Incidence rate: **27th lowest**

5 year survival rate: **N/A**

Medicaid expansion state: **N**

Is screening covered? **N**

Is biomarker testing covered? **Y**

Clinical trials covered in Medicaid? N

Step therapy law enacted: N



Score: F Kentucky

Incidence rate: **51st lowest**

5 year survival rate: **17.6%**

Medicaid expansion state: **Y**

Is screening covered? **Y**

Is biomarker testing covered? **N**

Clinical trials covered in Medicaid? N

Step therapy law enacted: Y



Score: F Louisiana

Incidence rate: **38th lowest**

5 year survival rate: **17.0%**

Medicaid expansion state: **Y**

Is screening covered? **N**

Is biomarker testing covered? **N**

Clinical trials covered in Medicaid? N

Step therapy law enacted: Y



Score: F Mississippi

Incidence rate: **48th lowest**

5 year survival rate: **16.9%**

Medicaid expansion state: **N**

Is screening covered? **N**

Is biomarker testing covered? **N**

Clinical trials covered in Medicaid? N

Step therapy law enacted: Y



Score: F Missouri

Incidence rate: **45th lowest**

5 year survival rate: **19.6%**

Medicaid expansion state: **N**

Is screening covered? **Y**

Is biomarker testing covered? **N**

Clinical trials covered in Medicaid? **N**

Step therapy law enacted: **Y**



Score: F Nebraska

Incidence rate: **20th lowest**

5 year survival rate: **20.6%**

Medicaid expansion state: **Y**

Is screening covered? **N**

Is biomarker testing covered? **N**

Clinical trials covered in Medicaid? **N**

Step therapy law enacted: **N**



Score: F North Carolina

Incidence rate: **40th lowest**

5 year survival rate: **21.5%**

Medicaid expansion state: **N**

Is screening covered? **Y**

Is biomarker testing covered? **N**

Clinical trials covered in Medicaid? **Y**

Step therapy law enacted: **N**



Score: F Oklahoma

Incidence rate: **41st lowest**

5 year survival rate: **17.7%**

Medicaid expansion state: **N**

Is screening covered? **Y**

Is biomarker testing covered? **N**

Clinical trials covered in Medicaid? **N**

Step therapy law enacted: **Y**



Score: F South Carolina

Incidence rate: **36th lowest**

5 year survival rate: **19.5%**

Medicaid expansion state: **N**

Is screening covered? **Y**

Is biomarker testing covered? **N**

Clinical trials covered in Medicaid? **N**

Step therapy law enacted: **N**



Score: F Tennessee

Incidence rate: **47th lowest**

5 year survival rate: **18.7%**

Medicaid expansion state: **N**

Is screening covered? **MCO only**

Is biomarker testing covered? **Y**

Clinical trials covered in Medicaid? **N**

Step therapy law enacted: **N**

