Colorado Cancer Coalition-
Lung CA Task Force

Claims-based Report of Lung CA Screenings

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National Jewish Health
Denver, Colorado
-statewide collaborative working to eliminate the burden of CA responsible for the Colorado Cancer Plan.

www.coloradocancercoalition.org/

**Goals: Lung Cancer Task Force** –
1. Promote tobacco cessation- (education and legislation)
   - Initiated legislation for a statewide tobacco tax increase 2016
2. Provide educational resources on Lung Ca and prevention
3. Promotion of Lung Cancer Screening
   - Educate providers about lung cancer screening
     a. Peer to peer educational programs
     b. Web based activities
     c. COPIC insurance- programs
   - Reduce barriers to screening.
   - Insure quality and safety at Lung Ca screening sites
   - Utilize a claims-based database to focus education efforts
Non-profit, non-partisan organization
---Founded in 2010 out of a recommendation from Blue Ribbon Commission on Healthcare Reform and the Governor’s office.

**AIM**: Better Health, Better Care, Lower Costs.

CIVHC is the administrator of the claims database as mandated by the Colorado Dept. of Health Care Policy and Financing (HCPF)

**DATA Source**: Colorado All Payors Claims Database (APCD) launched in 2012.
All Payor Claims Databases (APCD)

- **(APCDs)** are large state databases that include medical claims, pharmacy claims, dental claims, and eligibility and provider files collected from private and public payers.
- APCD data are reported directly by insurers to States, usually as part of a State mandate.
  - The data produces price, resource use, and quality information for consumers.

**APCD data have 3 potential advantages over other datasets:**
1. information on private insurance that many other datasets do not.
2. data from most or all insurance companies operating in any particular state. (in contrast to some proprietary datasets)
3. information on care for patients across care sites. (rather than just hospitalizations and ED visits generally reported)

**APCDs** have large sample sizes, geographic representation, and capture of longitudinal information on a wide range of individual patients.
- There is national and local momentum to establish and implement APCDs.
- To date, 18 States have legislation mandating the creation and use of APCDs or are actively establishing APCDs.

[www.ahrq.gov/data/apcd](http://www.ahrq.gov/data/apcd)
All Payor Claims Databases (APCD)

Information Typically Collected
- Encrypted SSN or member ID
- Type of product (HMO, POS, indemnity)
- Type of Contract (single person, family, etc)
- Patient Demographics (DOB, gender, ZIP code)
- Diagnosis, procedure and drug codes
- Information on service provider
- Prescribing physician
- Health plan payments/ member payment responsibility
- Type and date of bill paid
- Facility type
- Revenue codes and Service Dates.

Data Elements Typically NOT included in an APCD
- Administrative fees
- Back end settlement amounts
- Referrals
- Test results
- Provider affiliation with group practice
- Provider networks.
Colorado APCD
Data & Covered Lives

- Health First Colorado*
- Medicare & Medicare Advantage
- 33+ Commercial Payers

750+ Million
Medical, Pharmacy, & Dental Claims

Approx. 4.3 Million
Unique Lives

Majority of
Insured Coloradans

*Colorado’s Medicaid Program

Updated April 2018
Lung Cancer Screening CPT Codes

- **S8032** - Low-dose CT code for lung CA screening (old)
- **G0297** - Low dose CT scan (LDCT) for lung CA screening
- **G0296** - Counseling visit to discuss need for lung cancer screening using low dose CT scan (LDCT) (service is for eligibility determination and shared decision making)
- Do **NOT** use diagnostic CT code– **71250**.
Q1. How many lung cancer screening services performed?
Q2. Patient demographics?
Q3. Counseling provider demographics?
Q4. LDCT scan provider demographics?
Q5. Insurances paying the screening bills?
Q6. Coverage- (no patient out-of-pocket costs)?
Q7. Active lung cancer Dx found in patients within 60 days of LDCT screening?
Q8. Common co-conditions found in LDCT screened patients?

**Future Revision/Additions---**
- Extend timeframe for lung cancer diagnosis to 180d. (Since APCD links to state cancer registry, lag time to report dx is longer than 60 days.)
- Questions regarding use of Shared Decision making and co conditions
- Questions regarding referrals from mental health providers.
- Other questions to capture/identify barriers and uptake of screening.
Lung Cancer Screening Services (2015 - 2016)

- CTs
  - 2015: 365
  - 2016: 3,671
  - 2 year total: 4,036

- Shared Decision Making
  - 2015: 272
  - 2016: 306
  - 2 year total: 34
Lung Cancer Scans / Gender

- **FEMALE**
  - 2015: 182
  - 2016: 1,693

- **MALE**
  - 2015: 183
  - 2016: 1,978

Scans:
- 0
- 500
- 1,000
- 1,500
- 2,000
- 2,500

**Legend:**
- 2015
- 2016
## Counseling Visits / Provider Specialty (2015 – 2016)

<table>
<thead>
<tr>
<th>Counseling Provider / Specialty</th>
<th>Counseled</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Medicine</td>
<td>94</td>
<td>27%</td>
</tr>
<tr>
<td>Family Practice</td>
<td>78</td>
<td>23%</td>
</tr>
<tr>
<td>Nurse Practitioner</td>
<td>73</td>
<td>22%</td>
</tr>
<tr>
<td>Registered Nurse (not allowed to bill)</td>
<td>34</td>
<td>10%</td>
</tr>
<tr>
<td>Pulmonology</td>
<td>28</td>
<td>8%</td>
</tr>
<tr>
<td>Critical Care</td>
<td>13</td>
<td>4%</td>
</tr>
<tr>
<td>Physician Assistant*</td>
<td>&lt; 11</td>
<td>-</td>
</tr>
<tr>
<td>Acute Hospital</td>
<td>&lt; 11</td>
<td>-</td>
</tr>
<tr>
<td>Geriatric Medicine</td>
<td>&lt; 11</td>
<td>-</td>
</tr>
<tr>
<td>Not available</td>
<td>&lt; 11</td>
<td>-</td>
</tr>
<tr>
<td>Sleep Medicine</td>
<td>&lt; 11</td>
<td>-</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>&lt; 11</td>
<td>-</td>
</tr>
<tr>
<td>Interventional Cardiology</td>
<td>&lt; 11</td>
<td>-</td>
</tr>
</tbody>
</table>
Lung Cancer Scans / Key Providers (2014 -2016)

- Kaiser: 41%
- National Jewish: 34%
- Harmony Imaging Center: 10%
- Radiology Imaging Associates: 5%
- University of Colorado Hosp: 3%
- Penrad: 3%
- Remaining Providers: 3%
Insurance Coverage / Payer

<table>
<thead>
<tr>
<th>Payer</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>66</td>
<td>948</td>
</tr>
<tr>
<td>Medicaid</td>
<td>38</td>
<td>233</td>
</tr>
<tr>
<td>Medicare</td>
<td>236</td>
<td>1,127</td>
</tr>
<tr>
<td>Medicare Advantage</td>
<td>25</td>
<td>1,363</td>
</tr>
</tbody>
</table>

Bar chart showing the number of coverage for each payer in 2015 and 2016.
Common Conditions / Screened Patients

On average, each patient had 5 co-conditions billed in the 60 day post-screen period.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Billings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory system</td>
<td>1,750</td>
</tr>
<tr>
<td>Mental &amp; behavioral disorders</td>
<td>1,648</td>
</tr>
<tr>
<td>Circulatory system</td>
<td>1,513</td>
</tr>
<tr>
<td>Endocrine, nutritional &amp; metabolic</td>
<td>1,333</td>
</tr>
<tr>
<td>Musculoskeletal connective tissue</td>
<td>1,278</td>
</tr>
<tr>
<td>Digestive system</td>
<td>816</td>
</tr>
<tr>
<td>Nervous system</td>
<td>733</td>
</tr>
<tr>
<td>Genitourinary system</td>
<td>604</td>
</tr>
<tr>
<td>Skin &amp; subcutaneous tissue</td>
<td>449</td>
</tr>
<tr>
<td>Neoplasms</td>
<td>442</td>
</tr>
<tr>
<td>Blood, blood-forming organs &amp;...</td>
<td>244</td>
</tr>
</tbody>
</table>
Lung Cancer Screening Services

Interpretation

- LDCT penetration rates - very low across all regions
- Urban centers are responsible for most LDCT screens
- Areas with low update were identified.
  -- Low uptake in rural regions may indicate reduced access even though these areas offer local CT imaging services.
  -- Boulder, Durango had surprisingly low uptake.
- Low use of Shared Decision Making visits.
Increase the number of lung cancer screens done each year

- Patient barriers have been reduced—no out-of-pocket expense and it is mandated by Medicare and insurances. (Medicaid still requires prior authorization in some states—Colorado)
  - Target rural areas
  - Target mental health providers
  - Emphasize legal risk aspect in the future.

Increase awareness of the Shared Decision Making (SDM) visit

- Ratio of counseling services vs LDCT scans done is very low at 7.5%
- Not required but recommended in commercially insured patients.
- Billable service—separate visit or as add on to E & M visit.
- Engage non-physician providers who can perform/bill for SDM
Conclusions:

The utilization of Low Dose CT scans as a screening service is extremely low- (< 5 % of eligible patients are screened yearly) but increasing in recent years.

There are a number of barriers which help to explain the poor utilization but the main reason is lack of patient and provider awareness of screening recommendations.

Shared Decision Making visits are rarely performed despite being mandated

All Payor Claims Databases (APCDs) can provide valuable information to direct public health education efforts.

18 states have existing APCDs and other states have partial data sets

APCDs may help increase the number of eligible patients who get screened.

www.ahrq.gov/data/apcd
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COST

Original project fee—~$13,000.
   APCD scholarship covering most.
   $2500 from Colorado Cancer Coalition

• Pricing of proposed refresh for 2017 and 2018 data is similar
• if scholarship approval is received—-the data refresh is ~ $2,688;
Pricing of future refreshes will be similar to this proposed refresh