WHAT IS NEEDED FOR THORACIC HEALTH TO FIT INTO POPULATION HEALTH?

1. How Measurement Drives the Population Health Models of the Future
2. Technologies, existing and new, and how they can fit into population health

Bruce Pyenson, FSA, MAAA
Milliman

Prevent Cancer Foundation
Quantitative Imaging Workshop XVIII
November 4-5, 2021
1. How Measurement Drives the Population Health Models of the Future

Mary Barton, MD, MPP—National Committee for Quality Assurance
Cory Gusland, FSA, MAAA—Milliman
Spencer Carrucciu, MPA, Oxeon Partners

2. Technologies, existing and new, and how they can fit into population health

Jonathan Jaffery, MD, MS, MMM, U of Wisc and UW Health ACO
Paul Limburg, MD, MPH, Exact Science and Mayo Clinic
Implementing widespread Lung Cancer Screening will have large health benefits for at-risk populations—including identifying lung cancer at early, curable stage, and diagnosing COPD and cardiac conditions earlier.

Will provider organizations or communities be willing to take risk for successful lung cancer screening in their population?
Will Thoracic Health and Cancer Downstaging Appeal to Population Health Organizations?
Population Health Organizations

I will give a budget perspective for an Accountable Care Organization—one of the most popular forms of population health

We will hear from Dr. Jaffery, the leader of a successful population health program. What it takes to succeed.

We will hear from Dr. Limburg, a champion of multi-cancer early detection (MCED) — a blood test that may be able to detect many cancers early

We will end with a discussion of whether ACOs, Medicare Advantage plans, and Medicare fee-for-service are likely to champion lung cancer screening or MCED—or something else.
Medicare Program Takes Lead in Population Health

Most Medicare beneficiaries are in some form of Population Health

US Medicare Program

- About 60 million lives in 2021
- Mostly over age 65. <65 with disability.


Population Health in Medicare

- 24 million lives in Medicare Advantage (private insurance)
- 36 million lives in Fee for Service (original Medicare)
  - 12 million lives in Accountable Care
Value versus Volume

Attempts to control costs and improve outcomes focus on “pay for value” not “pay for volume”

Traditional: Volume
• Higher volume, higher prices generates more revenue and profit

Population Health: Value
• Shared savings generates financial gain
• Quality outcomes generate financial gain
Context of Lung Cancer Screening in Medicare
Even if fully implemented, LCS would be a tiny piece of Medicare spending

- Suppose 10 million beneficiaries are eligible for LC Screening (round number)
- $300 per annual scan (the biggest expense item in LCS, high reimbursement)
- $2.4 billion in annual spending if 80% are scanned \((10,000,000 \times \$300 \times .8)\)

- $800 billion Medicare Part A & Part B Spending in 2021
  - LCS would be \(~0.3\%\) of Medicare spending, even at 80% adherence

- What would be the financial and outcomes proposition for a Thoracic Health Population Health measure?
How would an ACO reduce spending?
Annual per-capita Medicare spending (estimated 2021)

<table>
<thead>
<tr>
<th>Service Line</th>
<th>Per beneficiary per year spending (revenue to providers). Estimated national average. Includes cost-sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital Inpatient</td>
<td>$4,290</td>
</tr>
<tr>
<td>Skilled nursing facility</td>
<td>$818</td>
</tr>
<tr>
<td>Home health</td>
<td>$548</td>
</tr>
<tr>
<td>Hospital OP</td>
<td>$3,234</td>
</tr>
<tr>
<td>Imaging</td>
<td>$205</td>
</tr>
<tr>
<td>Physician</td>
<td>$4,457</td>
</tr>
<tr>
<td>Imaging</td>
<td>$208</td>
</tr>
<tr>
<td>Total</td>
<td>$13,348</td>
</tr>
</tbody>
</table>

Source: Milliman ACO Insight. Non-Medicaid, non-institutional beneficiaries

Milliman, Inc.
Will Thoracic Health and Cancer Downstaging Appeal to Population Health Organizations?

Technologies, existing and new, and how they can fit into population health

• Downstaging reduces hospital revenue in the traditional model
• Downstaging may reduce hospital profits even with shared savings
• Money for quality can make finances favorable for downstaging
• What does that mean for lung cancer screening, thoracic health, multi-cancer early detection?
• What technologies will be favored under traditional or population health?

The Straw Dog:
Does it make sense for advocates to attempt a Thoracic Health Pilot through Medicare?