Analysis of Medicare Shared Savings Program (MSSP) performance

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Overview

- Background on Medicare Accountable Care Organizations (ACOs)
- Estimates of Medicare Shared Savings Program (MSSP) performance on cost
  - Savings relative to CMS benchmarks
  - Estimates in the literature of savings relative to counterfactuals
  - Relationship between changes in spending and assignment to MSSP ACOs
- Implications
- Discussion
Medicare ACOs

- Groups of providers held accountable for the cost and quality of care for a group of beneficiaries

- Goals of ACOs:
  - Increase quality of care and patient experience
  - Lower the growth in health care costs
  - Achieve care coordination at a lower administrative cost than MA plans

- If ACOs are successful, they are rewarded with shared savings
Key concepts for ACOs

- **Assignment: How and when beneficiaries are assigned to the ACO**
  - Eligibility: Beneficiaries must be in FFS (not in MA) and have a physician visit with an ACO participant
  - Basis: Plurality of primary care services (primary care and other clinicians)
  - Timing:
    - Prospective (ACO knows assigned beneficiaries at start of year)
    - Retrospective (ACO does not know final assignment until end of year)

- **Risk:**
  - One-sided, model has shared savings and no shared losses
  - Two-sided risk, model has shared savings and losses

- **Benchmarks:** CMS computed targets for spending; function of historical spending and regional spending
## Characteristics of the MSSP ACO Tracks

<table>
<thead>
<tr>
<th>Track</th>
<th>Assignment</th>
<th>Risk arrangement</th>
<th>Maximum shared savings/loss rate*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Track 1</td>
<td>Retrospective**</td>
<td>One-sided</td>
<td>50%</td>
</tr>
<tr>
<td>Track 2</td>
<td>Retrospective**</td>
<td>Two-sided</td>
<td>60%</td>
</tr>
<tr>
<td>Track 3</td>
<td>Prospective</td>
<td>Two-sided</td>
<td>75%</td>
</tr>
</tbody>
</table>

* The actual shared savings/loss rate could change depending on the ACO’s quality score (e.g., an ACO that scores poorly on quality would receive a smaller shared savings amount than if it had earned a high quality score).

**These tracks have preliminary prospective assignment and then retrospective assignment for final reconciliation.

Source: (Centers for Medicare & Medicaid Services 2017)
Number of MSSP ACOs, 2013-2018

Source: CMS data.

Data are preliminary and subject to change
Methods to estimate MSSP performance

- Performance relative to benchmarks
  - Benchmarks set in advance by CMS
  - Most pertinent for ACOs—determines their eligibility for shared savings

- Performance relative to counterfactuals
  - Determined after the fact using actual performance of comparison group
  - Used in research literature to assess performance of program as a whole
Performance relative to CMS benchmarks

- Actual spending on ACO beneficiaries was about 1.2 percent below benchmarks in 2017.
- Shared savings payments were about 0.8 percent of benchmarks.
- Net “savings” in 2017 after accounting for shared savings payments was about 0.3 percent of benchmarks.
- There were no net “savings” in earlier years; shared savings payments exceeded “savings” relative to benchmarks.
Estimate of MSSP performance relative to counterfactual: NAACOS

- Compared growth in spending for beneficiaries assigned to ACOs to growth in spending for other beneficiaries in the market
- Adjusted spending for changes in risk scores
- Found gross savings of 1.1 to 1.2 percent of Medicare spending from 2013 to 2015
- Equivalent to net savings of 0.3 percent after shared savings payments through 2015

Source: Dobson, DeVanzo and Associates 2018 study for National Association of ACOs (NAACOS)
Estimate of MSSP performance relative to counterfactual: McWilliams and colleagues

- Beneficiaries assigned to ACOs on plurality of primary care office visits with a primary care physician (differs from MSSP assignment algorithm)
- On average, found savings relative to counterfactual:
  - Higher gross savings for physician-only ACOs than hospital ACOs
  - Higher gross savings for older ACOs than newer ACOs
  - Small net savings for physician-only ACOs, none for hospital ACOs
- Suggests additional savings may come from spillover (treating patients in Medicare FFS who are not assigned to ACO the same way as those who are in ACO)
Relationship between changes in spending and assignment to MSSP ACOs

- We track individuals over time to reduce the need to risk-adjust for changes in beneficiaries assigned to ACOs
- Beneficiaries who were:
  - Alive from 2012 through 2016 (no decedents)
  - Eligible for ACO assignment in each year
  - Initial results are not propensity matched
- Can compare beneficiaries consistently in ACOs, those never in ACOs, and those who switched in and out of ACOs
### Association between changes in assignment and changes in spending

<table>
<thead>
<tr>
<th>Assignment Category</th>
<th>Percentage Point Difference in Spending Growth Relative to the Average in the Market from 2012 to 2016</th>
<th>Number of Beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assigned to same hospital ACO, 2013-14-15</td>
<td>-2.3</td>
<td>341,576</td>
</tr>
<tr>
<td>Assigned to same physician ACO, 2013-14-15</td>
<td>-5.6</td>
<td>216,143</td>
</tr>
<tr>
<td>Never in ACO</td>
<td>-1.3</td>
<td>3,838,089</td>
</tr>
<tr>
<td>Switched in/out of an ACO 2013-14-15, or joined ACO in 2016</td>
<td>3.1</td>
<td>2,242,284</td>
</tr>
</tbody>
</table>

Data are preliminary descriptive data and subject to change.

Source: MedPAC analysis of CMS ACO assignment data and CMS spending data from the Chronic Condition Data Warehouse.
Beneficiaries who gained assignment to an existing ACO had higher than average spending growth

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<th>Percentage point difference in spending growth relative to the average in the market from 2012 to 2016</th>
<th>Number of beneficiaries</th>
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</thead>
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<tr>
<td>Switched ACO 2013, 2014, 2015</td>
<td>1.2</td>
</tr>
<tr>
<td>First assigned to a newly formed ACO in 2016</td>
<td>2.1</td>
</tr>
<tr>
<td>First assigned to an existing ACO in 2016</td>
<td>16.0</td>
</tr>
<tr>
<td>Total</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Number of beneficiaries:
- Switched ACO 2013, 2014, 2015: 1,777,369
- First assigned to a newly formed ACO in 2016: 183,615
- First assigned to an existing ACO in 2016: 281,300
- Total: 2,242,284

Data are preliminary and subject to change.
Source: MedPAC analysis of CMS ACO assignment data and CMS spending data from the Chronic Condition Data Warehouse.
**Beneficiaries who lost assignment to their original ACO also had higher than average spending growth**

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<th>Percentage point difference in spending growth relative to the average in the market from 2012 to 2016</th>
<th>Number of beneficiaries</th>
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<tr>
<td>Assigned to same ACO 2013-14-15-16</td>
<td>-10.0</td>
</tr>
<tr>
<td>Assigned to same ACO 2013-14-15 left in 2016</td>
<td>13.8</td>
</tr>
</tbody>
</table>

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Source: MedPAC analysis of CMS ACO assignment data and CMS spending data from the Chronic Condition Data Warehouse
Illustrative example of retrospective and prospective assignment

- **Example:** Beneficiary has change in health status that results in a 2016 visit with an ACO physician and claims of $20,000 during 2016, $30,000 of claims in 2017

- **Retrospective assignment:**
  - First sees ACO physician in 2016, assigned to ACO in 2016
  - HCC score is based on diagnoses from 2015 = 1.0
  - Responsible for $20,000 in 2016 spending

- **Prospective assignment:**
  - First sees ACO physician in 2016, assigned to ACO in 2017
  - HCC score based on 2016 diagnoses = 2.0
  - Responsible for 2017 spending after caring for patient in 2016
The relationship between assignment and changes in spending reinforces the importance of assignment:

- ACOs can achieve favorable selection if ACOs can retain healthy beneficiaries and shift out those with declining health status. This could result in overpayments by CMS.
- ACOs face a risk of adverse selection if beneficiaries first start to see ACO clinicians when the beneficiaries’ health status declines.

Retrospective assignment amplifies these risks

Prospective assignment may mitigate these risks to some extent
Recent regulations significantly changed the MSSP

- CMS is moving ACOs toward two-sided risk
- Shifting toward regional benchmarking
- Allow up to a 3% one-time increase in benchmarks due to coding
- Can choose retrospective or prospective assignment annually
- Can pay beneficiaries for wellness visits
- Increased risk of patient selection
Discussion

- Relationship between assignment and changes in health status
- Prospective vs. retrospective assignment
- Next steps
Association between changes in assignment and changes in spending

Percentage point difference in spending growth relative to the average in the market from 2012 to 2016

<table>
<thead>
<tr>
<th></th>
<th>Low-use areas</th>
<th>Medium-use areas</th>
<th>High-use areas</th>
<th>Overall average</th>
<th>Number of beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assigned to same physician ACO 2013-14-15</td>
<td>-4.6%</td>
<td>-5.5%</td>
<td>-6.3%</td>
<td>-5.6%</td>
<td>216,143</td>
</tr>
<tr>
<td>Assigned to same hospital ACO 2013-14-15</td>
<td>-0.6%</td>
<td>-2.4%</td>
<td>-6.4%</td>
<td>-2.3%</td>
<td>341,576</td>
</tr>
<tr>
<td>Switched in/out of an ACO 2013-14-15 or joined ACO in 2016</td>
<td>3.8%</td>
<td>3.5%</td>
<td>1.0%</td>
<td>3.1%</td>
<td>2,247,568</td>
</tr>
<tr>
<td>Never in ACO</td>
<td>-1.0%</td>
<td>-1.6%</td>
<td>0.2%</td>
<td>-1.3%</td>
<td>3,838,089</td>
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</tbody>
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