Measuring low-value care

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Overview

- Definition of low-value care
- Claims-based measures of low-value care
- We applied 31 measures to 2012 and 2013 Medicare claims
- Results of our analysis
- Potential policy directions
Low-value care

- **Definition**
  - Services with little or no clinical benefit
  - When risk of harm from a service outweighs potential benefit

- **Potential to harm patients**
  - Direct: Risks from low-value service itself
  - Indirect: Service may lead to cascade of additional tests and procedures that contain risks but provide little or no benefit

- Increases health care spending
Motivation for examining low-value care

- Several recent studies of low-value care
- Choosing Wisely: over 70 medical societies identified over 400 tests and procedures that are often overused
- Commission supports value-based insurance design (part of benefit redesign)
- When measuring quality, important to look at overuse in addition to underuse
Researchers developed claims-based measures of low-value care

- Articles in *JAMA Internal Medicine* (Schwartz et al. 2014 and 2015)
- Measures based on Choosing Wisely, USPSTF*, literature, other sources
- 2 versions of each measure
  - Broad (higher sensitivity)
  - Narrow (higher specificity)

*U.S. Preventive Services Task Force*
### Examples of low-value care measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Source</th>
<th>Broader version</th>
<th>Narrower version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imaging for nonspecific low back pain</td>
<td>Choosing Wisely</td>
<td>Back imaging w/diagnosis of low back pain</td>
<td>Excludes certain diagnoses; limited to imaging within 6 wks of back pain diagnosis</td>
</tr>
<tr>
<td>Colon cancer screening for older patients</td>
<td>USPSTF</td>
<td>Colorectal cancer screening for all patients aged ≥ 75</td>
<td>Only patients aged ≥ 85 w/no history of colon cancer</td>
</tr>
<tr>
<td>Head imaging for uncomplicated headache</td>
<td>Choosing Wisely</td>
<td>CT or MRI imaging of head for headache (not thunderclap or post-traumatic)</td>
<td>Excludes diagnoses that warrant imaging</td>
</tr>
</tbody>
</table>

Note: USPSTF (U.S. Preventive Services Task Force), CT (computed tomography).  
Source: Schwartz et al. 2014.
Our analyses of low-value care measures

- Last year, we applied 26 measures to 2012 data (100% claims)
  - Spending based on standardized prices from 2009
  - Presented results at April 2015 meeting; published in data book and March report
- This year, we applied 31 measures to 2012 and 2013 data
  - Updated standardized prices from 2009 to 2012
Our analysis of 31 low-value care measures: Aggregate results, 2013

- **Broader measures**
  - 38% of beneficiaries received at least one low-value service
  - 74 low-value services per 100 beneficiaries
  - Medicare spending on low-value care: $7.1 billion

- **Narrower measures**
  - 23% of beneficiaries received at least one low-value service
  - 35 low-value services per 100 beneficiaries
  - Medicare spending on low-value care: $2.6 billion

Data are preliminary and subject to change
Some categories of low-value care account for most of volume, spending

<table>
<thead>
<tr>
<th>Categories that account for most of volume</th>
<th>Broader version of measures</th>
<th>Narrower version of measures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Imaging</td>
<td>• Imaging</td>
</tr>
<tr>
<td></td>
<td>• Cancer screening</td>
<td>• Diagnostic and preventive testing</td>
</tr>
<tr>
<td>Categories that account for most of spending</td>
<td>• Cardiovascular tests/procedures</td>
<td>• Other surgical procedures</td>
</tr>
<tr>
<td></td>
<td>• Other surgical procedures</td>
<td>• Imaging</td>
</tr>
</tbody>
</table>
# Results for selected individual measures, 2013

<table>
<thead>
<tr>
<th>Measure</th>
<th>Broader version</th>
<th>Narrower version</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count per 100 patients</td>
<td>Spending (millions)</td>
</tr>
<tr>
<td>Imaging for nonspecific low back pain</td>
<td>11.9</td>
<td>$236</td>
</tr>
<tr>
<td>PSA screening at age ≥ 75 yrs</td>
<td>9.2</td>
<td>82</td>
</tr>
<tr>
<td>Colon cancer screening for older adults</td>
<td>8.4</td>
<td>443</td>
</tr>
<tr>
<td>Spinal injection for low-back pain</td>
<td>6.4</td>
<td>1,261</td>
</tr>
</tbody>
</table>

Data are preliminary and subject to change
Results probably understate volume and spending on low-value care

- Limited number of claims-based measures of low-value care
- Challenging to identify low-value care with claims data
- Spending estimates for low-value care don’t include downstream services that result from the initial service
- Study estimated that Medicare spent $145 million/year on PSA tests + related diagnostic services for men age ≥ 75 (Ma et al. 2014)
  - PSA tests accounted for 28% of spending
  - Biopsies accounted for 50%, pathology for 19%
Pioneer ACOs reduced low-value care compared with control group (Schwartz et al. 2015)

- Researchers compared change in use of low-value care between beneficiaries in Pioneer ACOs and control group of other beneficiaries
- 31 measures
- ACOs had greater reduction in volume (-1.9%) and spending (-4.5%) for low-value care relative to control group
Potential policy directions

- Payment/delivery system reform (e.g., ACOs)
- Quality measurement
- Medicare coverage policy
- Increase beneficiary engagement (e.g., cost sharing, shared decision making)