



*Advising the Congress on Medicare issues*

# Measuring low-value care

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# Overview

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- 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

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- 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

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- 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

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- 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)

# Examples of low-value care measures

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

# Our analyses of low-value care measures

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- 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

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- 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

# Some categories of low-value care account for most of volume, spending

	<b>Broader version of measures</b>	<b>Narrower version of measures</b>
<b>Categories that account for most of volume</b>	<ul style="list-style-type: none"><li>• Imaging</li><li>• Cancer screening</li></ul>	<ul style="list-style-type: none"><li>• Imaging</li><li>• Diagnostic and preventive testing</li></ul>
<b>Categories that account for most of spending</b>	<ul style="list-style-type: none"><li>• Cardiovascular tests/procedures</li><li>• Other surgical procedures</li></ul>	<ul style="list-style-type: none"><li>• Other surgical procedures</li><li>• Imaging</li></ul>

# Results for selected individual measures, 2013

Measure	Broader version		Narrower version	
	Count per 100 patients	Spending (millions)	Count per 100 patients	Spending (millions)
Imaging for nonspecific low back pain	11.9	\$236	3.4	\$68
PSA screening at age $\geq$ 75 yrs	9.2	82	5.2	47
Colon cancer screening for older adults	8.4	443	0.4	4
Spinal injection for low-back pain	6.4	1,261	3.3	654

# Results probably understate volume and spending on low-value care

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- 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  $\geq 75$  (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)

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- 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

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