



*Advising the Congress on Medicare issues*

# Measuring low-value care

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April 2, 2015

# Motivation for examining low-value care

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- Increased interest in measuring and reducing low-value care
- Literature: Colla 2014, Pohl et al. 2014, Schwartz et al. 2014, Welch et al. 2012
- Choosing Wisely campaign: 60 medical societies identified over 300 tests and procedures that are often overused
- Commission supports value-based insurance design (part of benefit redesign)
- Commission's analysis of potentially inappropriate imaging services (June 2014)

# Overview

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- Researchers (including physicians) developed 26 claims-based measures of low-value care
- We applied these measures to 2012 Medicare claims
- Results of our analysis
- Potential next steps

# 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
- Increases health care spending
- 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

# Researchers developed 26 measures of low-value care

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- Article published in *JAMA Internal Medicine* (Schwartz et al. 2014)
- Measures based on Choosing Wisely, USPSTF\*, literature, other sources
- Applied measures to 5% sample of Medicare claims (2009)
- 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	No diagnosis in claim that warrants imaging; imaging within 6 weeks 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)	No diagnosis in claim that warrants imaging

# Differences between our analysis and *JAMA Internal Medicine* article

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- We used later year (2012 vs. 2009), larger sample size (100% vs. 5%), and larger population (aged + disabled vs. aged only)
- Authors of article made small changes to some measures after publication

# Our analysis of 26 low-value care measures: Aggregate results, 2012

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- Broader measures
  - 65 instances of low-value care per 100 beneficiaries
  - 37% of beneficiaries received at least 1 low-value service
  - Medicare spending on low-value care: \$5.8 billion
- Narrower measures
  - 28 instances of low-value care per 100 beneficiaries
  - 21% received at least 1 low-value service
  - Medicare spending on low-value care: \$1.9 billion



# Results by category of low-value measures, 2012

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- Imaging and cancer screening measures accounted for ~70% of volume of low-value care (under broader and narrower measures)
- Cardiovascular testing & procedures and imaging accounted for most of spending on low-value care
  - Broader measures: 72% of spending
  - Narrower measures: 60% of spending

# Results for selected individual measures, 2012

Measure	Broader version		Narrower version	
	Count per 100 patients	Spending (millions)	Count per 100 patients	Spending (millions)
Imaging for nonspecific low back pain	12.0	\$224	3.6	\$67
Colon cancer screening for older patients	8.7	435	0.4	4
Head imaging for uncomplicated headache	3.8	248	2.6	167

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

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- There are a limited number of claims-based measures of low-value care
- Challenging to identify low-value care with claims data
- Thus, unable to measure full extent of low-value care with claims Spending estimates for measures of low-value care don't include downstream services that result from initial service

# Potential next steps

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- Publish rates of low-value care on regular basis
- Alter Medicare's coverage and payment rules to be consistent with evidence of low-value care
- Increase cost sharing for low-value care (e.g., value-based insurance design)