



Advising the Congress on Medicare issues

Measuring low-value care

Ariel Winter
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Motivation for examining low-value care

- 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

- 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

- 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

- 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 ≥ 75	Only patients aged ≥ 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

- 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

- 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

- 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

- 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

- 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)