Value-based purchasing in Medicare: early results and the unfolding future

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There is strong evidence that health care providers respond to certain incentives

Residents are more likely to choose higher paying specialties (Nicholson 2002)

Physicians are more likely to order images when they own the equipment (Shreibati and Baker 2011)

Hospitals are more likely to expand profitable service lines (Altman et al. 2007)
The use of financial incentives to encourage value is proliferating through Medicare

But does it work?
The optimal design of pay-for-performance programs is uncertain

Performance measures to incentivize

Accountable group to target

Criteria for rewards or penalties

Size of rewards or penalties
VALUE-BASED PAYMENT IN HOSPITALS
Hospital Quality Incentive Demonstration also had short term improvements in process, not outcomes

*Figure 1. Mortality at 30 Days among All Hospitals, According to Pay-for-Performance Status, 2002–2009.*

Source: Jha et al. NEJM 2012
Hospital Value-Based Purchasing is the first national pay-for-performance program in the US

Figure 2. Example of Hospital Earning Points by Achievement or Improvement, Clinical Process of Care and Outcome Measure Scoring Under Three-Domain Performance Scoring Model

Measure: AMI-7a – Fibrinolytic Therapy

Hospital earns: 6 points for achievement
7 points for improvement
Hospital score: maximum of either achievement or improvement
= 7 points on this measure

Scoring is based on both achievement and improvement

Source: Author’s analysis
HVBP did not improve clinical process and patient experience performance in its first year.

Source: Author’s analysis
Hospitals may have improved performance in anticipation of HVBP

Clinical process: Assume effects started in July 2009

- **July 2011**: Performance begins to be subject to financial incentives
- **May 2011**: Final Rule for FY 2013 of HVBP was published
- **March 2010**: ACA initiated HVBP
- **November 2007**: Report to Congress outlining HVBP
Financial impact tended to be minor in the first two years of HVBP.

2013 financial impact ($ in thousands)

2014 financial impact ($ in thousands)

N 2013=2,981
N 2014=2,728
How large would incentive payments need to be for it to be “worth it” to try to improve performance?

A. It is already worth it for us to try improve performance
B. Between 2% and less than 5% of Medicare payments
C. Between 5% and less than 10% of Medicare payments
D. 10% or more of Medicare payments
Do you think that your hospitals’ attention to improving performance on measures incentivized in Hospital Value-Based Purchasing will result in better or worse performance on any un-targeted measures?

A. Substantially better performance for un-targeted measures
B. Substantially worse performance for un-targeted measures
C. Not large difference
D. Don’t know
Do you think that other payment reform efforts (Accountable Care Organization programs, Meaningful Use of electronic health records, penalties for readmissions, penalties for hospital acquired infections, bundled payment demonstrations) performance for Hospital Value-Based Purchasing, detract from these efforts, or make no difference?

A. These initiatives *complement* Hospital Value-Based Purchasing

B. These initiatives *detract* from Hospital Value-Based Purchasing

C. These initiatives make no difference to improvement efforts under Hospital Value-Based Purchasing
VALUE BASED PAYMENT IN MEDICARE ADVANTAGE
In 2012, CMS implemented Medicare Advantage Quality Bonus Payment Demonstration (MA QBP)

- Decreased base payments to MA insurers, added quality-based bonuses
  - Bonuses are large: 3-10% of plan revenue
  - Based on overall rating calculated from clinical quality measures and patient satisfaction
- First program to incentivize quality for health insurance plans
Benchmark prior to MA QBP

$814.36
Benchmark after MA QBP

- 2-star Plans: $786.42
- 3-star Plans: $810.30
- 4-star Plans: $818.25
- 5-star Plans: $826.21

Total: $814.36
Benchmark after MA QBP

- 2-star Plans: $786.42
- 3-star Plans: $810.30
- 4-star Plans: $818.25
- 5-star Plans: $826.21
CMS designates some counties as “double bonus” counties

• Bonuses are doubled
  – (3 star-6%, 5 star-10%)
• 3 requirements for double bonus status:
  – Lower than average fee-for-service Medicare costs in 2012
  – Designated as urban floor county in 2004
  – MA penetration rate of 25% or greater in Dec 2009
We saw no evidence that the receipt of double bonuses increased quality.
Double bonuses were associated with increased plan offerings
VALUE-BASED PAYMENT FOR PHYSICIANS
Physician Value-Based Payment Modifier (PVBPM) is rolling out to all practice

<table>
<thead>
<tr>
<th>Measurement year (CY)</th>
<th>Payment adjustment year (CY)</th>
<th>Size of practice exposed to PVBPM</th>
<th>Maximum payment adjustment*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>2015</td>
<td>100 or more eligible providers</td>
<td>-1% /+2%</td>
</tr>
<tr>
<td>2014</td>
<td>2016</td>
<td>10 or more eligible providers</td>
<td>+/- 2.0%^</td>
</tr>
<tr>
<td>2015</td>
<td>2017</td>
<td>All practices</td>
<td>+/- 4.0%†</td>
</tr>
<tr>
<td>2016</td>
<td>2018</td>
<td>All practices</td>
<td>TBD</td>
</tr>
</tbody>
</table>

Note: *Larger penalties are possible if physicians and practices do not participate satisfactorily in the PQRS. Maximum upward adjustments may exceed downward adjustments.
^Practices of 10 or more cannot receive a downward adjustment
† For practices with 1-9 physicians, downward adjustments are only for non-reporting, maximum upward adjustments are 2%
PVBPM incentive structure rewards quality and cost performance simultaneously

<table>
<thead>
<tr>
<th>Quality</th>
<th>Low cost</th>
<th>Average cost</th>
<th>High cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>High quality</td>
<td>+2.0x*</td>
<td>+1.0x*</td>
<td>0.0</td>
</tr>
<tr>
<td>Average quality</td>
<td>+1.0x*</td>
<td>0.0</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Low quality</td>
<td>0.0</td>
<td>-0.5%</td>
<td>-1.0%</td>
</tr>
</tbody>
</table>

Note: Payment adjustments based on 2013 performance for practices with 100 or more eligible providers; Upward payment adjustment factor (x) will be solved to ensure budget neutrality.
Patients are assigned to practices using the two-step Medicare Shared Savings attribution rules

1. Patients are assigned to the practice that provides the plurality of primary care services
   – Plurality of services are determined by total Part B billings
   – Practices are defined by their TIN

2. If patients do not receive any primary care services from a primary care physician:
   – Assignment is based on primary care services provided by specialists or advanced practitioners (e.g. nurse practitioners or physician assistants)
Most quality measures are related to effective clinical care

Examples of measures:

- Percentage of patients 18-75 years of age with diabetes who had hemoglobin A1c > 9.0% during the measurement period
- Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who were prescribed aspirin or clopidogrel
- Percentage of breast cancer resection pathology reports that include the pT category (primary tumor), the pN category (regional lymph nodes), and the histologic grade
- Percentage of patients aged 18 years and older who were screened for unhealthy alcohol use at least once within 24 months using a systematic screening method
- Percentage of new patients whose biopsy results have been reviewed and communicated to the primary care/referring physician and patient by the performing physician
- Percentage of patients 65 years of age and older who were screened for future fall risk at least once during the measurement period.
The PVBPM will also incentivize performance for three claims-based outcome measures

• **Acute prevention indicators**: Hospital admissions for bacterial pneumonia, urinary tract infection, and dehydration

• **Chronic indicators**: Hospital admissions and complications related to diabetes, chronic obstructive pulmonary disease, and heart failure

• **30-day hospital readmission rates**
Costs will be assessed using 5 measures

1. Total per-capita costs
   • Per-capita cost measures for patients with:
     2. diabetes
     3. chronic obstructive pulmonary disease
     4. heart failure
     5. coronary artery disease
Proposed SGR fix would have created an integrated physician value-based purchasing program

• Would have combined incentives under:
  – Meaningful Use
  – The Physician Quality Reporting System (PQRS)
  – PVBPM
• Approximately 10% of fee-for-service revenue would be at risk
• Bonus payments for providers receiving >=25% of Medicare revenue from alternative payment models
• Deal fell through, but could be renewed in future negotiations

Source: Weissfeld. 2014. “Fool me once, shame on you. Fool me 17 times, it’s the SGR” The Advisory Board
Important questions for the future of value-based purchasing

• How large do incentives – both bonuses and penalties – need to be to lead to provider behavior change?
• What types of providers will be most responsive to value-based purchasing?
• Can value-based purchasing be designed to simultaneously improve quality and reduce cost growth?
• Will the unintended consequences of value-based purchasing undermine any positive effects?