Beyond the Score:

Using VBP Methodology for Quality Improvement and Financial Decision-Marking

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Do you know...?

- **True or False:** It is possible for one hospital to get the same number of or more points for a lower absolute performance score on a measure than another hospital would get for higher performance on the same measure?

Do you know…?

- How much does each measure contribute to the overall VBP score?
  - All measures contribute equally
  - The percent of contribution is relative to a facility's score on each measure
  - The relative weight of the satisfaction measures is higher than the clinical measures
  - The clinical measures count more than the satisfaction measures
  - The percent of contribution is calculated according to a facility's potential to improve

Do you know...?

- Value-based purchasing affects witch component of Medicare reimbursement?
  - A facility's annual payment update
  - A facility's baseline DRG payment
  - Both the annual payment update and the baseline DRG payment

Do you know…?

- Which measures are the best candidates for improvement initiatives?
    - Topped-out measures where my performance is low
    - Non-topped out measures where my performance is already high because there are still rewards for maintaining high levels of performance
    - Non-topped out measures that are easy to improve
    - Non-topped out measures that are more difficult to improve

The Quality Indicator Project

- Provide quality measures reporting and analysis software and related services

   "It's not the data. It's what you do with it."

- Nonprofit organization

- 600+ hospital clients throughout U.S.

- Unit of the Maryland Hospital Associatio

National Background

- President's current proposal for Health Care Reform based on the Senate bill plus other items

- Value-based Purchasing included in Senate Bill

- Challenge of the amendment process

- Since VBP is a budget neutral program, it may be in danger for the reconciliation process

Senate Bill: VBP Key Elements

- Funding generated through reducing Medicare IPPS payments to hospitals

- Reductions apply to all MS-DRGs

- Incentive pool to be phased-in
  - 1.0% in FY2013
  - 1.25% in FY2014
  - 1.5% in FY2015
  - 1.75% in FY2016
  - 2.0% in FY2017

- Hospitals earn back part of the withheld payments based on performance

Senate Bill: VBP Key Elements

- Measures selected from those now used for public reporting and the Medicare APU

  - Clinical measures (AMI, HF, PN, SCIP)

  - Patient satisfaction (HCAHPS)

- Subsequent expansion of measures – additional clinical area(s), outcome and efficiency measures

Maryland Background

- Medicare Waiver State
- P4P implemented in Maryland by Health Services Cost Review Commission in 2008
- Includes
  - Clinical process and satisfactions measures
  - Hospital acquired conditions
  - Preventable readmissions planed for 2010

Impetus and Mandate

- Approached by key customers to collaborate on development of reports. Their goals:
  - Highlight the financial implications and the need to act prior to VBP implementation
  - Increase awareness and buy-in among leadership for quality improvement
- Develop a meaningful VBP reporting tool to complement existing analytics
- Facilitate strategic response to VBP

Phases of Development

- Initial development phase (alpha test)
  - Educating stakeholders
  - Developing initial VBP reports
  - Teaching interpretation
- Pilot phase (beta test)
  - Business requirement gathering
  - Determine key elements of interactive modeling tool

Educating Stakeholders:
Whom we talked to; What we found

- Stakeholders
  - Quality department
  - Executive leadership
  - Patient satisfaction team
  - Government relations
- Overall understanding of concept of pay for performance but scant knowledge relating to methodology and potential implications

Quick Review of Fundamentals

- VBP score a reflection of performance on a combination of clinical and satisfaction measures

- Performance on clinical measures contributes 70% of overall score

- Performance on satisfaction measures contributes 30% of overall score

Step 1: Determining Measure-level Scores Based on Attainment or Improvement

- Each measure scored on attainment **and** improvement, higher of the two is used in overall VBP score calculation

- Each measure may earn 0 to 10 points

- Additional 20 points may be awarded for all satisfaction being above a certain threshold – supplemental reward for doing well on all 8 satisfaction measures
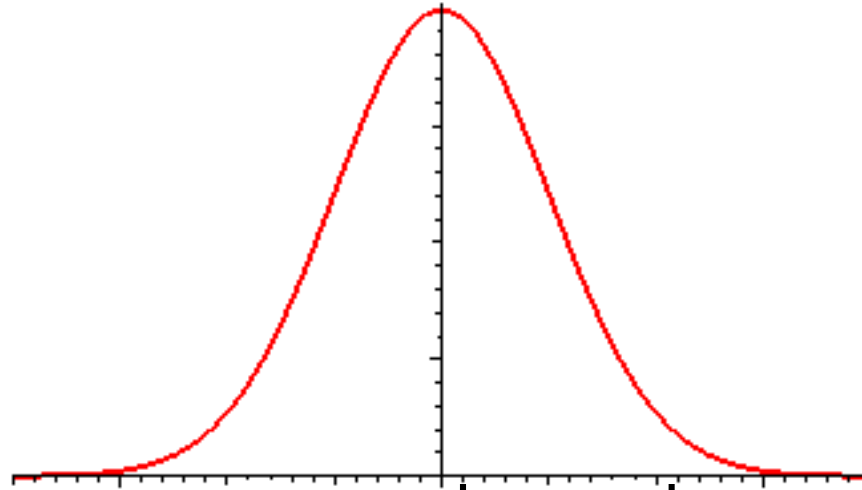
Attainment Threshold and Benchmark

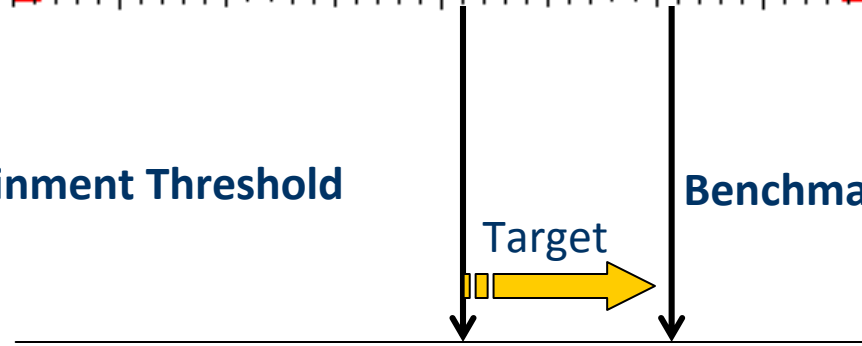| Measure Designation	Benchmark	Attainment Threshold
Non topped- out	Mean of top decile	50th percentile
Topped-out	90% performance	60% performance
HCAHPS	95th percentile	50th percentile

Scoring on Attainment

Baseline (e.g., 2008)

Attainment Threshold

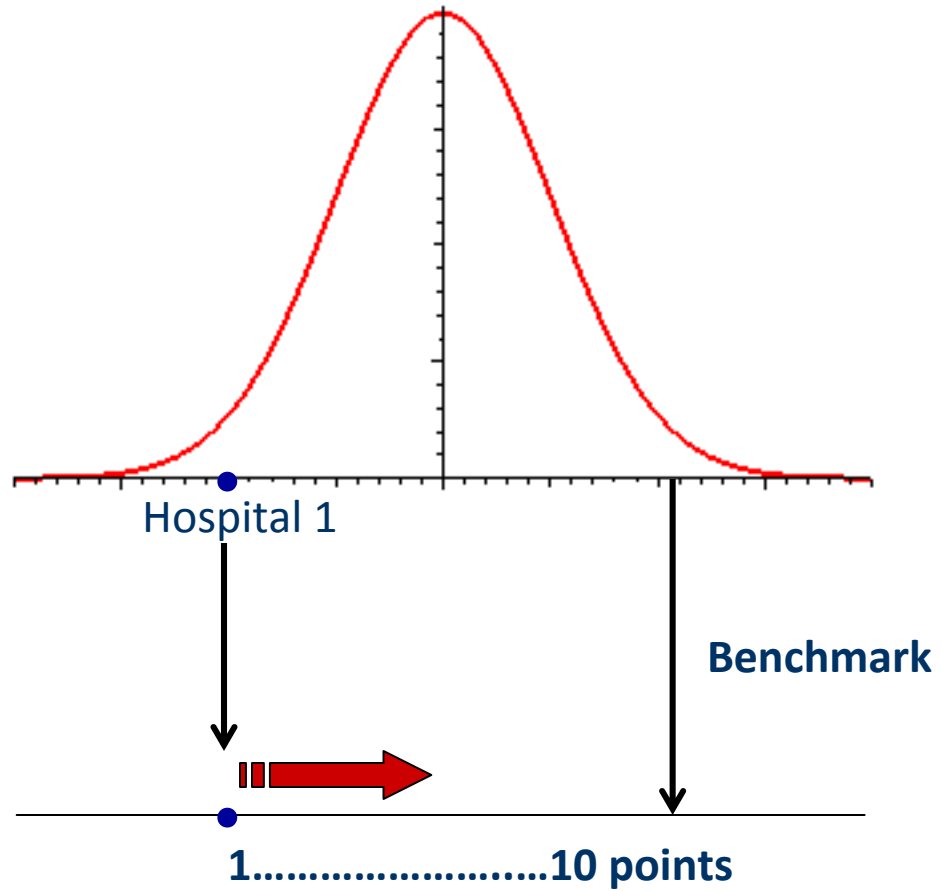**Benchmark**

Performance (e.g., 2009)

Target

1…………10 points

Scoring on Improvement

Baseline (e.g., 2008)

Hospital 1

Benchmark

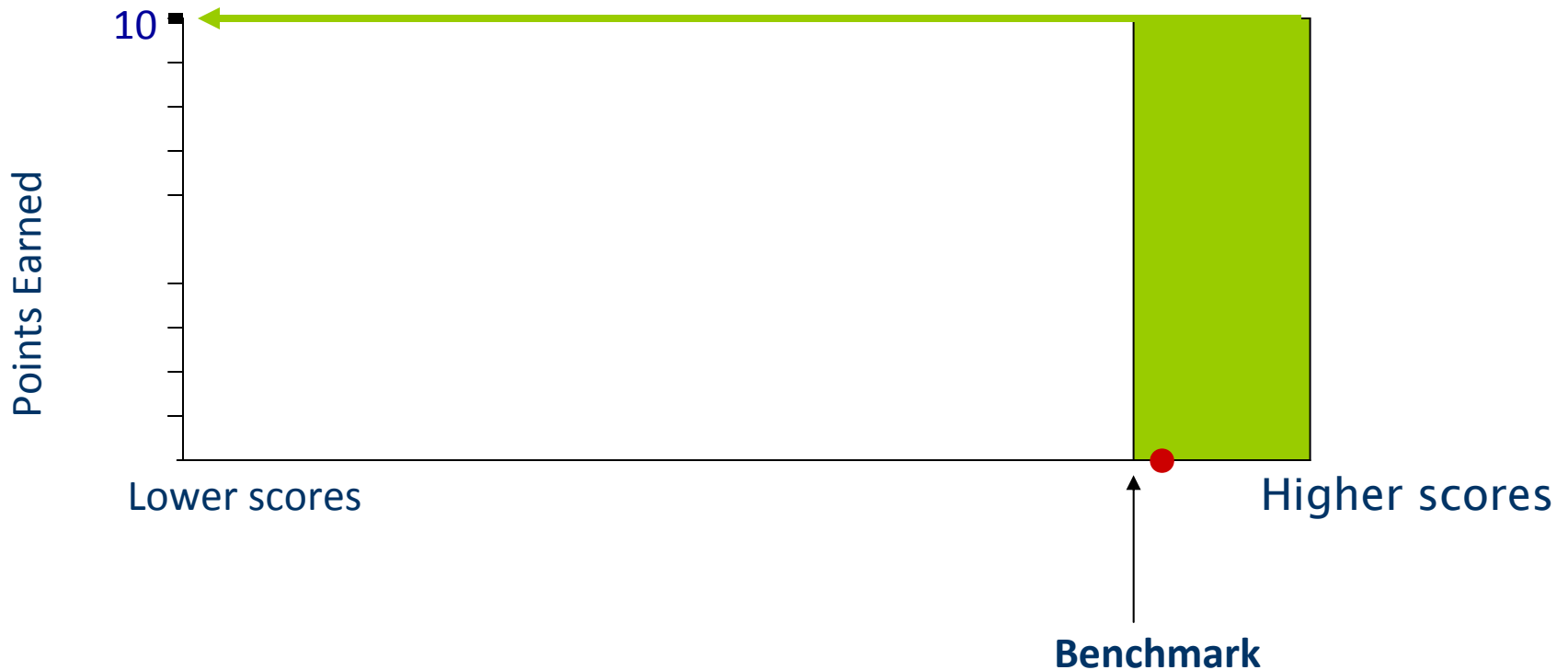Performance (e.g., 2009)

1…………………..10 points

Scenario 1

Attainment above Benchmark

Hospital exceeds benchmark and earns 10 points

Scenario 2

Attainment beyond Threshold, but below Benchmark

Hospital earns 5 points due to attainment

Points Earned

10

5

Lower scores

1 2 3 4 5 6 7 8 9 10

Higher scores

Attainment threshold

Benchmark
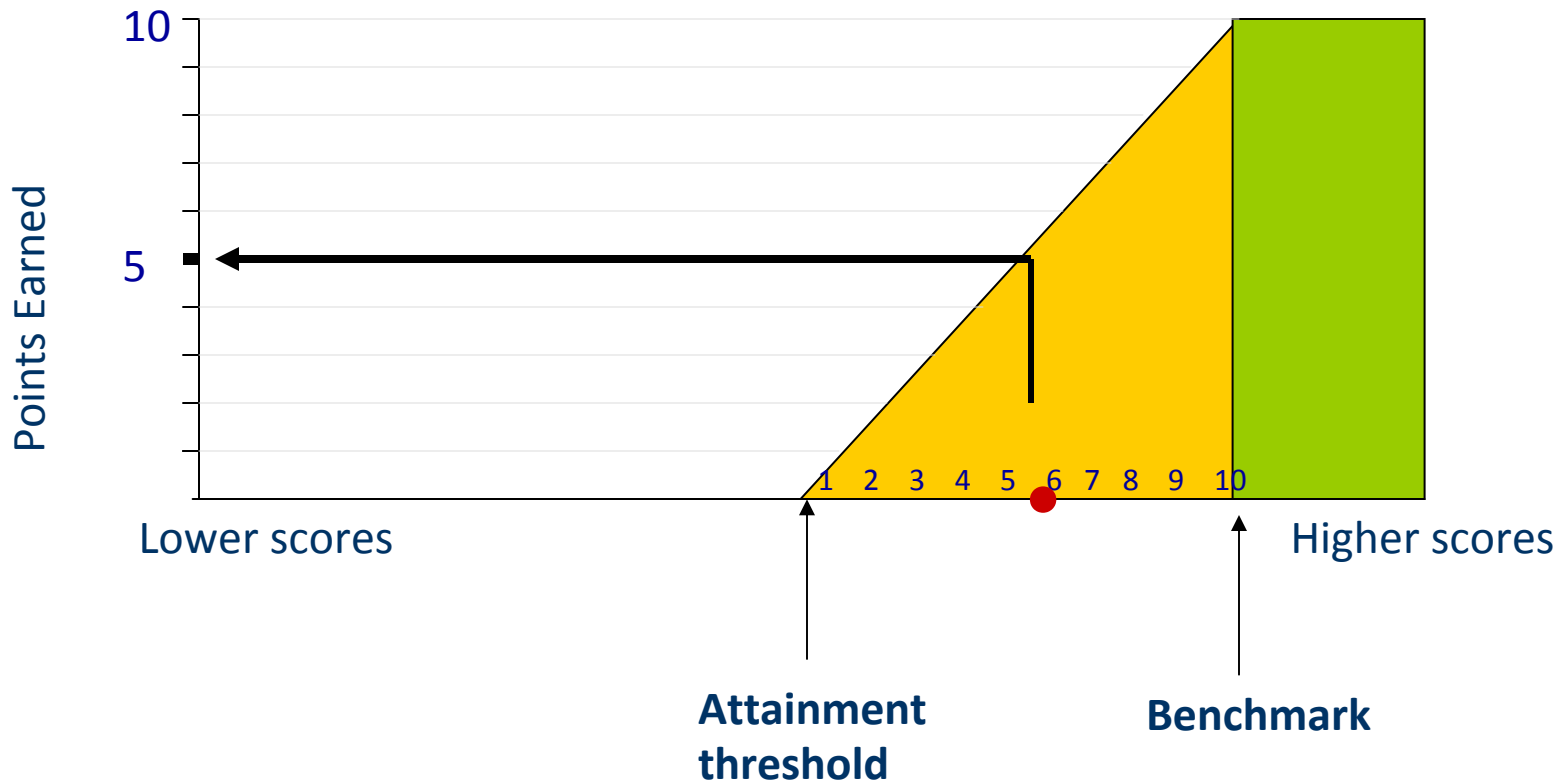
Scenario 3

Performance below Attainment Threshold

Hospital earns 5 points due to improvement

Points Earned

10

5

Lower scores

1 2 3 4 5 6 7 8 9 10

Higher scores

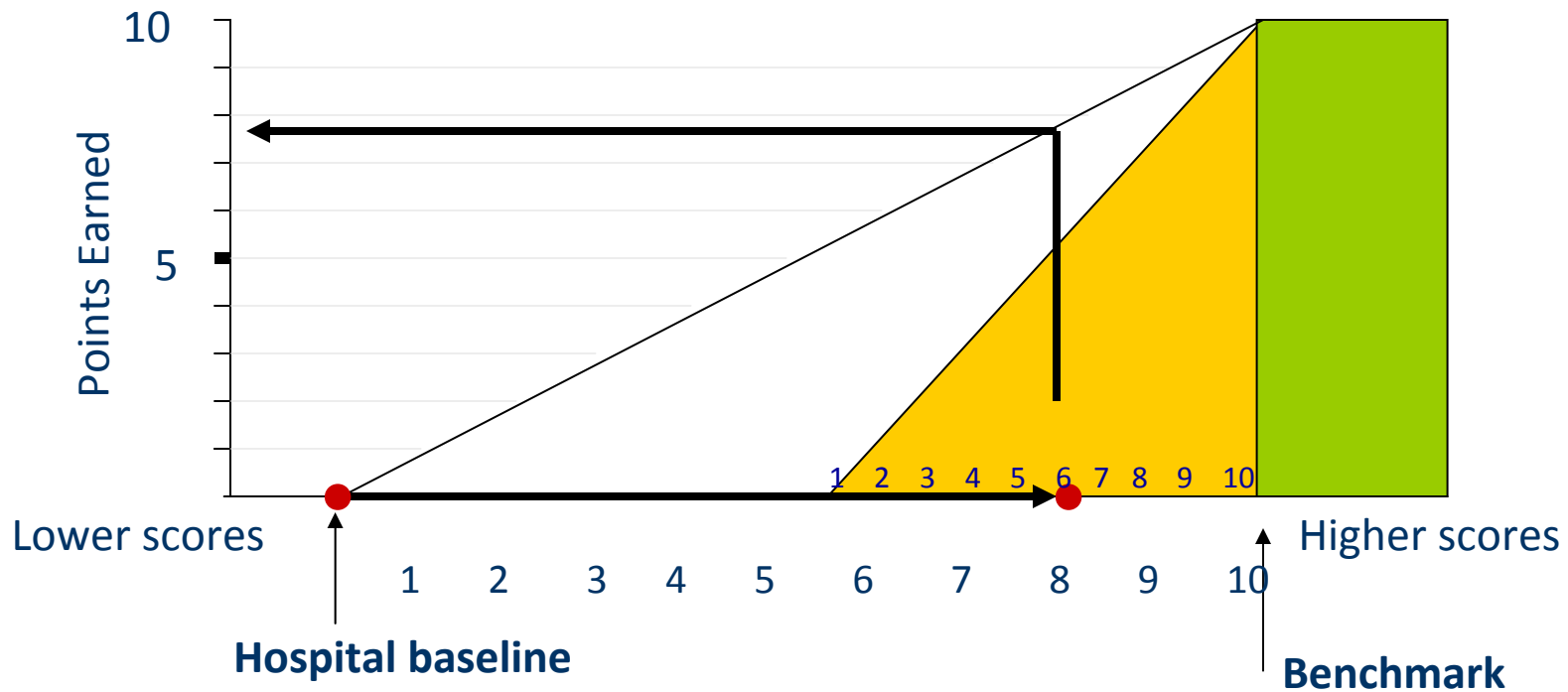**Hospital baseline**

Benchmark
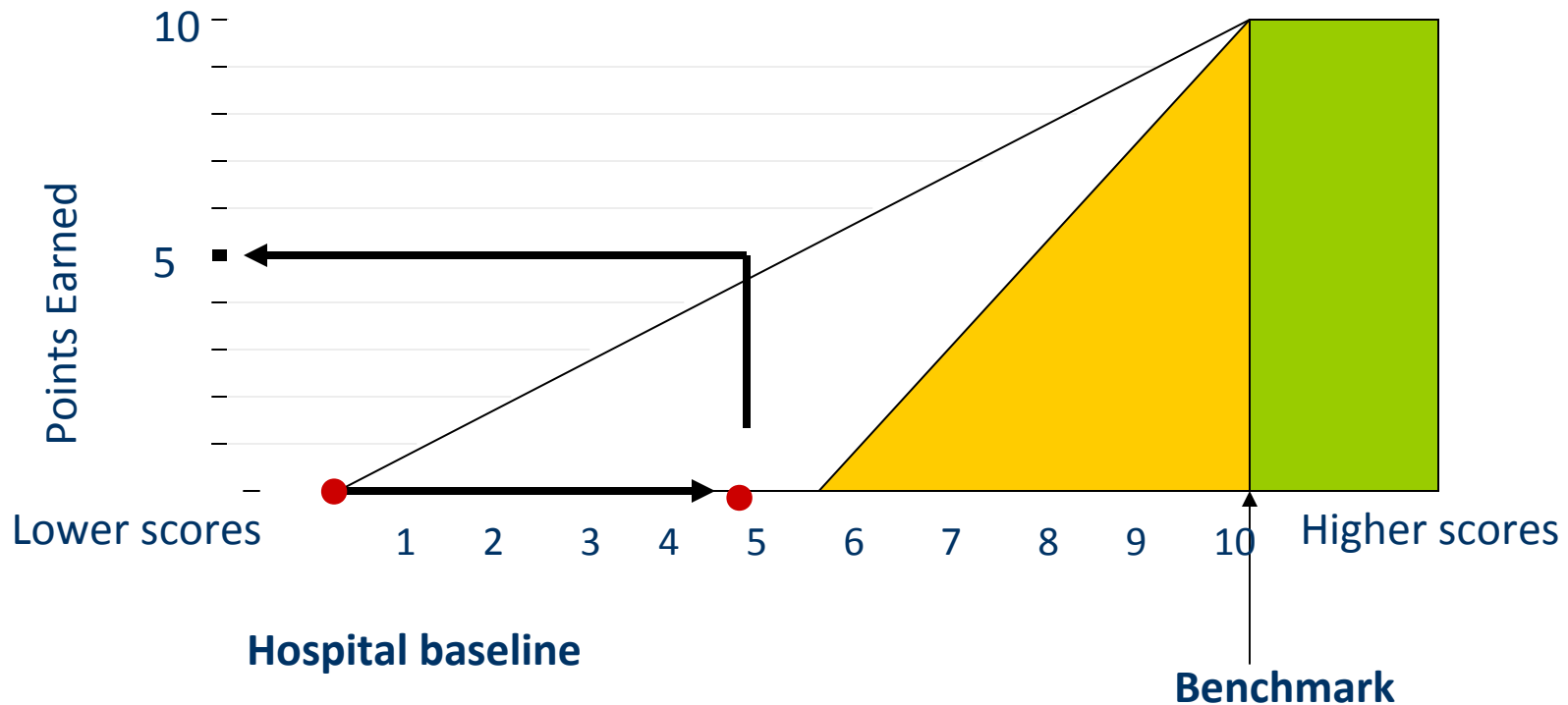
Scenario 4

The Greater of Attainment or Improvement

Hospital <u>attains</u> the same level as hospital under scenario 2

But, hospital earns about 8 points due to <u>improvement</u>

Step 2a: Calculating the Clinical Score

- Any given hospital might report on some or all of the individual measures

- Each hospital has its own maximum potential points (measures reported, multiplied by 10)

- Overall score for each hospital is the number of earned points as a percentage of its maximum potential points

Step 2b: Calculating the Satisfaction Score

- Total earned points = sum of points earned across all dimensions plus minimum performance points earned

  - Additional 20 points awarded for having all 8 dimensions above a minimum threshold

- Total earned points (100 max) = up to 10 for each of 8 dimensions plus up to 20 minimum performance points

Step 3: Final Score

- Overall VBP score is calculated by weighting the clinical score 70% and the satisfaction score 30%

Step 4: Converting Scores into Payment

- Exchange function determines percentage of Medicare MS-DRG withhold earned back
- Includes threshold and benchmark

Linear Exchange Model

Graph

Phase 1 (Alpha)

- Report development

- Report feedback

- Presentation to and feedback from executive leadership

Developing Draft Report

- Developed collaboratively with industry experts in VBP, Statistics, Quality Improvement

- Primary challenge: Displaying complex methodology in meaningful way

- Objective: Reports that are Graphic, Meaningful, and Comprehensive

- Draft Report "guinea pig": Cleveland Clinic

Reports Objective

- How performance on each individual measure contributes to clinical and satisfaction scores (i.e., how lagging performance contributes to loosing reimbursement)

- Amount of reimbursement at stake on each measure

- How overall clinical and satisfaction scores contribute to overall VBP score

- Facility's scores in comparison to others'

- Percentage and amount of reimbursement earned back

The Key Summary Elements

- Clinical Score

- Satisfaction score

- Overall Score

- Exchange Function

Methodology Recap

- Each measure score individually on attainment and improvement

- Thresholds determined differently for topped out clinical measures, non-topped out clinical measures, and satisfaction measures

- Summary scores for clinical and satisfaction measures calculated and combined 70%/30% to calculate overall score

- Exchange function determines earned back reimbursement

Hospital Comparison

Graph

Summary Page

Graph

Clinical Measures

Graph

Satisfaction Measures

Graph

Financial Impact

Graph

Overall Score and Exchange Function

Graph

Individual Measure Scores

Delivering the Reports and their Content

- Distributed reports to each facility within Cleveland Clinic's system

- Conducted WebEx sessions to review reports
  - Quality department
  - Patient satisfaction
  - Outcomes research
  - Government relations

- Presented to Cleveland Clinic leadership including CFO

Delivering the Reports and their Content

- Conducted session with financial modeling expert

- Conducted on site visit
  - Meetings with Quality Department
  - Financial modeling expert
  - Outcomes research team

Challenges to Address in Next Round

- Two distinctly different audiences
  - Executive leadership
  - Quality improvement
- Complexity of methodology
- Balancing explanations and feedback
- Using a modified phased approach similar to alpha testing

Phase 2: Beta Testing

- Multiple system/hospital

- Advance VBP "Quiz"

- Initial educational session

- Distribution of hospital specific VBP reports

- Feedback session

Hospital/System Selection

- Baptist Healthcare

- CHRISTUS Health System

- SSM Health System

- OSF Health System

- St. Luke's Health System

- Lifespan

- Hospital Sisters Health System

Advance VBP "Quiz"

- Web-based

- 10-question, multiple choice survey

- Purposes
  - Establish how much the system/hospital leaders already understand about VBP, thus allowing the initial session to be tailored for the group
  - Give QI Project a sense for the overall level of understanding about VBP among hospital leaders generally

Sample Questions

- How much does each measure contribute to the overall VBP score?

- What facilities will comprise your facility's comparison group?

- Value-based purchasing affects witch component of Medicare reimbursement?

VBP Quiz Results

- Mixed results

- Although many understand the overall concept, there is lack of knowledge of important aspects

- Satisfaction scores particularly challenging (percentile methodology)

Educational Session

- Review the results of the quiz

- Discuss key aspects of VBP
  - Impact on reimbursement
  - Score calculation
  - How to strategize under VBP to maximize reimbursement
  - Review the current format for QI Project VBP reports

Educational Challenges

- Balancing the need to provide sufficient content information for meaningful discussion while still receiving user feedback on technical aspects of reports

Report Distribution

- Individual reports for hospital

- One comparative summary

- Immediately following Session 1

- Reports are accompanied by instructions for reviewing the reports

Comparative Summary

Graph

Hospital Report

Graph

Feedback Session

- One week after Session 1

- Structural aspects of the report
  - Layout, content, format
  - Optimal timing for such reports
  - Comparison groups
  - Predictive modeling
  - Potential need for education/consultation to accompany this information

Layout, Content, Format

- Generally highly satisfied
- Potential need for 2 tier report
  - Summary report with focus on financial implications
  - Detailed report with focus on performance improvement

Summary Report

- Intended for CFO, executive leadership

- Establish financial implications of overall performance, satisfaction vs. clinical, and individual measures

- Project revenue implications

- Support and inform executive leadership for performance improvement

- Weigh investment in performance improvement versus financial gains

Detail Report

- Detailed information on each measure
- Gage exactly how much improvement would lead to how many additional points and revenue
- Supports decision making about resources versus benefit
  - Time to PCI
  - Vaccinations

Optimal Timing of Reports

- Leadership
  - Annual reports sufficient
  - Since reports are based on rolling years, 75% of data the same from quarter to quarter
  - Relatively subtle changes, quarter to quarter

- Performance improvement
  - Need for more frequent reports to supplement other scorecards and reports provided by QI Project

Comparison Groups

- National comparison for each measure crucial
  - VBP based on national comparisons
  - Basis for thresholds for next FY report

- Custom comparisons
  - Of particular interest to Cleveland Clinic
  - Asked for comparison to 8 facilities

Scenario Planning

- Evaluate improvement opportunities and financial rewards

- Wide range of effort and costs, depending on area targeted for improvement
  - ACE for Heart failure
  - Postoperative glucose control
  - Door-to-balloon time for AMI

Scenario Planning

- Estimate
  - Own ability to improve performance
  - Improvement on scores by comparison group
- Model
  - Scores for hospitals in the comparison group
- Calculate
  - Improved own scores
  - Financial reward

Predictive Modeling

- Modeling comparison group's individual measure, summary scores, and exchange function

- Challenging given the nature of the data
  - Rolling quarters

Summary Plots of
Observed vs. Forecasted VBP Score

Graphs

Education/Support

- Clear need for
  - Detailed glossary of terms
  - Executive summary highlighting key findings for facility
  - Educational sessions
    - Methodology
    - Financial model

Questions?

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