Quality-Related Payment Policies
HSCRC Waiver Implementation
February 28, 2014

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Presentation Overview

- Quality-Based Reimbursement
- Readmissions
- Potentially Avoidable Utilization
- Maryland Hospital Acquired Conditions

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Quality-Based Reimbursement

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Quality-Based Reimbursement

- MHA supported January 2014 Quality-Based Reimbursement (QBR) final recommendations that updated existing policy to ensure the program meets or exceeds the national Medicare policy on Value-Based Purchasing
- 1.0 percent of inpatient revenue will be “at risk” based on performance and applied to 2016 rates
- Recommendations:
  - Publish any changes to methodology details for CY 2014 performance (e.g., transfer-in logic for mortality measure)
  - Reconvene HSCRC’s QBR work group in July to discuss revisions for CY 2015
    - Mortality (use of age cohort; transfers-in to include only acute care; adjust for one-day stays)
    - Weighting of domains

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Readmissions

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Readmissions

- Waiver Target: Maryland must be at or below the national average Medicare readmission rate by the end of the five year demonstration period
- Maryland must "close the gap" that exists in CY 2013 between Maryland and the nation by one-fifth of the difference each year

	National Medicare						Maryland Medicare				
	Admissions	RA	RA rate	Percent rate change	Percent change in number of RAs		Admissions	RA	RA rate	Percent rate change	Percent change in number of RAs
FY 2010	11,043,196	2,049,473	18.56%				253,320	54,019	21.32%		
FY 2011	11,129,694	2,070,250	18.60%	0.23%	1.01%		248,731	52,032	20.92%	-1.90%	-3.68%
FY 2012	10,857,862	1,991,886	18.35%	-1.38%	-3.79%		241,681	49,100	20.32%	-2.88%	-5.63%
FY 2013	10,458,098	1,847,036	17.66%	-3.73%	-7.27%		235,532	45,244	19.21%	-5.45%	-7.85%
CY 2013		1,779,878	17.33%	-1.86%	-3.64%			43,467	18.69%	-2.72%	-3.93%

Readmissions

Closing the Gap

- Maryland RA rate – National RA Rate = 1.55 percentage points
- 1.55/5 = 0.31 percentage points per year

	National readmission rate	Maryland readmission rate	Maryland percent change prior yr	Pct point difference	Percent difference
FY 2013	17.66%	19.21%		1.55%	8.76%
FY 2014	17.66%	18.90%	-1.61%	1.24%	7.01%
FY 2015	17.66%	18.59%	-1.64%	0.93%	5.26%
FY 2016	17.66%	18.28%	-1.67%	0.62%	3.51%
FY 2017	17.66%	17.97%	-1.69%	0.31%	1.75%
FY 2018	17.66%	17.66%	-1.72%	0.00%	0.00%

Readmissions—Statewide Goals

Beyond closing the gap, Maryland will need to keep pace with the national readmission rate improvement

- It is unclear how much improvement can be expected nationally
  - Medicare readmission payment policies continue to penalize for readmissions above “expected”
  - National readmission payment policy has been in place since October 2012
  - When will national readmission rates stop declining?
  - As hospitals reduce avoidable admissions and move utilization to lower acuity settings, the inpatient severity of illness is likely to increase and readmission increases are likely to follow
- Set statewide quality improvement targets annually

Readmissions—Hospital Specific Goals

Comparing hospitals' readmission rates to one another or to a benchmark standard results in erroneous conclusions

- High readmission rates associated with:
  - Limited relationships and coordination with community partners
  - More challenging social and economic circumstances
  - Limited access to primary and specialty care
  - Patients with higher prevalence of chronic conditions and more severe illnesses
  - Lower use of "observation"
- Low readmission rates associated with:
  - Better care transitions
  - Careful discharge and follow up planning
  - Location near a state border
  - Readmissions to other hospitals
  - Higher use of "observation"
  - Lower severity of illness
  - Patient population with fewer social needs and more resources

Readmissions—Hospital Specific Goals

- Experts do not yet agree on how to adjust for risk of readmission—severity of illness, age, payer mix, socioeconomic status affect rates
- Interventions must target specific needs of the patient population—the same strategy does not work for all
- Data availability can limit the choice of readmissions metric
  - Readmissions to other Maryland hospitals (addressed with a unique Maryland ID)
  - Readmissions that occur outside the state (requires patient-level data from the payer; e.g., Medicare, commercial plan)
  - Without this information, only intra-hospital readmission rates can be calculated

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Readmissions—Hospital Specific Goals

- Hospitals need access to timely and complete data to monitor payment metrics
  - CRISP readmission data is a valuable tool for quality improvement interventions. The data source is from hospital registration systems.
  - It does not, and cannot match exactly a payment policy since payment is determined by a patient's status at discharge, not at time of registration
  - In the future, it could be possible for CRISP to receive monthly case-mix data, apply the unique ID, calculate an inter-hospital readmission metric and provide that information to all hospitals by the end of the following month.

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Readmissions: MHA Recommendations

- Global budgets provide a strong incentive to reduce readmissions—no additional incentive is needed, especially in the first year
- Continue work to develop a readmissions payment policy if Maryland's progress on readmissions is not sufficient
- Establish a payment policy before the start of the performance period

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Readmissions: MHA Recommendations

- When a payment policy is established, the metric should match the waiver metric as closely as possible
  - Medicare only
  - Inter-hospital—only if data available
  - Consider stratifying hospitals in lieu of risk adjustment
  - Make sure psychiatric and rehabilitation admissions are out
- Address concerns about influence of “observation” and out-of-state or inter-hospital readmissions by monitoring inter-hospital readmissions and an “observation” metric

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Potentially Avoidable Utilization

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Potentially Avoidable Utilization

- Assess potentially avoidable utilization opportunities using AHRQ Prevention Quality Indicators (PQIs)
- AHRQ recommends measuring PQIs at the population level as an indication of where to focus resources
- AHRQ does not recommend using PQIs at the hospital level, or for payment
- The health status of the hospital's community and its access to primary care drive the PQI rate

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FY 16 MHAC Methodology Redesign
HSCRC Performance Measurement Work Group
February 20, 2014

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Maryland Hospital Acquired Conditions

- Background: Reason to change, guiding principles, timing
- Measurement Methodology
- Payment Methodology
- Remaining Issues to Address

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Maryland Hospital Acquired Conditions

Background

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Why Change Existing Policy?

- Use of 3M Proprietary Software: Potentially Preventable Complications (PPC)
- Waiver Goal: 30% reduction in all 65 PPCs
- Target list of 20 PPCs—high volume, high cost, opportunity for improvement and areas of national focus
- Revenue at risk commensurate with CMS policies

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Guiding Principles

- Meet CMS waiver test and goals on an annual and long-term basis
  - Focus on areas of greatest opportunity
  - Match payment metric to policy goal
- Predetermined performance targets and financial impact
- Encourage cooperation and sharing of best practices
- Do not penalize a lack of improvement if attainment is highly favorable
- Ability to track progress

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Implementation Timing

Waiver Goal for Complication Reduction

- CY 2013 base period
- Measurement period began January 2014
- 30% cumulative reduction by 2018

Maryland Hospital Acquired Conditions Policy

- FY 2013 base period
- CY 2014 first measurement period

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Measurement Methodology

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Components of Redesign

- Measurement Methodology
  - All 65 PPCs vs current 50 PPCs
  - Selecting PPCs for focus
  - Design and calculation of “MHAC Score”
  - Thresholds and benchmarks
  - Better of **attainment** or **improvement** score
- Payment Methodology
  - Translating score to payment impact

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MHAC Score Design Options

Ideally, measure would be similar to Waiver Goal metric

	Definition	Risk Adj	Vol Adj
Total # MHACs	# Actual MHACs	N	N
Unadjusted MHAC Rate	# Actual ÷ At Risk Cases	N	Y
O/E Ratio	# Actual ÷ # Expected	Y	Y

Observed to expected ratio
Lower numbers are more favorable

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Target PPC List

- 20 PPCs
- High volume, high cost, and opportunity for improvement and national focus
- Heavier weight than non-target PPCs

Since target PPCs are those with high cost and high volume statewide, reducing these will contribute more to the overall waiver goal

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Target PPC List: Top 10 by Volume * Cost

PPC	ALL PAYER PPC Description	PPCs Expected	PPCs Actual	PPC Weighted Impact
PPC 4	Acute Pulmonary Edema and Respiratory Failure with Ventilation	1,069.72	1,209	$ 39,634,647
PPC 65	Urinary Tract Infection without Catheter	2,388.77	2,048	$ 29,313,024
PPC 14	Ventricular Fibrillation/Cardiac Arrest	1,250.11	1,375	$ 27,780,500
PPC 24	Renal Failure without Dialysis	3,660.69	3,355	$ 27,672,040
PPC 5	Pneumonia & Other Lung Infections	1,288.80	1,169	$ 24,418,072
PPC 3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	2,326.32	2,209	$ 21,665,872
PPC 9	Shock	1,141.40	1,063	$ 20,538,223
PPC 35	Septicemia & Severe Infections	1,052.88	1,060	$ 19,984,180
PPC 21	Clostridium Difficile Colitis	1,028.00	1,030	$ 17,934,360
PPC 40	Post-Operative Hemorrhage & Hematoma without Hemorrhage Control Proc	1,515.83	1,512	$ 14,846,328

PPC	MEDICARE PPC Description	PPCs Expected	PPCs Actual	PPC Weighted Impact
PPC 4	Acute Pulmonary Edema and Respiratory Failure with Ventilatior	605.40	788	$ 25,833,004
PPC 14	Ventricular Fibrillation/Cardiac Arrest	788.81	989	$ 19,981,756
PPC 65	Urinary Tract Infection without Catheter	1,314.70	1,356	$ 19,408,428
PPC 24	Renal Failure without Dialysis	1,994.09	2,153	$ 17,757,944
PPC 5	Pneumonia & Other Lung Infections	699.79	757	$ 15,812,216
PPC 9	Shock	657.09	728	$ 14,065,688
PPC 3	Acute Pulmonary Edema and Respiratory Failure without Ventila	1,238.41	1,408	$ 13,809,664
PPC 21	Clostridium Difficile Colitis	634.11	725	$ 12,623,700
PPC 35	Septicemia & Severe Infections	600.34	657	$ 12,386,421
PPC 6	Aspiration Pneumonia	496.70	607	$ 10,093,196

Target PPC List: Proposed List

		CMS HAC (PSI 90)	Top Volume * Cost	Other (Pair, Opportunity, etc)
3	Respiratory Failure without Ventilation		x	
4	Respiratory Failure with Ventilation		x	
5	Pneumonia & Other Lung Infections		x	
6	Aspiration Pneumonia		x	
7	Pulmonary Embolism	PSI #12		
9	Shock	PSI #13	x	
14	Cardiac Arrest		x	
16	Venous Thrombosis	PSI #12		
24	Renal Failure without Dialysis		x	
28	In-Hospital Trauma and Fractures	PSI #8		
31	Decubitus Ulcer	PSI #3		
35	Septicemia & Severe Infections	PSI #13	x	
37	Post-Operative Infection & Deep Wound Disruption Without Procedure			x
38	Post-Operative Wound Infection & Deep Wound Disruption with Procedure	PSI #14		
40	Post-operative Hemorrhage and Hematoma		x	
42	Accidental Puncture/Laceration During Invasive Procedure	PSI #15		
49	Iatrogenic Pneumothrax	PSI #6		
54	Infections due to Central Venous Catheters	PSI# 7		
65	Urinary Tract Infection		x	
66	Catheter-Related Urinary Tract Infection			x

MHAC/PPC Tiers

- Two or three 'tiers' of MHACs/PPCs
  - Tier A – Target list of 20 PPCs – highest weight
  - Tier B – PPCs not on target list, but have high percentage attributed to Medicare patients (> 60%) and affect majority of hospitals (> 43)
  - Tier C – All other PPCs, including those with very low volume, affecting low number of hospitals, obstetric-related PPCs
- Each tier can be weighted differently to put more emphasis on the target PPCs

	Weighting	PPCs	Total Points	FY12 Actual PPCs	FY13 Actual PPCs
Tier A	100%	20	200	23,102	17,451
Tier B	60%	9	54	5,166	4,074
Tier C	40%	36	144	12,259	10,452
Total		65	398	40,527	31,977

MHAC/PPC Tiers

Tier A
Selected as high cost, high volume statewide plus those that match CMS HAC policy of AHRQ Patient Safety Indicators
3 Acute Pulmonary Edema and Respiratory Failure without Ventilation
4 Acute Pulmonary Edema and Respiratory Failure with Ventilation
5 Pneumonia & Other Lung Infections
6 Aspiration Pneumonia
7 Pulmonary Embolism
9 Shock
14 Ventricular Fibrillation/Cardiac Arrest
16 Venous Thrombosis
24 Renal Failure without Dialysis
28 In-Hospital Trauma and Fractures
31 Decubitus Ulcer
35 Septicemia & Severe Infections
37 Post-Operative Infection & Deep Wound Disruption Without Procedure
38 Post-Operative Wound Infection & Deep Wound Disruption with Procedure
40 Post-Operative Hemorrhage & Hematoma without Hemorrhage Control Procedure or I&D Proc
42 Accidental Puncture/Laceration During Invasive Procedure
49 Iatrogenic Pneumothrax
54 Infections due to Central Venous Catheters
65 Urinary Tract Infection without Catheter
66 Catheter-Related Urinary Tract Infection

Tier B
Selected as remaining PPCs with high Medicare percentage (>60%) and high number of Maryland hospitals (>43)
8 Other Pulmonary Complications
10 Congestive Heart Failure
11 Acute Myocardial Infarction
17 Major Gastrointestinal Complications without Transfusion or Significant Bleeding
18 Major Gastrointestinal Complications with Transfusion or Significant Bleeding
19 Major Liver Complications
27 Post-Hemorrhagic & Other Acute Anemia with Transfusion
41 Post-Operative Hemorrhage & Hematoma with Hemorrhage Control Procedure or I&D Proc
48 Other Complications of Medical Care

Tier C
Remaining PPCs
1 Stroke & Intracranial Hemorrhage
2 Extreme CNS Complications
12 Cardiac Arrythmias & Conduction Disturbances
13 Other Cardiac Complications
15 Peripheral Vascular Complications Except Venous Thrombosis
20 Other Gastrointestinal Complications without Transfusion or Significant Bleeding
21 Clostridium Difficile Colitis
23 GU Complications Except UTI
25 Renal Failure with Dialysis
26 Diabetic Ketoacidosis & Coma
29 Poisonings Except from Anesthesia
30 Poisonings due to Anesthesia
32 Transfusion Incompatibility Reaction
33 Cellulitis
34 Moderate Infectious
36 Acute Mental Health Changes
39 Reopening Surgical Site
43 Accidental Cut or Hemorrhage During Other Medical Care
44 Other Surgical Complication - Mod
45 Post-procedure Foreign Bodies
46 Post-Operative Substance Reaction & Non-O.R. Procedure for Foreign Body
47 Encephalopathy
50 Mechanical Complication of Device, Implant & Graft
51 Gastrointestinal Ostomy Complications
52 Inflammation & Other Complications of Devices, Implants or Grafts Except Vascular Infection
53 Infection, Inflammation & Clotting Complications of Peripheral Vascular Catheters & Infusions
55 Obstetrical Hemorrhage without Transfusion
56 Obstetrical Hemorrhage wtih Transfusion
57 Obstetric Lacerations & Other Trauma Without Instrumentation
58 Obstetric Lacerations & Other Trauma With Instrumentation
59 Medical & Anesthesia Obstetric Complications
60 Major Puerperal Infection and Other Major Obstetric Complications
61 Other Complications of Obstetrical Surgical & Perineal Wounds
62 Delivery with Placental Complications
63 Post-Operative Respiratory Failure with Tracheostomy
64 Other In-Hospital Adverse Events

Measurement Methodology

- In Quality-Based Reimbursement (QBR) methodology:
  - Each measure receives separate points for attainment (compared to the state's performance) and improvement (hospital performance year over year)
  - The higher of attainment or improvement points for each measure becomes the final points for that measure
- Define *Threshold* and *Benchmark* for each measure (PPC)
  - Threshold is minimum performance required to score points
    - median of all hospitals (50th percentile)
      - Mean performance is measured at the hospital level—including small hospitals with expected values less than 1
      - Assumes that case-mix adjusts adequately for all factors affecting a hospital's performance
    - weighted mean of all O/E ratios (will equal O/E of 1)
      - Mean performance is measured at the case level
      - Inherently includes other factors that affect performance
      - Higher volume hospitals have more influence on PPCs mean
  - Benchmark is performance required to score maximum points
    - weighted mean of top quartile O/E ratio

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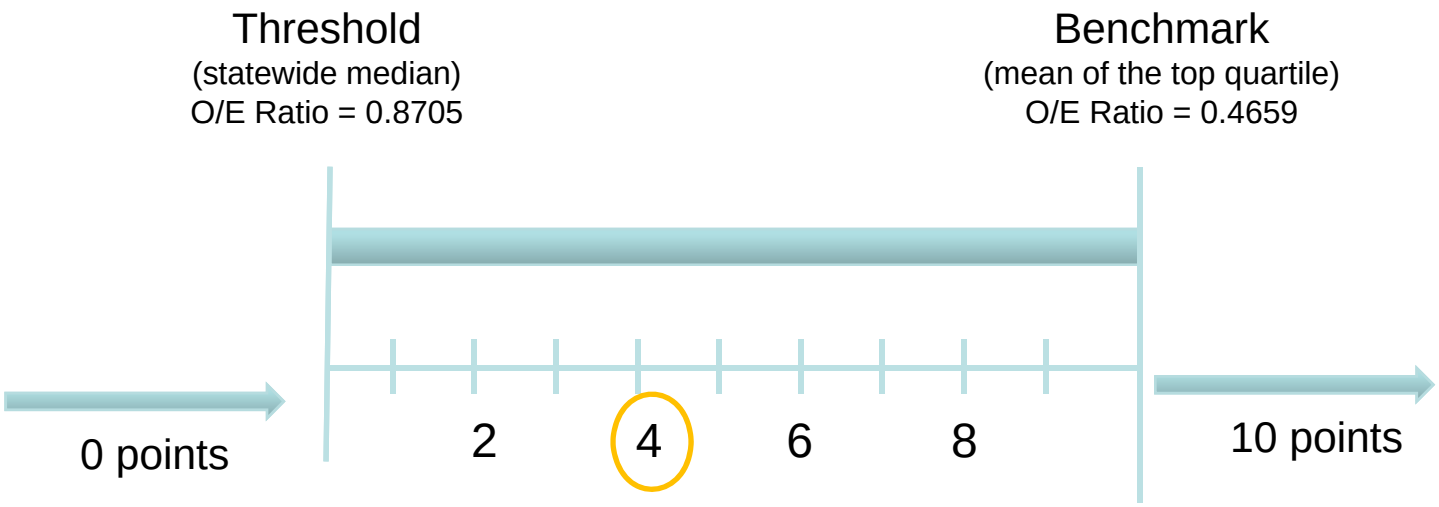
Attainment Example

PPC 24 – Renal Failure



Hospital O/E = 0.7012

Calculates to an attainment score of 4

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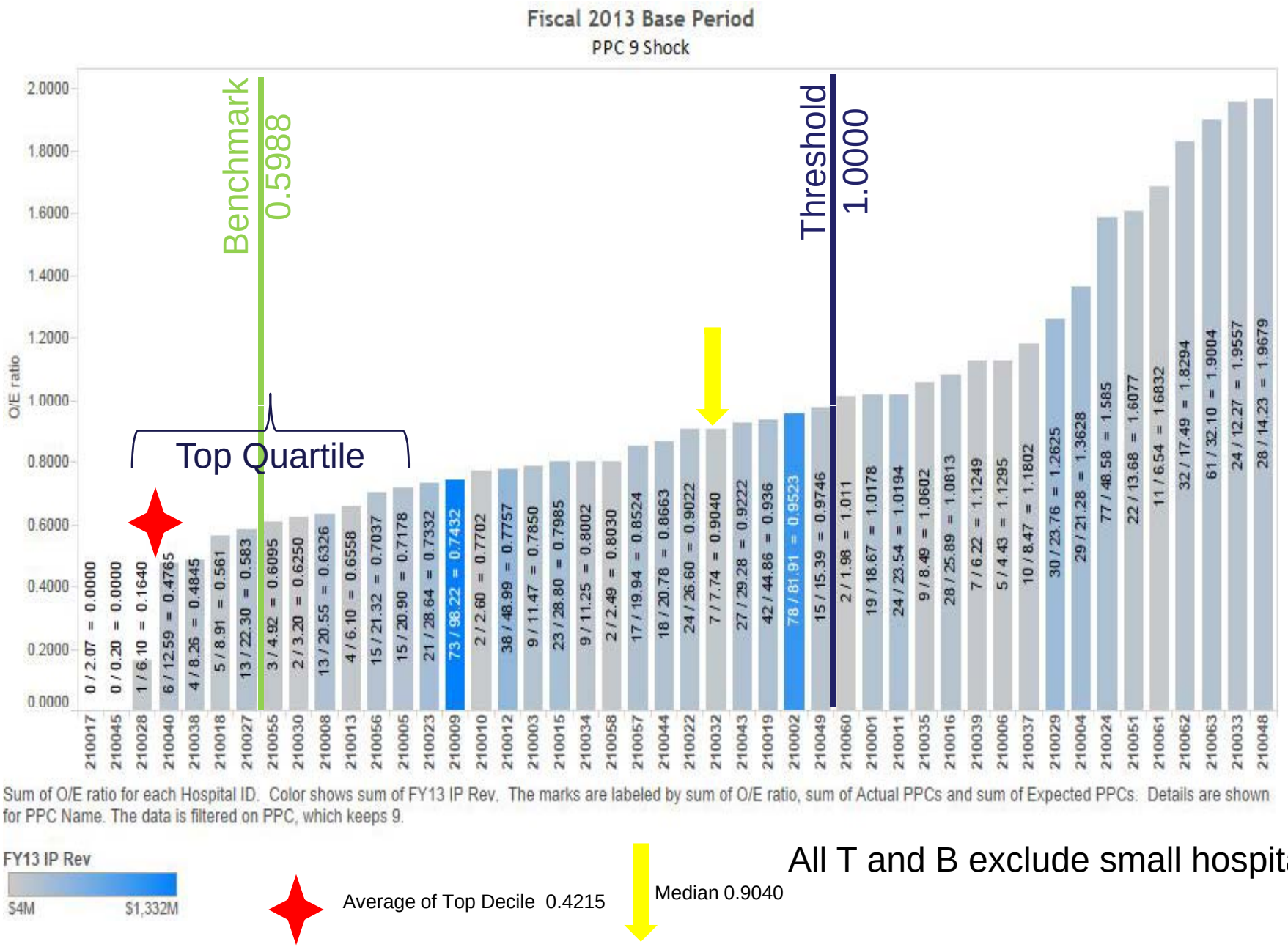


Sum of O/E ratio for each Hospital ID. Color shows sum of FY13 IP Rev. The marks are labeled by sum of O/E ratio, sum of Actual PPCs and sum of Expected PPCs. Details are shown for PPC Name. The data is filtered on PPC, which keeps 9.

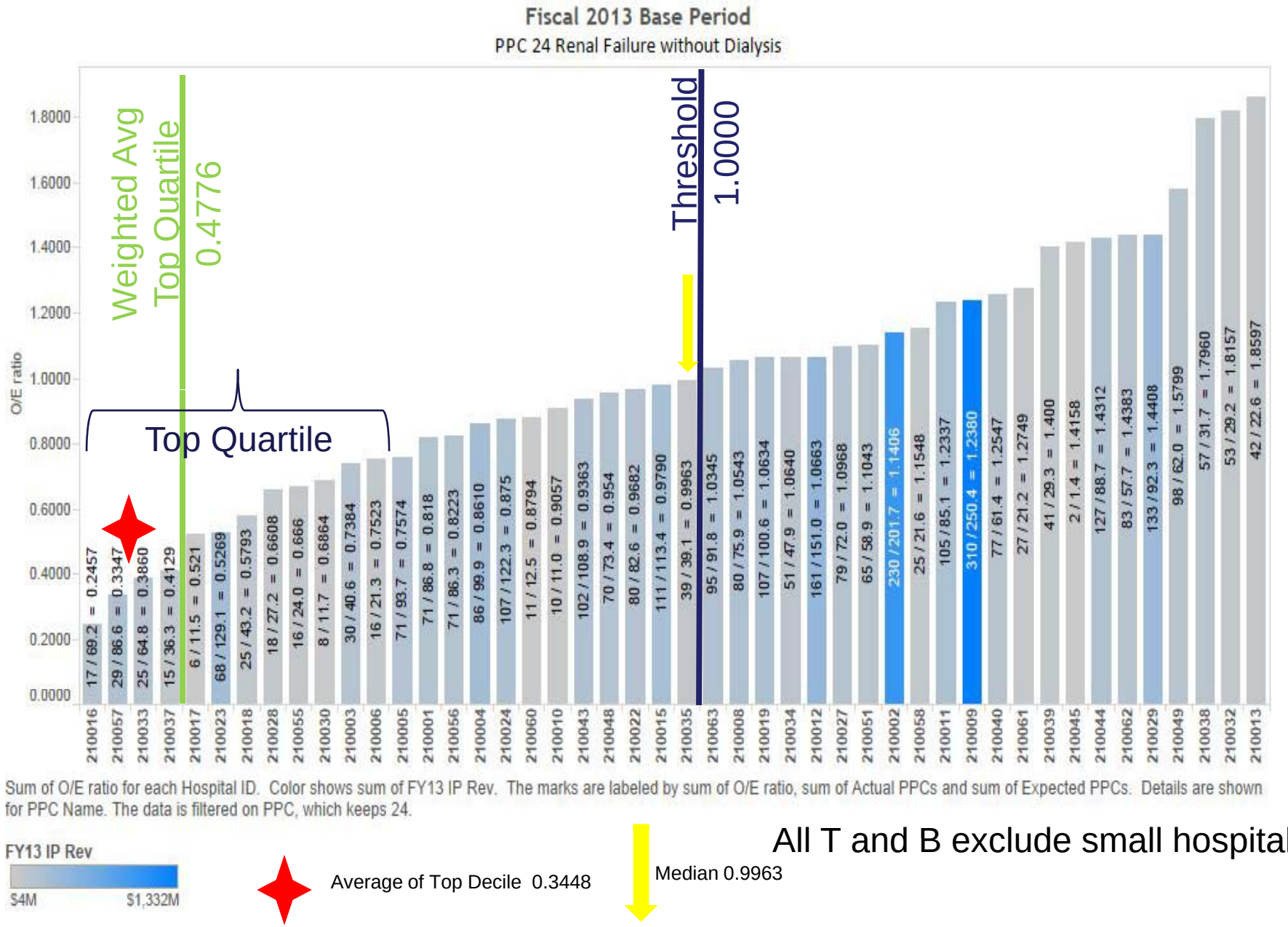
FY13 IP Rev

$4M $1,332M

Average of Top Decile 0.4215

Median 0.9040

All T and B exclude small hospitals



Sum of O/E ratio for each Hospital ID. Color shows sum of FY13 IP Rev. The marks are labeled by sum of O/E ratio, sum of Actual PPCs and sum of Expected PPCs. Details are shown for PPC Name. The data is filtered on PPC, which keeps 24.

FY13 IP Rev

$4M $1,332M

Average of Top Decile 0.3448

Median 0.9963

All T and B exclude small hospitals

Payment Methodology

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Translating the Score to Payment Impact

- MHA proposes 3% revenue at risk on Medicare revenue
- Individual hospital payment impact depends on combination of statewide aggregate performance and individual hospital performance
- CMS waiver goal is 30 percent PPC reduction over five years, which will require sustained annual improvement of just under 7%

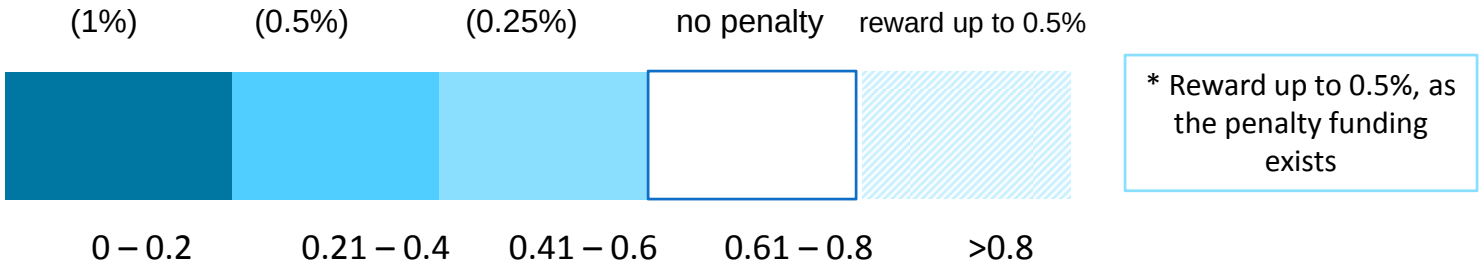
CY 14	CY 15	CY 16	CY 17	CY 18	5-Year Cumulative
6.89%	6.89%	6.89%	6.89%	6.89%	30.02%

- If annual goal is not met, maximum possible penalty applies
- If annual goal is met, maximum possible penalty is discounted to 1% of Medicare revenue with possibility of rewards for highest performing hospitals

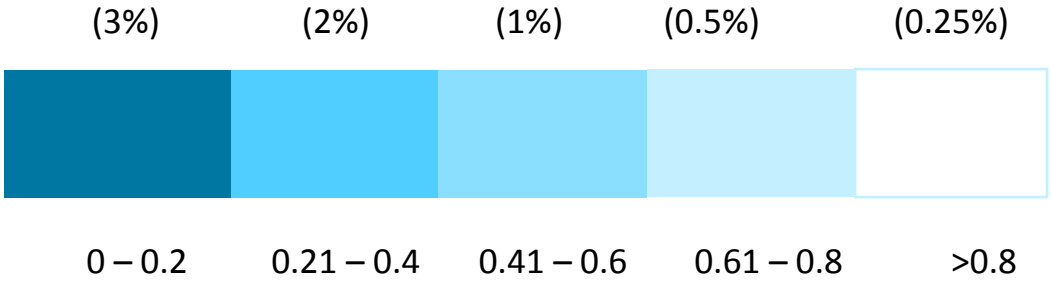
Translating the Score to Payment Impact

Preset corridors of MHAC score (0-1) corresponding to payment impact

- Statewide Target Met: Targets and penalty scale "discounted" if statewide performance achieves policy target; max possible penalty = 1%



- Statewide CMS Target Not Met: All hospitals penalized if CMS target not met; max possible penalty = 3%



Measurement Issues to be Addressed

Methodology

- Address small hospitals
  - Hospitals with expected values < 1 score 0 or 10
  - Combine PPCs for an aggregate O/E, peer group, set minimum for expected value
- Ongoing discussion with 3M to refine PPC logic
  - Example…PPC 12 cardiac arrhythmia. This PPC occurs in 25% of open heart surgery cases. Pre-existing atrial fibrillation increases likelihood of arrhythmia after surgery. Request to 3M is adjust PPC logic.
- Define top performance—how high should the benchmark be set? How low can each PPC rate go? “Never” events—close to zero, but others are *potentially* preventable.

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