New All-Payer Model for Maryland
Performance Measurement Workgroup Meeting
2/28/2014

Draft MHAC Methodology and Policy Changes

HSCRC
Health Services Cost Review Commission

Presentation Contents

- Background Overview and Guiding Principles
- Proposed Measurement Methodology Modifications
- Translating Performance into Payment
- Next Steps

Overview and Guiding Principles

Current MHAC Policy Overview

- Implemented in 2009 with performance-based payment adjustments effective in FY 2011
- Use of 3M Proprietary Software: Potentially Preventable Complications (PPC)
- PPCs selected for the program based on significance of the cost when they occur (~50 out of 65 meet this criteria from year to year)
- For attainment, hospitals' results are determined based on the sum of the revenue expended or saved for the actual over the expected PPC cases in each PPC group selected for the program; expected values are determined based on policy-established best practice standard
- For improvement, hospitals' scores are determined based on improvement over their own performance from the previous year on five PPCs
- Hospital performance scores are translated into payment at the end of a performance year by placing hospitals in relative positions on a revenue neutral scale (2% at risk allocated for worst performers on attainment scale and 1% for improvement scale)

Guiding Principles for Meeting All-Payer Model Goals for MHAC Program

- Need to achieve the new All-payer model goal: 30% reduction in all 65 PPCs
  - CY 2013 base period
  - Measurement period began January 2014
  - 30% Cumulative reduction by 2018
- Breadth and impact of the program must meet or exceed Medicare national program
  - Measures
  - Revenue at risk
- Program must improve care for all patients, regardless of payer
- Program should prioritize high volume, high cost, opportunity for improvement and areas of national focus

Additional Guiding Principles- HSCRC in Agreement with MHA Proposal

- Predetermined performance targets and financial impact
- Encourage cooperation and sharing of best practices
- Hold harmless for lack of improvement if attainment is highly favorable
- Ability to track progress

Proposed Measurement Methodology Modifications

Components of Redesign- HSCRC in Agreement with MHA Proposal

- Measurement Methodology
  - All 65 PPCs
  - Weighting select PPCs for focus
  - Design and calculation of “MHAC Score”
  - Establish thresholds and benchmarks
  - Better of attainment or improvement score

MHAC Score Design Options- HSCRC in Agreement with MHA Proposal

Measure definition new Model 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

Prioritize a Targeted PPC List- HSCRC in Agreement with MHA Proposal

- 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 model goal.

MHAC/PPC Tiers- HSCRC in Agreement with MHA Proposal for Most Part

- 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	50%	20	200	23,102	17,451
Tier B	30%	9	54	5,166	4,074
Tier C	20%	36	144	12,259	10,452
	100%	65	398	40,527	31,977

Defining Thresholds and Benchmarks- HSCRC in Agreement with MHA Proposal Options

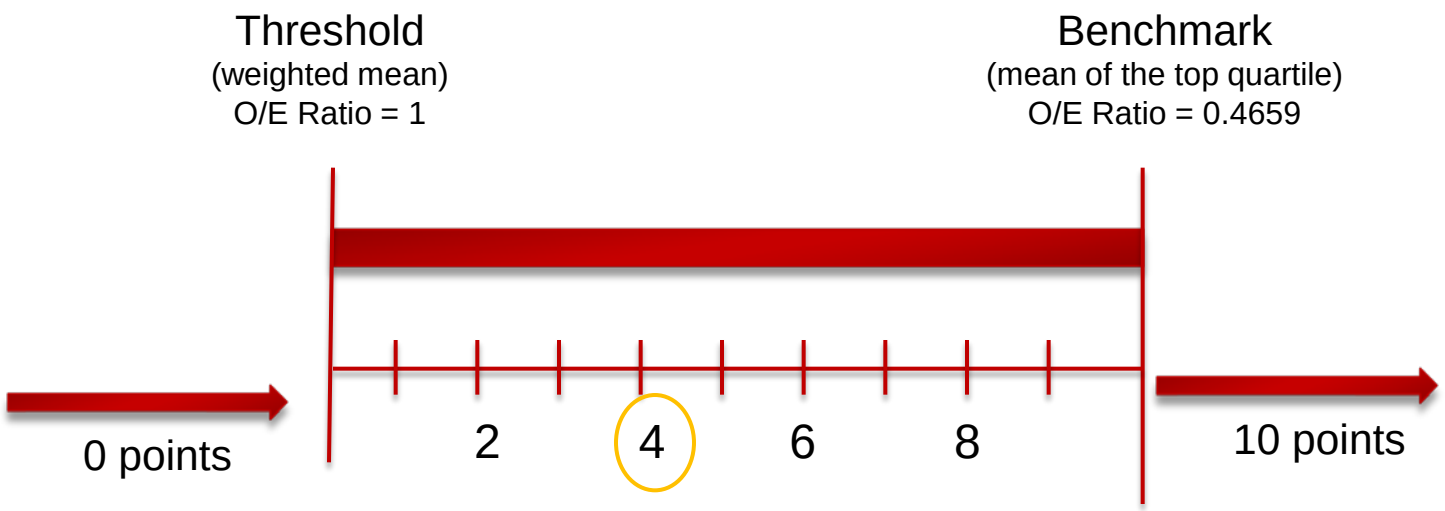
- Define *Threshold* and *Benchmark* for each measure (PPC)
  - Threshold is minimum performance required to score points
    - median of all hospitals (50th percentile)
      - Mean performance is measured at the hospital level—including small hospitals with expected values less than 1
      - Assumes 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 means

  - Benchmark is performance required to score maximum points
    - weighted mean of top quartile O/E ratio

  - HSCRC proposal: For never events the benchmark is zero

Attainment Example- MHA Example

PPC 24 – Renal Failure



Hospital O/E = 0.7012

Calculates to an attainment score of 4

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Exclusion Criteria

- Existing Exclusions- Case level
  - APR-DRG SOI cells with less than 2 total cases
  - Palliative Care cases
  - Cases with more than 6 PPCs
- Proposed New Exclusions – Hospital Level
  - PPCs with total expected cases less than 1
  - PPCs with less than 10 at risk cases

Other Measurement Issues

Methodology

- Small hospitals must have at least 1 expected and 10 at risk cases for the PPC to be included
- Ongoing discussion with 3M to refine PPC logic
- Defining never events
- Over time, need to define top performance—how high should the benchmark be set? How low can each PPC rate go?

Appendix: MHA Proposed Target PPCs and Tiers

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

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

Proposed Never Events

- 28 In-Hospital Trauma and Fractures
- 29 Poisonings Except from Anesthesia
- 30 Poisonings due to Anesthesia
- 32 Transfusion Incompatibility Reaction
- 43 Accidental Cut or Hemorrhage During Other Medical Care
- 45 Post-procedure Foreign Bodies
- 46 Post-Operative Substance Reaction & Non-O.R. Procedure for Foreign Body