

Performance Measurement Work Group Meeting

5/17/2017

HSCRC Health Services Cost Review Commission

QBR Revised Mortality Measure



RY 2019 QBR Mortality

RY 2019: Two measures of mortality

- Calculate risk-adjusted mortality with and without palliative care patients, using same set of APR-DRGs.
 - Calculate scores for improvement based on measure including palliative care patients;
 - Calculate scores for attainment based on measure excluding palliative care.
 - Continue to use the better of improvement or attainment.
- This is a short-term policy that mitigates impact of increases in palliative care on improvement in mortality rate
- Going forward (RY 2020) include all palliative care patients in mortality measure and continue development of 30-day mortality measure.

30-Day Mortality Measure Update

- HSCRC has obtained two-years of death data from Vital Statistics
 - Mathematica is finalizing work plan for developing all-payer 30-day mortality measure
 - The 30-day time period to calculate mortality will align with the time period in the federal measures.
 - Goal is to provide patient-level data back to hospitals and to publicly report hospital-level results

RY 2019 RRIP Policy (Approved)



Medicare Test: At or below National Medicare Readmission Rate by CY 2018

Maryland is reducing readmission rate faster than the nation. Maryland reduced the gap from 1.22 percentage points in the base year to 0.29 percentage points in CY 2016. Our target for the gap for CY 2016 was a 0.49 percentage point difference.



Final Recommendations for RY 2019 RRIP Policy

- The RRIP policy should continue to be set for **all-payers**.
- Hospital performance should continue to be measured as the better of attainment or improvement.
- Due to ICD-10, RRIP should have a one-year improvement target (CY 2017 over CY 2016), and will add this one-year improvement to the achieved improvement CY 2016 over CY 2013, to create a modified cumulative improvement target.
- The attainment benchmark should be set at **10.83 percent.**
- The reduction benchmark for CY 2017 readmissions should be -3.75 percent from CY 2016 readmission rates.
- Hospitals should be eligible for a maximum reward of 1 percent, or a maximum penalty of 2 percent, based on the better of their attainment or improvement scores.
- Staff will continue to work with CMS to review readmission logic and data discrepancies, and an update will be provided to the Commission if any substantive issues are found that warrant revisiting RY 2019 targets.

Ongoing RRIP Work

- Finalize review of CMS readmission code and run HSCRC logic using CCW data
- Explore alternative methods for setting attainment target
 - Review risk adjustment methodologies for attainment target
- Continue analysis on service-line specific quality measures

Rate Year (RY) 2018 Potentially Avoidable Utilization Savings Policy Draft Recommendation



Background

- Ensure savings to the purchasers from incentive programs and satisfy exemption requirements from Medicare programs
- Started in RY 2014 in conjunction with the Admission Readmission Revenue (ARR) Program
- RY 2017 PAU Savings policy was updated to align the measure with the PAU definitions used in the market shift adjustment
 - Added Prevention Quality Indicators (PQI)*
 - Readmissions counted at the receiving hospital
 - Added observation stays lasting 23 hour or longer to inpatient discharges

*Developed by Agency For Health Care Quality and Research http://www.qualityindicators.ahrq.gov/modules/pqi_overview.aspx

Also known as Ambulatory Care Sensitive Conditions, that is conditions for which good outpatient care 10 can potentially prevent the hospitalization.

RY 2018 PAU Savings Draft Recommendations

- Set the value of the PAU savings amount to 1.45 percent of total permanent revenue in the state, which is a 0.20 percent net reduction in RY 2018.
 - All hospitals contribute to the statewide PAU savings, however, each hospital's reduction is proportional to their percent PAU revenue.
- Cap the PAU savings reduction at the statewide average reduction for hospitals with higher socio-economic burden.
- Evaluate further expansion of PAU definitions for RY 2019 to incorporate additional categories of unplanned admissions.

RY 2018 PAU Savings State-Wide Calculation

Statewide Results		Value			
RY 2017 Total Approved Permanent Revenue	A	\$15.8 billion			
Total RY18 PAU %	В	10.86%			
Total RY18 PAU \$	С	\$1.7 billion			
Statewide Total Calculations		Total	Last year	Net	
Proposed RY 2018 Revenue Adjustment %	D	-1.45%	-1.25%		-0.20%
Proposed RY 2018 Revenue Adjustment \$	E=A*D	-\$228.4 million	-\$194.4 million		-\$34.0 million
Percent Revenue Adjustment of Total RY18 PAU \$	F=E/C	13.35% ^a			
^a 13.90% with Medicaid Protections					

CY 2017 PAU Report Changes



PQI versions for RY 2019

- Update PQI* software version to version 6
- Major changes in version 6
 - PQI 13 (angina without procedure) retired in version 6
 - PQI 08 (heart failure) corrected in version 6

*Developed by Agency For Health Care Quality and Research http://www.qualityindicators.ahrq.gov/modules/pqi_overview.aspx

Also known as Ambulatory Care Sensitive Conditions, that is conditions for which good outpatient care can potentially prevent the hospitalization.

Statewide Number of PQIs

Number of Discharges with PQI



Version Impact on Statewide PQI rates

	2015			2016		
	v5	v6	Change	v5	v6	Change
PQI 01 Diabetes Short-Term						
Complications	2,971	2,971	0	2,993	2,993	0
PQI 02 Perforated Appendix	1,071	1,071	0	1,207	1,207	0
PQI 03 Diabetes Long-Term						
Complications	4,324	4,324	0	3,525	3,525	0
PQI 05 COPD or Asthma in Older Adults	13,489	13,410	- 79	13,043	12,880	- 163
PQI 07 Hypertension	2,897	2,897	0	2,319	2,319	0
PQI 08 Heart Failure	14,720	15,165	445	11,402	14,950	3,548
PQI 10 Dehydration	5,245	6,437	1,192	7,342	7,342	0
PQI 11 Bacterial Pneumonia	9,649	9,656	7	9,179	9,179	0
PQI 12 Urinary Tract Infection	7,683	7,683	0	7,712	7,712	0
PQI 13 Angina Without Procedure	880	0	- 880	1,780	0	- 1,780
PQI 14 Uncontrolled Diabetes	965	965	0	2,192	2,192	0
PQI 15 Asthma in Younger Adults	1,078	1,078	0	927	927	0
PQI 16 Lower-Extremity Amputation						
among Patients with Diabetes	704	730	26	782	850	68
Number of Discharges w/ at least 1 PQI*	65,114	65,811	697	62,871	64,514	1,643
%PQIs	9.26%	9.36%		9.05%	9.29%	

¹⁶ *These discharge totals are de-duplicated.

PAU: High Needs Patients

- Expand current PAU definition to capture utilization of high needs patients that could be avoided through better care coordination
- Consider extending readmission timeframe to capture greater proportion of high needs patients
 - Current policy is 30-day Readmissions
 - Analyze impact of extending the readmissions window to 60 or 90 days
 - Note: extending readmission timeframe captures some PQI admissions

Statewide analyses

CY 16, version 6		30 day	60 day	90 day
Total PAU	А	137,918	165,716	183,674
# Readmits	В	73,404	108,487	131,067
Readmits % of Total PAU	C=B/A	53.2%	65.5%	71.4%
Readmits Charges (\$)	D	\$1,120,982,966	\$1,631,038,644	\$1,945,419,943
Total PAU Charges (\$)	E	\$1,792,701,800	\$2,219,080,802	\$2,482,891,687
Readmits % of Total PAU (\$)	F=D/E	62.5%	73.5%	78.4%
PAU % (\$)		11.0%	13.7%	15.3%

Performance-based Revenue Adjustments; Aggregate at-Risk; Maximum Penalty Guardrail



RY 2018 Performance-based Revenue Adjustments

- Analysis concludes that ICD-9 to ICD-10 impact does not warrant a retrospective adjustment to the MHAC or other quality program.
- HSCRC believes that Aggregate at-risk meets All-Payer Model requirement
- RRIP/MHAC Results memo went out Friday, 5/12/17.
 Preliminary PAU results included in Draft Policy (May 2017 Commission meeting).

Medicare vs Maryland Aggregate At-Risk Requirement

 Maryland must meet or exceed the aggregate percentage of revenue at-risk under national Medicare quality programs

Maximum Quality Penalties or Rewards for Maryland and The Nation

	Max	Max	National	Max	Max
MD All-Payer	Penalty %	Reward %	Medicare	Penalty %	Reward %
RY/FFY 2018					
MHAC	3.0%	1.0%	HAC	1.0%	N/A
RRIP	2.0%	1.0%	HRRP	3.0%	N/A
QBR	2.0%	1.0%	VBP	2.0%	2.0%
RY/FFY 2019					
MHAC	2.0%	1.0%	HAC	1.0%	N/A
RRIP	2.0%	1.0%	HRRP	3.0%	N/A
QBR	2.0%	2.0%	VBP	2.0%	2.0%

Potential Risk: Absolute Max Penalty/Reward

% of MD All-Paver Inpatient Revenue	RY 2014	RY 2015	RY 2016	RY 2017	RY 2018	RY 2019
MHAC	2.0%	3.0%	4.0%	3.0%	3.0%	2.0%
RRIP*			0.5%	2.0%	2.0%	2.0%
QBR	0.5%	0.5%	1.0%	2.0%	2.0%	2.0%
Subtotal	2.5%	3.5%	5.5%	7.0%	7.0%	6.0%
PAU Savings*	0.4%	0.9%	1.4%	4.5%	5.9%	5.9%
Demographic PAU Efficiency Adjustment*	0.5%	0.9%	1.1%	1.3%	1.2%	1.2%
MD Aggregate Maximum At Risk	3.4%	5.2%	8.0%	12.8%	14.1%	13.1%
*Italicized numbers subject to change						
	EEV 2011	EEV 2015	EEV2016	EEV2017	EEV2018	EEV2010
HAC	111 2014	1.0%	1.0%	1.0%	1.0%	1.0%
Readmissions	2.0%	3.0%	3.0%	3.0%	3.0%	3.0%
VBP	1.3%	1.5%	1.8%	2.0%	2.0%	2.0%
Medicare Aggregate Maximum At Risk	3.3%	5.5%	5.8%	6.0%	6.0%	6.0%
*HSCRC estimated CMS numbers based on pu	blicly availab	ole files and	this is subjec	t to change.	FFY 2018 us	ses FFY

Annual MD-US Difference 0.2%	-0.3%	2.2%	6.8%	8.1%	7.1%
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Realized Risk: Absolute Average Revenue Adjustments

% of MD All-Payer Inpatient Revenue	RY 2014	RY 2015	RY 2016	RY 2017	RY 2018
МНАС	0.22%	0.11%	0.18%	0.40%	0.50%
RRIP			0.15%	0.57%	0.61%
QBR*	0.11%	0.14%	0.30%	0.26%	0.15%
Subtotal	0.34%	0.25%	0.63%	1.23%	1.26%
PAU Savings*	0.29%	0.64%	0.93%	2.6%	3.1%
Demographic PAU Efficiency Adjustment*	0.28%	0.33%	0.39%	0.3%	0.3%
MD Aggregate Maximum At Risk	0.90%	1.22%	1.95%	4.13%	4.66%
*SFY 18 and 19 Estimated based on previous yea	ar.				
% of National Medicare Inpatient Revenue	FFY 2014	FFY 2015	FFY2016	FFY2017*	FFY2018*
% of National Medicare Inpatient Revenue HAC	FFY 2014	FFY 2015 0.22%	FFY2016 0.23%	FFY2017* 0.24%	FFY2018* 0.24%
% of National Medicare Inpatient Revenue HAC Readmits	FFY 2014 0.28%	FFY 2015 0.22% 0.52%	FFY2016 0.23% 0.51%	FFY2017* 0.24% 0.61%	FFY2018* 0.24% 0.61%
% of National Medicare Inpatient Revenue HAC Readmits VBP	FFY 2014 0.28% 0.20%	FFY 2015 0.22% 0.52% 0.24%	FFY2016 0.23% 0.51% 0.40%	FFY2017* 0.24% 0.61% 0.51%	FFY2018* 0.24% 0.61% 0.51%
% of National Medicare Inpatient Revenue HAC Readmits VBP Medicare Aggregate Maximum At Risk	FFY 2014 0.28% 0.20% 0.47%	FFY 2015 0.22% 0.52% 0.24% 0.97%	FFY2016 0.23% 0.51% 0.40% 1.14%	FFY2017* 0.24% 0.61% 0.51% 1.36%	FFY2018* 0.24% 0.61% 0.51% 1.36%
% of National Medicare Inpatient Revenue HAC Readmits VBP Medicare Aggregate Maximum At Risk	FFY 2014 0.28% 0.20% 0.47%	FFY 2015 0.22% 0.52% 0.24% 0.97%	FFY2016 0.23% 0.51% 0.40% 1.14%	FFY2017* 0.24% 0.61% 0.51% 1.36%	FFY2018* 0.24% 0.61% 0.51% 1.36%
% of National Medicare Inpatient Revenue HAC Readmits VBP Medicare Aggregate Maximum At Risk Annual MD-US Difference	FFY 2014 0.28% 0.20% 0.47%	FFY 2015 0.22% 0.52% 0.24% 0.97% 0.25%	FFY2016 0.23% 0.51% 0.40% 1.14% 0.81%	FFY2017* 0.24% 0.61% 0.51% 1.36% 2.76%	FFY2018* 0.24% 0.61% 0.51% 1.36% 3.30%
% of National Medicare Inpatient Revenue HAC Readmits VBP Medicare Aggregate Maximum At Risk Annual MD-US Difference *HSCRC estimated CMS numbers based on publi	FFY 2014 0.28% 0.20% 0.47% 0.43% cly available	FFY 2015 0.22% 0.52% 0.24% 0.97% 0.25% files and this	FFY2016 0.23% 0.51% 0.40% 1.14% 0.81% is subject to	FFY2017* 0.24% 0.61% 0.51% 1.36% 2.76% change. FFY	FFY2018* 0.24% 0.61% 0.51% 1.36% 3.30% 2018 uses

Maximum Revenue Guardrail

- Similar to the risk corridors in other VBP programs, a maximum penalty guardrail may be necessary to mitigate the detrimental financial impact of unforeseen large adjustments in Maryland programs.
- Policy recommends the maximum penalty one hospital could receive in RY 2019 across QBR, MHAC, RRIP, and net PAU savings.
- RY 2018: Maximum penalty for one hospital was 1.06 percent of total hospital revenue (1.41percent of IP revenue).
- RY 2017/18: Staff used the Medicare aggregate amount atrisk total as the benchmark to calculate the hospital maximum penalty guardrail of 3.50 percent (e.g. 6% * 58 % of IP revenue).

Draft Recommendation

For RY 2019, the maximum penalty guardrail should continue to be set at 3.50 percent of total hospital revenue.

ED Performance Update

D



Statewide Trends – ED Diversion Over Time



Yellow Alert: The ED temporarily requests that it receive absolutely no patients in need of urgent medical care. Yellow Alert is initiated because the ED is experiencing a temporary overwhelming overload such that priority II and III patients may not be managed safely. Prior to diverting pediatric patients, medical consultation is advised for pediatric patient transports when EDs are on yellow alert.

- ED Diversion is increasing in Maryland, but particularly in:
 - Region 3 (Baltimore City/County and Central MD)
 - Region 5 (DC suburbs and southern MD)
- Diversion remains a critical issue across the country, not just Maryland.

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27 Data Source: Md. Institute for EMS Systems (MIEMSS)

Statewide Trends – ED Diversion Over Time



% of Time on Yellow Alert by Month

Data Source: Md. Institute for EMS Systems (MIEMSS)

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Statewide Overview – 2016-03 through 2017-02 (Yellow Alert)

% of Time on Alert - 2016-03 to 2017-02

40.00%		_
35.00%		╂
30.00%		ł
25.00%		╉
20.00%		╀
15.00%		ł
10.00%		1
5.00%		t
0.00%	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41	42
	Hospital Statewide	
2	²⁹ Data Source: MIEMSS	

Statewide Trends – ED Wait Times Over Time



- ED-2 Admit Decision until Admission
 - Some physicians concerned that "boarding" is reducing ED throughput efficiency and increasing wait times.
 - Boarding is associated with increased mortality rates and length of stay.
- OP-20 Door to Diagnostic Evaluation
 - This measure is most accessible to consumers and was presented in recent local news story.
 - ³⁰ Data Source: CMS Hospital Compare

Statewide Overview - FY 2016 - ED-2





³¹ Data Source: CMS Hospital Compare

Statewide Overview – FY 2016 – OP-20

OP-20 - Door to Diagnostic Evaluation (Data through Q2 2016)



% Change Wait Times



% Change in OP-20 2016Q1 over 2014Q1



Next Steps

- HSCRC is evaluating the feasibility of including select ED wait time measures in RY 2020 QBR program.
- Hospital Overload and Emergency Department Strategic Workgroup convened in May 2017 to evaluate ED diversion trends in Maryland.
 - Participants include Maryland Institute for Emergency Medical Services Systems (MIEMSS), HSCRC, DHMH, and Maryland Hospital Association.
 - Report to the Legislature due in December 2017.
- Staff is working with MIEMSS to capture additional data on ED diversion to better inform market shift adjustments.

Performance Measurement – Next Steps

- Work with MPR to evaluate following four ED Wait Time measures for potential inclusion in QBR:
 - ED-1b Median time from ED Arrival to ED Departure for Admitted ED Patients
 - ED-2b Admit Decision Time to ED Departure Time for Admitted Patients
 - OP-18 Median Time from ED Arrival to ED Departure for Discharged ED Patients
 - OP-20 Door to Diagnostic Evaluation by a Qualified Medical Professional

Contact Information

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