Final Recommendation for Implementing a Hospital Readmission Reduction Incentive Program for FY 2016

Health Services Cost Review Commission
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This document contains the final staff recommendations for implementing a Readmission Reduction Incentive Program for FY 2016 as approved by the Commission on April 9, 2014.

A. Introduction

The United States health care system currently experiences an unacceptably high rate of unnecessary hospital readmissions. These excessive readmissions are a symptom of our fragmented payment system and result in considerable unnecessary cost and substandard care quality. The purpose of this document is to describe one of the components of a proposed Readmission Reduction Incentive program designed to provide incentives for hospitals to improve overall care coordination and substantially reduce readmissions.

There are a number of economic and environmental factors motivating this effort – including the passage of National Health Insurance reform and concerns about the affordability of care and financial sustainability of our current health care system. Dramatic slowing in hospital volume growth and the Commission's need to mirror tight updates nationally have also brought many to the realization that we must look for other ways to ensure the financial sustainability of Maryland's hospital/health system.

Commensurate with these events is a recognized need to transition our health care delivery system toward a more coordinated care model, focusing on promoting health of populations and, at the same time, improving efficiency and quality of the care delivered.

Maryland's readmission rates are high compared to the nation. The Center for Medicare and Medicaid Innovation (CMMI) All-payer model demonstration contract, which began on January 1, 2014, has established readmission reduction targets that require Maryland hospitals to be equal or below rates of Medicare readmissions by 2018. In order to enhance our ability to incentivize hospital care improvements and meet the target, the Commission has convened four meetings of the Performance Measurement Workgroup to vet a proposed methodology and deliberate near-term issues related to providing incentives to reduce readmissions.

B. Background

Since the inception of hospital rate regulation in Maryland, the HSCRC has experimented with innovative methods of hospital reimbursement. Pursuant to the provisions of Health-General Article, Section 19-219 and COMAR 10.37.10.06, the Commission may approve experimental payment methodologies that are consistent with the HSCRC's legislative mandate to promote effective and efficient health service delivery and primary policy objectives of cost containment, expanded access to care, equity in payment, financial stability, improved quality, and public accountability.

Our fragmented system for reimbursing health services in this country, for the most part, has provided large disincentives for hospitals and other providers to construct efficient and effective coordinated care models. To address these deficiencies, the HSCRC has implemented episode-based reimbursement and broad-based quality of care Pay-for-Performance ("P4P) methods designed to promote lower cost and higher quality care.

The Global Budget Revenue (GBR), Total Patient Revenue, (TPR) and Admission Readmission Revenue (ARR) arrangements impose a constraint on the amount of revenue a hospital may generate during a particular year. Of note, lacking the ability to assign patients unique patient

identifiers, the ARR program measures and bundles payments for readmissions that occur within the same hospital only. Hospitals are paid HSCRC approved unit rates – rates based on the units of service provided for any given case. In May 2013, the Commission approved a Shared Savings Policy where hospital revenues are adjusted by 0.3% of inpatient revenues to provide similar cost savings as the federal Centers for Medicare and Medicaid Services (CMS) Readmission Reduction program. Hospitals' unit rates are updated on an annual basis per the Commission's normal inflation update process, with any associated adjustments for price compliance, case mix change, volume change, and MHAC and QBR scaling provisions; this recommendation proposes adding an additional positive incentive adjustment for high performing hospitals that meet pre-determined reduction targets for readmissions.

C. Assessment

1. *Maryland's High Readmission Rates*

Figure 1 reviews the status of Maryland hospitals compared to all US hospitals using CMS' FY2013 IPPS Final Rule: Hospital Readmissions Reduction Program-Supplemental Data (Revised March 2013).

Figure 1: Maryland Hospitals Ranked By Excess Readmissions in CMS' Hospital Readmissions Reduction Program*

National Quartiles: Hospital Ranked From Least to Most Excess Readmissions	Excess Readmissions Due To:		
	Pneumonia	Heart Failure	Heart Attack
Quartile 1 (Least Excess Readmissions)	4 (9%)	4 (9%)	2 (5%)
Quartile 2	4 (9%)	6 (14%)	7 (19%)
Quartile 3	7 (16%)	14 (32%)	10 (27%)
Quartile 4 (Most Excess Readmissions)	29 (66%)	20 (45%)	18 (49%)
Total hospitals included in analysis	3,123	3,110	2,262

Source: HSCRC analysis of CMS Readmission data, April 2013.
Note: Based on CMS data from July 1, 2008 to June 30, 2011. Some Maryland hospital did not have enough cases for CMS to calculate excess readmission figures (pneumonia= 1 hospital, health failure=1 hospital, heart attack=8 hospitals).

As illustrated in Figure 1, the majority of Maryland hospitals were ranked below the national average for Medicare's Hospital Readmission indicators, and many were in the lowest 25 percent. Four Maryland hospitals were ranked in the worst 100 hospitals in the nation for each of the three indicators. For pneumonia readmissions, one-fifth of Maryland hospitals (n=9) were ranked among the worst 200 hospitals in the nation for excess readmissions.

Based on data HSCRC has received from the Colorado Foundation for Medical Care on Medicare readmissions in CY 2012, Maryland continues to perform poorly and has one of the highest readmission rates of all states. In addition, quarterly trend data from the Delmarva Foundation through September 2013 on Medicare readmissions continue to reveal that Maryland's readmission rate is substantially higher than the national average.

2. *Master Patient Index Enables Measurement of Across-Hospital Readmissions*

Since HSCRC does not collect sufficient patient level data indicators to identify patients across care settings, staff has worked with the Chesapeake Regional Information System for our Patients (CRISP) to assign patients in our data set unique patient identifiers using the CRISP Master Patient Index technology. HSCRC is now able to match patients across hospitals and calculate reliable inter-hospital readmission rates.

3. *Readmissions Reduction Incentive Program Guiding Principles*

Staff vetted the guiding principles for implementing incentives to reduce readmissions listed below with the Performance Measurement Workgroup.

- Measurement used for performance linked with payment must include all patients regardless of payer.
- Measurement must be fair to hospitals.
- A first year target must be established to reasonably support the overall goal of equal or less than the National Medicare readmission rate by CY 2018.
- Measure specifications used for the program should be consistent with the CMS measure of readmissions (also used by Partnership for Patients Program).

4. *Key Methodology Components that Support the Guiding Principles*

The key methodology components of the proposed readmission reduction program vetted with the Workgroup are described below. (See Appendix I for Complete Measure Calculation Specifications and Appendix VII for FY 2013 Results).

- **Readmission definition**- Total readmissions/total admissions to any acute hospital[1]
- **Broad patient inclusion-** For greater impact and potential for reaching the target the measure should include all payers and any acute hospital readmission in the state. Staff examined the relationship between improvements in all-payer readmission rates and Medicare readmission rates since the CMMI contract is based on Medicare readmission rates only. The analysis indicated that there is a strong correlation between the Medicare and all-payer measures (Appendix IV).
- **Patient exclusion adjustments–** To enhance fairness of the methodology, planned admissions (using the CMS Algorithm V 2.1) and deliveries should be excluded from readmission counts.
- **Positive incentive**- For hospitals that reach or exceed the goal, they have the opportunity to earn the incentive.
- **Performance measurement consistent across hospitals**- A uniform achievement benchmark for all hospitals will be established for the first year, and performance will be measured cumulatively for future years. The Workgroup discussed using a segmented approach, where hospitals with high readmission rates would be required to have higher benchmarks for improvement. Staff examined whether hospitals with high readmission rates in the base year had higher reductions in the following year using intra-hospital readmissions and did

[1] Discharge can both be initial and readmission; one readmission within 30 days is counted; transfers are combined into a single stay; and the 30-day period starts at the end of the combined stay, Left against medical advice is also included in the index. Admissions with discharge status of "Died" are excluded.

not find a significant impact of base year readmission rates on readmission reductions the following year (Appendix V). Given the debate whether socio-economic and demographic factors should be used in readmission risk adjustment and that arguments could be made to lower readmission targets for high readmission hospitals if they serve hard to reach populations, staff recommends using a uniform achievement benchmark for all hospitals.

- **Monitor for unintended consequences**- Observation and ED visits within 30 Days of an inpatient stay will be monitored; adjustments to the positive incentive will be made if observation cases within 30 days increase faster than the other observations in a given hospital.

5. Readmission Reduction Target, Revenue at Risk for Positive Incentive

Setting targets annually for the next five years is problematic as there are no national projected numbers for admissions or readmissions nor are there projected reduction targets. Therefore, staff has modeled and is recommending a one year target we believe is not overly aggressive but may have potential to incrementally close the large gap that must be bridged in five years. According to the (CMMI) all-payer model demonstration contract, "If in a given Performance Year Regulated Maryland Hospitals, in aggregate, fail to outperform the national Readmissions Rate change by an amount equal to or greater than the cumulative difference between the Regulated Maryland Hospital and national Readmission Rates in the base period divided by five, CMS shall follow the corrective action and/or termination provisions of the Waiver of Section 1886(q) as set forth in Section 4.c and in Section 14."

As illustrated in Figure 2 below, if a 5% annual reduction in Medicare readmissions is assumed, for FY 2014, reaching a 6.76% reduction target would enable Maryland to begin to close the gap between Maryland and the nation.

Figure 2. FY 2014 Readmission Reduction Target with 5% Medicare Reduction Modeled

	National Medicare					Maryland Medicare					
	Admissions	Readmis-sions	% Readmis-sions	Percentage Point Change	Percent Change in Rate of Readmits	Admissions	Readmis-sions	% Readmis-sions	Percentage Point Change	Percent Change in Rate of Readmits	MD- US Differ-ence
FY2010	11,043,196	2,049,473	18.56%			253,320	54,019	21.32%			14.9%
FY2011	11,129,694	2,070,250	18.60%	0.04%	0.22%	248,731	52,032	20.92%	-0.40%	-1.88%	12.5%
FY2012	10,857,862	1,991,886	18.35%	-0.25%	-1.34%	241,681	49,100	20.32%	-0.60%	-2.87%	10.7%
FY2013	10,458,098	1,847,036	17.66%	-0.69%	-3.76%	235,532	45,244	19.21%	-1.11%	-5.46%	8.8%
FY 2014			16.78%	-0.88%	-5.00%			17.91%	-1.30%	-6.76%	6.8%
CY 2014			**16.34%**	**-1.32%**	**-7.50%**			**17.26%**	**-1.95%**	**-10.13%**	**5.7%**

In addition to a reduction target, CMMI requires that all Maryland performance programs linked with payment have revenues at risk comparable to the national programs. Appendix III compares Maryland with Medicare revenue magnitudes at risk for each program for FYs 2015-17 and illustrates Maryland designating 0.5% as a positive incentive for reaching readmission reduction targets.

For Maryland's Readmission Reduction Incentive Program, staff believes the amount must not be overly aggressive but sufficient to incentivize positive behavior change and contribute to meeting or exceeding the CMS percentages of revenue at risk.

In its written submission to HSCRC's call for white papers on Quality Based Reimbursement, MHA submitted an alternative proposal for a readmission reduction program. MHA's full white paper submission entitled "Quality-Related Payment Policies HSCRC Waiver Implementation February 28, 2014" is in Appendix VI.

D. Recommendations

As part of the FY 2015 update, the recommendations for the Readmission Shared Savings program will be proposed in May Commission meeting. Staff provides the following recommendations for a new readmission reduction incentive program that would have CY 2014 performance applied to rate year 2016:

1. The Commission should implement a Readmissions Reduction Incentive Program.
2. The CMS readmission measure definition specifications should be used with limited adjustments to enhance the fairness of the measure.
3. The annul target for the first performance year, CY 2014, should be based on an all-payer readmission rate.
4. The risk adjusted readmission reduction target for the first year, CY 2014, should be a 6.76% compared to CY 2013 risk adjusted readmission rates. The readmission reduction target will be determined annually.
5. A positive incentive magnitude of up to 0.5% of the hospital's inpatient permanent revenue should be provided for hospitals that meet or exceed the target set forth in recommendation 4, provided that the FY 2016 update factor has favorable conditions.

Appendix I. HSCRC Methodology for Readmissions FY2016

READMISSIONS

FY2013 inpatient data, with EIDs (base year), was used to calculate the readmission rates for all-payer and Medicare patients.

EXCLUSIONS

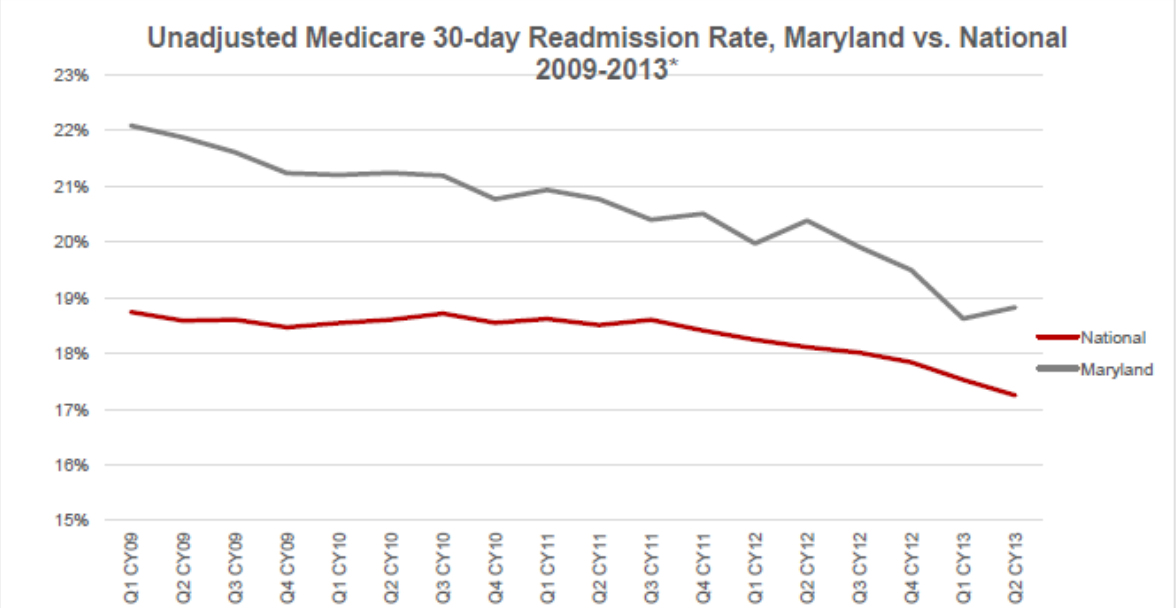
The following were removed from the readmission rate calculations:

1. Rehab hospitals (provider ids 213028,213029, 213300)
2. Cases with null or missing EIDs
3. Duplicates
4. Negative interval days
5. For risk adjustment, based on admission DRGs, exclude DRG and SOI cells with < 2
6. Exclude those who have died (from denominator) and those with same day transfers (interval days = 0) (from readmissions)

RESULTS

1. Two numerators (readmissions within 30 days of a hospitalization)
   a. Unadjusted readmissions (comparable to CMS)
   b. Adjusted readmissions (exclude planned admissions, based on the Clinical Classification System (CCS) to flag planned admissions)
2. Denominator – Total number of discharges
3. Expected Readmissions based on Discharge DRG and Severity of Illness.
4. Calculate Ratio – Adjusted readmissions / expected readmissions
5. Risk Adjusted Readmission Rate – Ratio*Overall state rate

Appendix II. Medicare Readmissions Quarterly Trend Data from the Delmarva Foundation



	CY 2009		CY 2010		CY 2011		CY 2012		CY 2013*	
	Maryland	National	Maryland	National	Maryland	National	Maryland	National	Maryland	National
Admissions	256,702	11,073,489	250,750	11,100,099	246,407	11,042,259	238,001	11,042,259	119,320	5,241,930
Readmissions	55,741	2,060,324	52,926	2,065,268	50,915	2,047,174	47,474	1,930,871	22,343	911,769
% Readmissions	21.71%	18.61%	21.11%	18.61%	20.66%	18.54%	19.95%	17.49%	18.73%	17.39%

Appendix III. Maryland Performance Based Revenue at Risk Percentages 2009-FY2016 (Proposed)

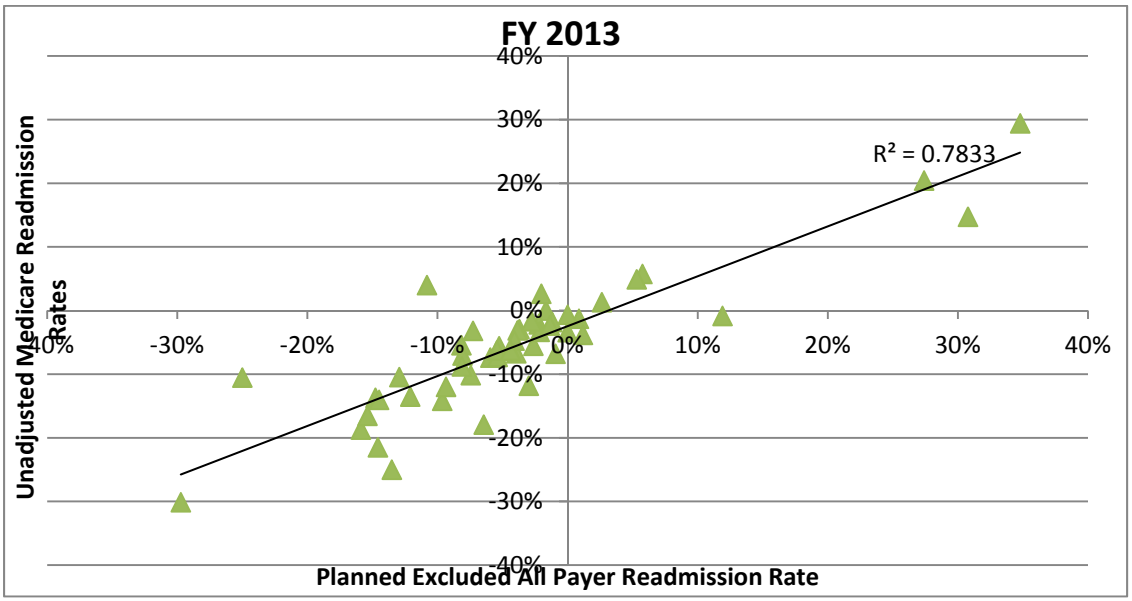
Program	Year	Medicare	Maryland
		% Revenue at Risk	
	FY 2009		
VBP/QBR			**0.50%**
	FY 2010		
VBP/QBR			**0.50%**
	FY 2011		
VBP/QBR			0.50%
HAC/MHAC			0.50%
TOTAL			**1.00%**
	FY 2012		
VBP/QBR			0.50%
HAC/MHAC			1.00%
TOTAL			**1.50%**
	FY 2013		
VBP/QBR		1.00%	0.50%
HAC/MHAC			2.00%
HRRP		1.00%	
TOTAL		**2.00%**	**2.50%**
	FY 2014		
VBP/QBR		1.25%	0.50%
HAC/MHAC			2.00%
HRRP/Readmission Shared Savings		2.00%	0.41%
GBR Potentially Avoidable Utilization Efficiency Adjustment			To be Determined after the Completion of GBR contracts
GBR Cost Efficiency Constraint			To be Determined after the Completion of GBR contracts
TOTAL		**3.25%**	**2.91%**
	FY 2015		
VBP/QBR		1.50%	0.50%
HAC/MHAC		1.00%	3.00%
HRRP/Readmission Shared Savings		3.00%	To be Proposed at May 2014 Commission Meeting
GBR Potentially Avoidable Utilization Efficiency Adjustment			To be Determined after the Completion of GBR contracts
GBR Cost Efficiency Constraint			To be Determined after the Completion of GBR contracts
TOTAL		**5.50%**	**3.50%**

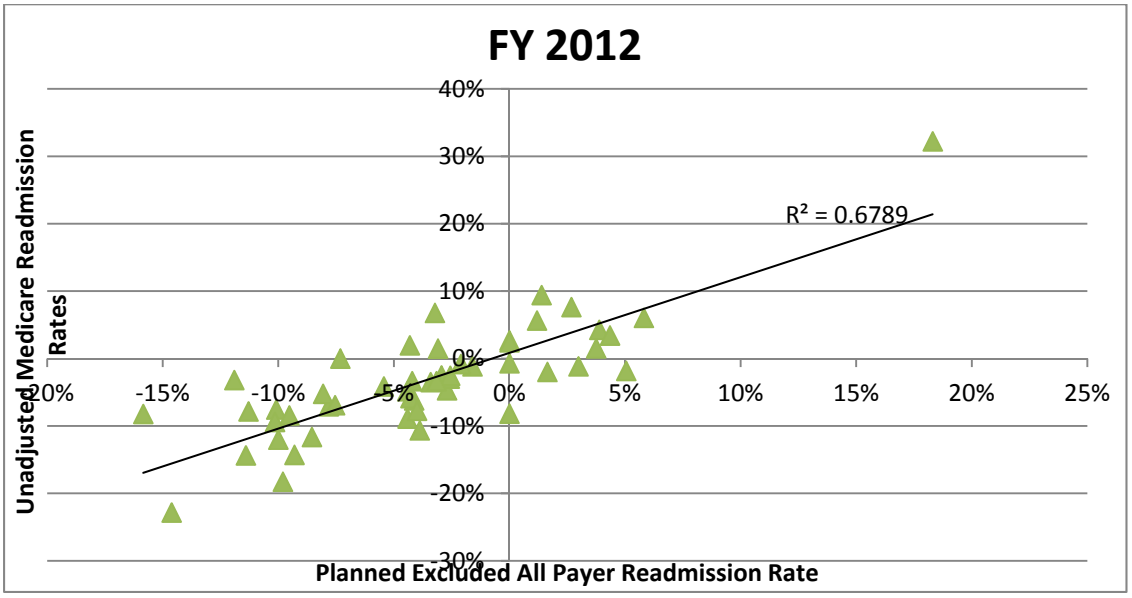
Program	Year	Medicare	Maryland
		% Revenue at Risk	
	FY 2016		
VBP/QBR		1.75%	1.00%
HAC/MHAC		1.00%	4.00%
HRRP/Readmission Shared Savings Program		3.00%	To be Proposed at May 2015 Commission Meeting
Readmission Reduction Incentive Program			0.50% (Proposed)
GBR Potentially Avoidable Utilization Efficiency Adjustment			To be Determined after the Completion of GBR contracts
GBR Cost Efficiency Constraint			To be Determined after the Completion of GBR contracts
Total		**5.75%**	**5.50%**

Waiver Calendar Year Calculations based on Existing and Proposed Policies

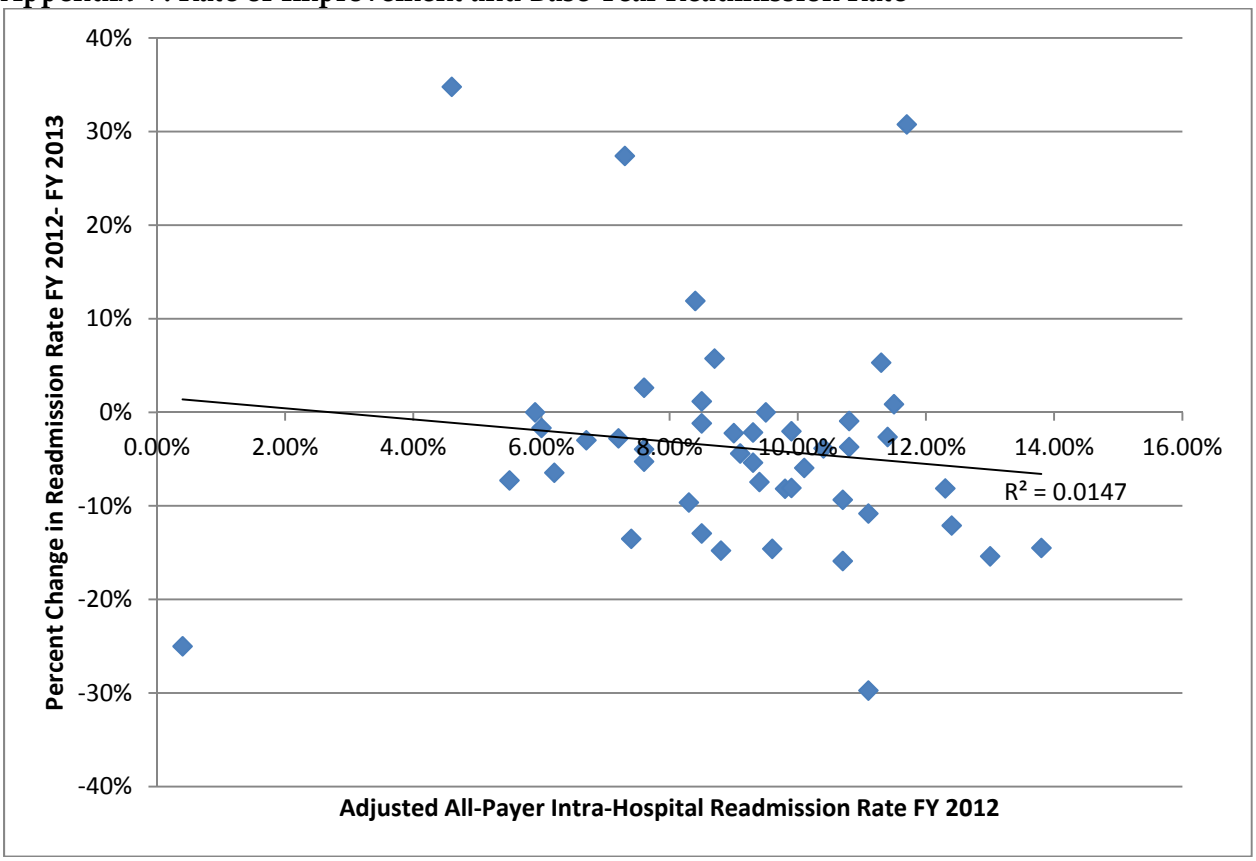
	Medicare	Maryland	Cumulative Difference
CY 2014	3.8%	3.2%	-0.6%
CY 2015	5.6%	4.5%	-1.7%

Appendix IV. Annual Percent Change in Readmission Rates: All-Payer vs Medicare





Appendix V. Rate of Improvement and Base Year Readmission Rate



Appendix VI. MHA White Paper Submission on Quality Based Reimbursement Programs entitled "Quality-Related Payment Policies HSCRC Waiver Implementation February 28, 2014."

NOTE: This submission also addresses the Draft Recommendation for Modifying the Maryland Hospital Acquired Conditions Programs for FY 2016 and is repeated in Appendix VI of that draft recommendation.

Appendix VII. FY 2013 All Payer All Hospital Readmission Rates

HOSPITAL ID	HOSPITAL NAME	TOTAL NUMBER OF HOSPITAL DISCHARGES in DENOMINATOR	TOTAL NUMBER OF UNADJUSTED READMISSIONS	UNADJUSTED READMISSIONS PERCENT	TOTAL NUMBER OF READMISSIONS EXCLUDING PLANNED ADMISSIONS	READMISSIONS EXCLUDING PLANNED ADMISSIONS, PERCENT	TOTAL NUMBER OF EXPECTED READMISSIONS	RATIO = ADJUSTED READMISSIONS / EXPECTED READMISSIONS	RISK ADJUSTED RATE
210017	GARRETT COUNTY	2,247	166	7.39%	156	6.94%	245	0.64	8.02%
210039	CALVERT	7,528	744	9.88%	695	9.23%	906	0.77	9.65%
210003	PRINCE GEORGE	11,951	1,205	10.08%	1,113	9.31%	1,391	0.80	10.05%
210019	PENINSULA REGIONAL	19,148	2,299	12.01%	2,039	10.65%	2,444	0.83	10.48%
210032	UNION HOSPITAL OF CECIL COUNT	6,115	726	11.87%	706	11.55%	843	0.84	10.53%
210037	EASTON	8,470	892	10.53%	806	9.52%	962	0.84	10.53%
210005	FREDERICK MEMORIAL	19,043	2,131	11.19%	1,986	10.43%	2,339	0.85	10.67%
210044	G.B.M.C.	20,319	1,901	9.36%	1,680	8.27%	1,976	0.85	10.68%
210022	SUBURBAN	12,638	1,635	12.94%	1,534	12.14%	1,771	0.87	10.89%
210061	ATLANTIC GENERAL	2,799	422	15.08%	399	14.26%	461	0.87	10.89%
210001	MERITUS	16,506	1,900	11.51%	1,746	10.58%	1,998	0.87	10.98%
210010	DORCHESTER	2,403	382	15.90%	365	15.19%	415	0.88	11.04%
210057	SHADY GROVE	24,918	2,270	9.11%	2,076	8.33%	2,337	0.89	11.17%
210004	HOLY CROSS	34,880	2,876	8.25%	2,628	7.53%	2,932	0.90	11.26%
210006	HARFORD	4,700	772	16.43%	739	15.72%	807	0.92	11.51%
210062	SOUTHERN MARYLAND	15,587	2,081	13.35%	1,899	12.18%	2,069	0.92	11.54%
210016	WASHINGTON ADVENTIST	13,547	1,733	12.79%	1,634	12.06%	1,773	0.92	11.58%
210049	UPPER CHESAPEAKE HEALTH	13,367	1,680	12.57%	1,544	11.55%	1,667	0.93	11.64%
210048	HOWARD COUNTY	18,356	1,997	10.88%	1,812	9.87%	1,930	0.94	11.80%
210033	CARROLL COUNTY	11,963	1,534	12.82%	1,439	12.03%	1,519	0.95	11.91%
210018	MONTGOMERY GENERAL	8,851	1,231	13.91%	1,152	13.02%	1,214	0.95	11.92%
210063	UM ST. JOSEPH	16,582	1,981	11.95%	1,784	10.76%	1,879	0.95	11.94%
210051	DOCTORS COMMUNITY	10,405	1,762	16.93%	1,660	15.95%	1,739	0.96	12.00%
210035	CHARLES REGIONAL	8,194	1,092	13.33%	1,040	12.69%	1,087	0.96	12.03%
210023	ANNE ARUNDEL	31,585	3,067	9.71%	2,755	8.72%	2,864	0.96	12.09%
210058	REHAB & ORTHO	2,680	351	13.10%	311	11.60%	322	0.97	12.15%
210028	ST. MARY	8,388	1,043	12.43%	1,000	11.92%	1,007	0.99	12.48%
210055	LAUREL REGIONAL	6,230	780	12.52%	752	12.07%	740	1.02	12.77%
210015	FRANKLIN SQUARE	23,282	3,294	14.15%	3,050	13.10%	2,983	1.02	12.85%
210027	WESTERN MARYLAND HEALTH SYS	13,147	1,843	14.02%	1,657	12.60%	1,618	1.02	12.87%
210045	MCCREADY	259	50	19.31%	48	18.53%	46	1.04	13.02%
210011	ST. AGNES	18,461	2,602	14.09%	2,461	13.33%	2,332	1.06	13.26%
210012	SINAI	25,677	4,093	15.94%	3,662	14.26%	3,445	1.06	13.36%
210034	HARBOR	9,486	1,240	13.07%	1,171	12.34%	1,088	1.08	13.52%
210008	MERCY	19,128	2,286	11.95%	2,054	10.74%	1,898	1.08	13.60%
210002	UNIVERSITY OF MARYLAND	32,496	5,834	17.95%	4,935	15.19%	4,547	1.09	13.64%
210060	FT. WASHINGTON	2,092	346	16.54%	335	16.01%	306	1.10	13.77%
210009	JOHNS HOPKINS	47,162	8,760	18.57%	7,417	15.73%	6,682	1.11	13.95%
210024	UNION MEMORIAL	13,357	2,347	17.57%	2,226	16.67%	2,005	1.11	13.95%
210043	BALTIMORE WASHINGTON MEDICAL	18,389	3,156	17.16%	2,925	15.91%	2,616	1.12	14.05%
210056	GOOD SAMARITAN	12,321	2,480	20.13%	2,334	18.94%	2,080	1.12	14.11%
210030	CHESTERTOWN	2,060	398	19.32%	377	18.30%	335	1.12	14.13%
210040	NORTHWEST	12,539	2,401	19.15%	2,311	18.43%	2,040	1.13	14.24%
210029	HOPKINS BAYVIEW MED CTR	21,072	3,561	16.90%	3,342	15.86%	2,876	1.16	14.61%
210038	UMMC MIDTOWN	7,192	1,560	21.69%	1,520	21.13%	1,217	1.25	15.70%
210013	BON SECOURS	5,611	1,603	28.57%	1,555	27.71%	1,080	1.44	18.10%
	STATE	643,131	88,507	13.76%	80,830	12.57%	80,830	1	