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**HEALTH SERVICES COST REVIEW COMMISSION**

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**467<sup>th</sup> MEETING OF THE HEALTH SERVICES COST REVIEW COMMISSION**

**May 5, 2010**

**The meeting agenda items listed below were approved:**

4. **Docket Status - Cases Open**  
2067R - Garrett County Memorial Hospital
9. **Final Recommendations on One Day Length of Stay – amended**
10. **Final Recommendations for Continued Support of the Maryland Patient Safety Center**
11. **Final Recommendations for FY 2011 Nurse Support II and Competitive Institutional Grants**

**IN RE: THE PARTIAL RATE                   \*       BEFORE THE HEALTH SERVICES**  
**APPLICATION OF THE                   \*       COST REVIEW COMMISSION**  
**GARRETT COUNTY                   \*       DOCKET                               2010**  
**MEMORIAL HOSPITAL                   \*       FOLIO:                               1877**  
**OAKLAND, MARYLAND                   \*       PROCEEDING:                       2067R**

\*\*\*\*\*

**Staff Recommendation**

**May 5, 2010**

**This recommendation was approved at the May 5, 2010 Commission Meeting.**

## **Introduction**

On April 7, 2010, Garrett County Memorial Hospital (the Hospital) submitted a partial rate application requesting a rebundled rate for Interventional Radiology/ Cardiovascular services (IRC). A rebundled rate is approved by the Commission when a hospital provides certain non-physician services to inpatients off-site. By approving a rebundled rate, the Commission makes it possible for a hospital to bill for services provided off-site, as required by Medicare. The Hospital is requesting the statewide median rate for IRC services to be effective May 1, 2010.

## **Staff Evaluation**

To determine if the Hospital's IRC rate should be set at the statewide median rate or at a rate based on its own cost experience, the staff requested that the Hospital submit to the Commission all cost and statistical data for IRC for FY 2010. Based on information received, it was determined that the IRC rate based on the Hospital's actual data would be \$ 127.10 per RVU, while the statewide median rate for IRC services is \$53.78 per RVU.

## **Recommendation**

After reviewing the Hospital's application, the staff has the following recommendations:

1. That COMAR 10.37.10.07 requiring that rate applications be filed 60 days prior to the opening of a new service be waived;
2. That an IRC rate of \$53.78 per RVU be approved effective May 1, 2010;
3. That no change be made to the Hospital's Charge per Case standard for IRC services; and
4. That the IRC rate not be rate realigned until a full year's experience data have been reported to the Commission.

**Final Staff Recommendation Rate Methods and Financial Incentives  
relating to One Day Length of Stay and Denied Cases in the  
Maryland Hospital Industry**

Health Services Cost Review Commission  
May 5, 2009

This final recommendation was approved, with the amendments listed on page 22, by the Commission on May 5, 2010.

# **Introduction and Background - One Day Stay and Denied Cases**

## **Introduction**

This document relates to recommended changes in rate incentives associated with so-called One Day Stay (ODS) cases reimbursed through the Maryland rate setting methods as determined by the Health Services Cost Review Commission (the Commission or HSCRC). This document also discusses modifications to the calculation of hospital Charge per Case (CPC) constraints to appropriately account for denied cases in the establishing of approved revenue.

For purposes of this recommendation, One Day Stay or ODS acute care cases are defined as cases that are admitted to an acute inpatient unit and have either a zero or one-day length of stay. Denied cases refer to patients who were originally admitted to an inpatient unit, but after additional review (and any associated hospital appeal) it was determined that the decision to admit was not medically necessary. Denied cases may have stayed zero, one or more than one days

## **Background**

### **Basis for this Review and Recommendation**

This issue is currently a focus of discussions between both HSCRC staff and industry representatives due to developments both nationally and internal to Maryland:

- 1) ODS cases have recently been a focus of the national Medicare Recovery Audit Contractor (“RAC”) initiative currently authorized by federal law to identify areas of both overpayment and underpayment to acute care hospitals by the Medicare program. The RAC process was initially piloted in several states but will be expanded to all states (including Maryland) by January 2010. ODS cases have been a particular area of focus for the RAC because of concern regarding whether or not these admissions meet Medicare’s medical necessity criteria. In RAC audits in pilot states, large numbers of ODS cases were denied based on RAC determinations that the cases should not have been admitted for inpatient care because they were appropriate for outpatient observation or other less-intensive (and less costly – from Medicare’s perspective) forms of care. ODS cases by chest pain patients are an example of a condition targeted by RACs;
- 2) During CY 2009, several private payers (likely in reaction to the focus on one-day stays by Medicare nationally, contacted the HSCRC staff regarding the wide variation in the use of outpatient observation services by Maryland hospitals. These private payers believed that Maryland hospital practices were leading to an overuse of inpatient levels of care for patients that could be treated as observation cases. Overuse of inpatient services for cases that could be treated on an outpatient observation basis results in excess medical cost and potential additional clinical risks for patients (exposure to generally higher rates of complications for inpatient cases than for outpatient cases). ODS cases also can be surgical cases that are admitted and the surgery is performed in an inpatient basis (instead of being performed on an ambulatory basis);

- 3) Additionally, over the summer of 2009 staff became aware of anomalous reporting and handling (for purposes of hospital Charge per Case development) of denied (based on medical necessity criteria) inpatient cases. This issue and the associated hospital reimbursement implications will also be discussed and addressed in the staff's recommendations for changes to HSCRC payment policies.

The overuse of inpatient services for medical and surgical cases arguably inflates the overall cost of hospital care in Maryland. There is also evidence that suggests that there may be negative quality of care related implications associated with excessive inpatient treatment. These considerations along with the three factors noted above, caused the HSCRC to analyze Maryland hospital performance on ODS cases, both over time and relative to hospitals in other states.

### **Maryland Relative Performance on ODS Cases (as a proportion of total cases)**

Historically, Maryland hospitals have (relative to national standards) admitted a much higher percentage of ODS (both medical and surgical) cases as a proportion of total inpatient admission, relative to hospitals nationally.<sup>1</sup> **Table 1** provides a comparison of proportions of one-day LOS admissions as a percentage of state-wide admissions for the years 2003 – 2008 for both all-payers and for Medicare. The table shows Maryland admits 6% more one-day stays overall and 4% more Medicare one-day stay cases than hospitals in the rest of the US.

Table 1

Maryland Proportion of 1 Day LOS Cases as a % of Total Statewide Cases						
	2003	2004	2005	2006	2007	2008
Maryland Medicare Cases	16.58%	16.99%	17.54%	17.83%	17.59%	17.49%
US Medicare Cases	13.30%	13.44%	13.48%	13.75%	13.68%	13.40%
Difference	3.28%	3.55%	4.06%	4.08%	3.91%	4.09%
Maryland All-Payer (excluding newborns)				22.48%		
US All-Payer (estimateHCUP data excluding newborns)				16.58%		
Difference				5.90%		
Maryland (All Payer)						21.40%
New York State (All Payer data)						15.30%
						6.10%

Source of the Medicare data: National Medpar file 2003-2008

<sup>1</sup> Staff's analysis of national case mix data sample available through the HCUP program for 2006 indicated that Maryland appears to be the 5<sup>th</sup> highest state in terms of ODS cases as a proportion of all inpatient admissions.

This difference in admitting practices also does not appear to be regional phenomena. **Table 2** shows that Maryland hospitals also admit much higher proportions of one-day LOS cases than do hospitals in neighboring areas.

**Table 2**

Maryland Proportion of 1 Day LOS Cases as a % of Total Statewide Cases (Medicare) - Region (2007)			
	Total Cases	1 Day Cases	Proportion
Maryland	255,153	45,013	17.60%
Washington DC	36,053	4,548	12.61%
Delaware	40,701	4,733	11.63%
Pennsylvania	559,799	69,507	12.42%
Virginia	285,149	36,001	12.63%

The comparisons of Maryland hospital less efficient performance on 1 Day LOS cases versus hospitals nationally is further substantiated by data provided by a national private insurer, United Health Care. According to United’s national data, Maryland has the second highest use of inpatient hospitalization in the country, for cases that met United’s criteria for treatment on an observation basis. The Maryland percentage is 62% compared to the average of United’s national case totals of 36%.

**CareFirst Experience with One Day Admission Cases in Maryland vs. Other Jurisdictions**

During the course of Work Group Discussions, CareFirst also provided some information regarding its experience in Maryland, Washington DC and Virginia with hospitals’ practices related to the use of Observation services vs. admitting patients for inpatient care. These data (shown in Appendix I) show the different in clinical treatment patterns between Maryland hospitals and hospitals outside of Maryland. Stent cases inside of Maryland were admitted 97% of the time and treated on an outpatient basis only 3% of the time, whereas hospitals in the District of Columbia and Virginia admitted these type of patients only 27% and 13% of the time (respectively) and treated stent patients 73% and 87% of the time on an outpatient basis (respectively). These data are summarized in **Table 3** below.

**Table 3**  
**Combined Summary of Cases For Stent**  
 Inpatient and Outpatient  
 Summary by Jurisdiction (CareFirst Maryland)

Inpatient Summary - Average per case for Stents  
 DC, VA and Select MD Hospitals CY 2008 - 02/2009  
 (MD hospitals include JHH, UMMS, St. Joseph's, WAH)

Outpatient Summary - Average per case for Stents  
 DC, VA and Select MD Hospitals CY 2008 - 02/2009  
 (MD hospitals include JHH, UMMS, St. Joseph's, WAH)

		<b>Ratio of Inpatient to Outpatient Stents</b>				
		<u>Inpatient</u>	<u>Outpatient</u>	<u>Total</u>	<u>Inpatient</u>	<u>Outpatient</u>
DC	Cases	119	328	447	26.62%	73.38%
	Avg. billed amt	\$42,164	\$20,242			
	Avg Allowed amt	\$19,470	\$10,946			
MD	Cases	1,206	35	<b>1,241</b>	<b>97.18%</b>	<b>2.82%</b>
	Avg. billed amt	\$13,818	\$11,258			
	Avg Allowed amt	\$13,214	\$11,044			
VA	Cases	32	209	241	13.28%	86.72%
	Avg. billed amt	\$35,184	\$20,723			
	Avg Allowed amt	\$19,405	\$10,103			

Total No. Cases	1,470	776
Total Avg Billed Amt.	\$16,228	\$15,107
Total Avg Allowed Amt.	\$13,776	\$8,291
Proportion of Inpatient pmt/stent to Outpatient pmt/stent		60.18%

### Recent and Current Maryland Hospital Performance

The following tables also show more updated information on the performance of Maryland hospitals on ODS performance (ODS cases as a proportion of total inpatient admissions). These data show that while a few hospitals have been relatively proactive in establishing observation units and shifting cases to observation status away from inpatient treatment (see Table 4a "early adopters"), most hospitals remain very high in terms of their proportion of ODS cases and many hospitals are increasing their proportion of ODS cases (see Table 4b, rank of ODS as a percentage of total cases).



Table 4A

Total Cases per Year Compared to ODS Cases per Year  
 RY 2007 - RY 2010; Level I CPC Cases Only Excluding Delivery Normal Newborn and TPR Hospitals  
 Ranked Based on Rates of Change in Pct ODS cases (2007-2010)

Hospital	Total Cases				ODS Cases				Percentage ODS Cases				Percentage Increase/(Decrease)			
	2007	2008	2009	2010 Annualized	2007	2008	2009	2010 Annualized	2007	2008	2009	2010 Annualized	2008	2009	2010	chg_07-10
Johns Hopkins Bayview	20,251	19,860	19,448	19,482	4,631	4,094	3,722	3,708	22.87%	20.61%	19.14%	19.03%	-2.25%	-1.48%	-0.11%	-3.84%
Johns Hopkins Hospital	40,147	40,200	40,126	40,606	10,700	9,830	9,997	9,540	26.65%	24.45%	24.91%	23.49%	-2.20%	0.46%	-1.42%	-3.16%
Montgomery General Hospital	9,250	9,785	9,827	9,294	1,782	1,804	1,719	1,520	19.26%	18.44%	17.49%	16.35%	-0.83%	-0.94%	-1.14%	-2.91%
Southern Maryland Hospital Center	16,937	16,701	16,502	15,740	4,079	3,876	3,773	3,338	24.08%	23.21%	22.86%	21.21%	-0.88%	-0.34%	-1.66%	-2.88%
University Oncology	859	825	841	870	116	91	64	94	13.50%	11.03%	7.61%	10.80%	-2.47%	-3.42%	3.19%	-2.70%
GBMC	19,801	19,344	19,323	18,476	4,477	3,905	4,017	3,702	22.61%	20.19%	20.79%	20.04%	-2.42%	0.60%	-0.75%	-2.57%
Memorial Hospital at Easton	8,284	8,939	9,220	9,196	2,010	2,009	1,836	2,006	24.26%	22.47%	19.91%	21.81%	-1.79%	-2.56%	1.90%	-2.45%
Sinai Hospital	21,984	23,022	22,965	23,104	4,822	5,201	4,985	4,536	21.93%	22.59%	21.71%	19.63%	0.66%	-0.88%	-2.07%	-2.30%
Suburban Hospital	14,145	14,708	14,589	13,688	3,754	3,961	3,743	3,362	26.54%	26.93%	25.66%	24.56%	0.39%	-1.27%	-1.09%	-1.98%
Dorchester General Hospital	3,331	3,524	3,666	3,460	736	742	664	702	22.10%	21.06%	18.11%	20.29%	-1.04%	-2.94%	2.18%	-1.81%
Shady Grove Adventist Hospital	17,753	18,408	19,634	19,330	3,775	3,848	3,901	3,766	21.26%	20.90%	19.87%	19.48%	-0.36%	-1.04%	-0.39%	-1.78%
Laurel Regional Hospital	6,297	6,320	6,121	5,734	1,242	1,231	1,092	1,030	19.72%	19.48%	17.84%	17.96%	-0.25%	-1.64%	0.12%	-1.76%
Saint Joseph Medical Center	22,516	22,111	22,176	18,856	5,857	5,703	6,155	4,602	26.01%	25.79%	27.76%	24.41%	-0.22%	1.96%	-3.35%	-1.61%
Sinai Oncology	1,450	1,454	1,541	1,458	195	200	190	174	13.45%	13.76%	12.33%	11.93%	0.31%	-1.43%	-0.40%	-1.51%
Frederick Memorial Hospital	15,269	16,338	16,297	16,810	3,003	3,229	2,686	3,062	19.67%	19.76%	16.48%	18.22%	0.10%	-3.28%	1.73%	-1.45%
Howard County General Hospital	12,349	11,993	12,692	13,124	2,394	2,285	2,451	2,404	19.39%	19.05%	19.31%	18.32%	-0.33%	0.26%	-0.99%	-1.07%
Northwest Hospital Center	12,841	12,788	12,742	13,306	2,662	2,560	2,589	2,636	20.73%	20.02%	20.32%	19.81%	-0.71%	0.30%	-0.51%	-0.92%
Washington Adventist Hospital	16,902	16,849	16,452	16,326	4,374	4,016	3,936	4,080	25.88%	23.84%	23.92%	24.99%	-2.04%	0.09%	1.07%	-0.89%
University of Maryland Hospital	24,385	24,394	24,982	26,504	6,338	6,302	6,283	6,676	25.99%	25.83%	25.15%	25.19%	-0.16%	-0.68%	0.04%	-0.80%
Upper Chesapeake Medical Center	12,671	14,675	15,356	14,180	3,767	4,818	5,230	4,104	29.73%	32.83%	34.06%	28.94%	3.10%	1.23%	-5.12%	-0.79%
Anne Arundel Medical Center	20,036	20,493	21,881	21,678	5,013	4,615	5,299	5,274	25.02%	22.52%	24.22%	24.33%	-2.50%	1.70%	0.11%	-0.69%
Saint Agnes Hospital	19,368	19,252	20,777	20,668	4,977	4,704	5,144	5,170	25.70%	24.43%	24.76%	25.01%	-1.26%	0.32%	0.26%	-0.68%
Memorial of Cumberland	7,216	7,284	7,141	5,506	1,495	1,376	1,396	1,110	20.72%	18.89%	19.55%	20.16%	-1.83%	0.66%	0.61%	-0.56%
Washington County Hospital	15,105	15,277	15,157	14,992	2,889	2,953	2,823	2,810	19.13%	19.33%	18.63%	18.74%	0.20%	-0.70%	0.12%	-0.38%
James Lawrence Kernan Hospital	2,610	2,764	2,789	2,896	130	109	122	138	4.98%	3.94%	4.37%	4.77%	-1.04%	0.43%	0.39%	-0.22%
Harford Memorial Hospital	6,531	7,317	7,743	7,106	1,582	1,894	2,264	1,706	24.22%	25.88%	29.24%	24.01%	1.66%	3.35%	-5.23%	-0.22%
Fort Washington Medical Center	2,898	2,903	2,962	3,080	636	574	622	670	21.95%	19.77%	21.00%	21.75%	-2.17%	1.23%	0.75%	-0.19%
Braddock Hospital	9,485	9,277	9,348	10,398	2,055	1,958	2,032	2,248	21.67%	21.11%	21.74%	21.62%	-0.56%	0.63%	-0.12%	-0.05%
Union Memorial Hospital	19,990	20,687	20,551	19,674	6,339	6,351	6,410	6,272	31.71%	30.70%	31.19%	31.88%	-1.01%	0.49%	0.69%	0.17%
Harbor Hospital Center	12,136	12,890	12,834	11,790	2,884	2,809	3,042	2,848	23.76%	21.79%	23.70%	24.16%	-1.97%	1.91%	0.45%	0.39%
Prince George's Hospital Center	12,925	12,274	12,858	12,404	2,604	2,876	2,915	2,554	20.15%	23.43%	22.67%	20.59%	3.28%	-0.76%	-2.08%	0.44%
Peninsula Regional Medical Center	19,761	19,789	20,100	20,876	3,746	3,725	3,692	4,070	18.96%	18.82%	18.37%	19.50%	-0.13%	-0.46%	1.13%	0.54%
Saint Mary's Hospital	8,592	8,973	8,986	8,346	2,558	2,771	2,741	2,536	29.77%	30.88%	30.50%	30.39%	1.11%	-0.38%	-0.12%	0.61%
Franklin Square Hospital Center	24,619	25,890	26,337	26,298	7,484	7,897	8,451	8,224	30.40%	30.50%	32.09%	31.27%	0.10%	1.59%	-0.82%	0.87%
Union of Cecil	7,428	8,161	8,134	7,708	1,859	1,982	2,190	2,028	25.03%	24.29%	26.92%	26.31%	-0.74%	2.64%	-0.61%	1.28%
Bon Secours Hospital	7,925	6,597	7,067	7,712	999	928	971	1,074	12.61%	14.07%	13.74%	13.93%	1.46%	-0.33%	0.19%	1.32%
Civita Medical Center	7,128	7,105	7,302	7,598	1,591	1,535	1,808	1,814	22.32%	21.60%	24.76%	23.87%	-0.72%	3.16%	-0.89%	1.55%
Baltimore Washington Medical Cen	18,128	18,878	19,504	20,688	4,295	4,402	4,588	5,288	23.69%	23.32%	23.52%	25.56%	-0.37%	0.21%	2.04%	1.87%
Good Samaritan Hospital	16,924	17,066	17,324	16,958	3,305	3,352	3,803	3,708	19.53%	19.64%	21.95%	21.87%	0.11%	2.31%	-0.09%	2.34%
Doctors Community Hospital	11,803	11,622	11,883	12,010	2,715	2,594	2,951	3,070	23.00%	22.32%	24.83%	25.56%	-0.68%	2.51%	0.73%	2.56%
Carroll Hospital Center	15,270	15,365	15,691	15,104	4,295	4,078	4,474	4,644	28.13%	26.54%	28.51%	30.75%	-1.59%	1.97%	2.23%	2.62%
Mercy Medical Center	15,812	16,243	16,928	17,246	3,890	4,157	4,398	4,698	24.60%	25.59%	25.98%	27.24%	0.99%	0.39%	1.26%	2.64%
Calvert Memorial Hospital	7,526	7,483	7,844	7,624	1,783	1,730	2,363	2,034	23.69%	23.12%	30.12%	26.68%	-0.57%	7.01%	-3.45%	2.99%
Johns Hopkins Oncology	2,912	2,822	2,986	3,074	626	709	761	754	21.50%	25.12%	25.49%	24.53%	3.63%	0.36%	-0.96%	3.03%
Atlantic General Hospital	3,602	3,681	3,793	3,970	826	818	853	1,058	22.93%	22.22%	22.49%	26.65%	-0.71%	0.27%	4.16%	3.72%
Holy Cross Hospital	22,727	22,666	23,082	23,862	3,416	3,026	4,199	4,478	15.03%	13.35%	18.19%	18.77%	-1.68%	4.84%	0.57%	3.74%
Chester River Health System	3,501	3,415	3,297	3,026	560	601	715	640	16.00%	17.60%	21.69%	21.15%	1.60%	4.09%	-0.54%	5.15%
Maryland General Hospital	10,846	10,849	10,675	10,624	1,320	1,682	1,885	2,104	12.17%	15.50%	17.66%	19.80%	3.33%	2.15%	2.15%	7.63%
Total	630,226	639,261	649,474	642,460	146,586	145,911	151,945	148,064	23.26%	22.82%	23.40%	23.05%	-0.43%	0.57%	-0.35%	-0.21%

Note (1): US Hospital One day stay cases as a proportion of total admissions is approximately 16.5% as of 2006 per HCUP data compared to Maryland's average of over 23% FY 2010 YTD

Note (2): Hospitals in BOLD are thought to be "early-adopters" of OBS services

Table 4B

Total Cases per Year Compared to ODS Cases per Year  
 RY 2007 - RY 2010; Level I/II/III Cases Only Excluding Delivery Normal Newborn and TPR Hospitals

Ranked based on Proportion of ODS cases to Total Inpatient Cases

Hospital	Total Cases					ODS Cases					Percentage ODS Cases					Percentage Increase/(Decrease)			
	2007	2008	2009	2010	Annualized	2007	2008	2009	2010	Annualized	2007	2008	2009	2010	Annualized	2008	2009	2010	chg 07-10
Union Memorial Hospital	19,990	20,687	20,551	19,674		6,339	6,351	6,410	6,272		31.71%	30.70%	31.19%	<b>31.88%</b>	-1.01%	0.49%	0.69%	0.17%	
Franklin Square Hospital Center	24,619	25,890	26,337	26,298		7,484	7,897	8,451	8,224		30.40%	30.50%	32.09%	<b>31.27%</b>	0.10%	1.59%	-0.82%	0.87%	
Carroll Hospital Center	15,270	15,365	15,691	15,104		4,295	4,078	4,474	4,644		28.13%	26.54%	28.51%	<b>30.75%</b>	-1.59%	1.97%	2.23%	2.62%	
Saint Mary's Hospital	8,592	8,973	8,986	8,346		2,558	2,771	2,741	2,536		29.77%	30.88%	30.50%	<b>30.39%</b>	1.11%	-0.38%	-0.12%	0.61%	
Upper Chesapeake Medical Center	12,671	14,675	15,356	14,180		3,767	4,818	5,230	4,104		29.73%	32.83%	34.06%	<b>28.94%</b>	3.10%	1.23%	-5.12%	-0.79%	
Mercy Medical Center	15,812	16,243	16,928	17,246		3,890	4,157	4,398	4,698		24.60%	25.59%	25.98%	<b>27.24%</b>	0.99%	0.39%	1.26%	2.64%	
Calvert Memorial Hospital	7,526	7,483	7,844	7,624		1,783	1,730	2,363	2,034		23.69%	23.12%	30.12%	<b>26.68%</b>	-0.57%	7.01%	-3.45%	2.99%	
Atlantic General Hospital	3,602	3,681	3,793	3,970		826	818	853	1,058		22.93%	22.22%	22.49%	<b>26.65%</b>	-0.71%	0.27%	4.16%	3.72%	
Union of Cecil	7,428	8,161	8,134	7,708		1,859	1,982	2,190	2,028		25.03%	24.29%	26.92%	<b>26.31%</b>	-0.74%	2.64%	-0.61%	1.28%	
Doctors Community Hospital	11,803	11,622	11,883	12,010		2,715	2,594	2,951	3,070		23.00%	22.32%	24.83%	<b>25.56%</b>	-0.68%	2.51%	0.73%	2.56%	
Baltimore Washington Medical Center	18,128	18,878	19,504	20,688		4,295	4,402	4,588	5,288		23.69%	23.32%	23.52%	<b>25.56%</b>	-0.37%	0.21%	2.04%	1.87%	
University of Maryland Hospital	24,385	24,394	24,982	26,504		6,338	6,302	6,283	6,676		25.99%	25.83%	25.15%	<b>25.19%</b>	-0.16%	-0.68%	0.04%	-0.80%	
Saint Agnes Hospital	19,368	19,252	20,777	20,668		4,977	4,704	5,144	5,170		25.70%	24.43%	24.76%	<b>25.01%</b>	-1.26%	0.32%	0.26%	-0.68%	
Washington Adventist Hospital	16,902	16,849	16,452	16,326		4,374	4,016	3,936	4,080		25.88%	23.84%	23.92%	<b>24.99%</b>	-2.04%	0.09%	1.07%	-0.89%	
Suburban Hospital	14,145	14,708	14,589	13,688		3,754	3,961	3,743	3,362		26.54%	26.93%	25.66%	<b>24.56%</b>	0.39%	-1.27%	-1.09%	-1.98%	
Johns Hopkins Oncology	2,912	2,822	2,986	3,074		626	709	761	754		21.50%	25.12%	25.49%	<b>24.53%</b>	3.63%	0.36%	-0.96%	3.03%	
Saint Joseph Medical Center	22,516	22,111	22,176	18,856		5,857	5,703	6,155	4,602		26.01%	25.79%	27.76%	<b>24.41%</b>	-0.22%	1.96%	-3.35%	-1.61%	
Anne Arundel Medical Center	20,036	20,493	21,881	21,678		5,013	4,615	5,299	5,274		25.02%	22.52%	24.22%	<b>24.33%</b>	-2.50%	1.70%	0.11%	-0.69%	
Harbor Hospital Center	12,136	12,890	12,834	11,790		2,884	2,809	3,042	2,848		23.76%	21.79%	23.70%	<b>24.16%</b>	-1.97%	1.91%	0.45%	0.39%	
Harford Memorial Hospital	6,531	7,317	7,743	7,106		1,582	1,894	2,264	1,706		24.22%	25.88%	29.24%	<b>24.01%</b>	1.66%	3.35%	-5.23%	-0.22%	
Civista Medical Center	7,128	7,105	7,302	7,598		1,591	1,535	1,808	1,814		22.32%	21.60%	24.76%	<b>23.87%</b>	-0.72%	3.16%	-0.89%	1.55%	
Johns Hopkins Hospital	40,147	40,200	40,126	40,606		10,700	9,830	9,997	9,540		26.65%	24.45%	24.91%	<b>23.49%</b>	-2.20%	0.46%	-1.42%	-3.16%	
Good Samaritan Hospital	16,924	17,066	17,324	16,958		3,305	3,352	3,803	3,708		19.53%	19.64%	21.95%	<b>21.87%</b>	0.11%	2.31%	-0.09%	2.34%	
Memorial Hospital at Easton	8,284	8,939	9,220	9,196		2,010	2,009	1,836	2,006		24.26%	22.47%	19.91%	<b>21.81%</b>	-1.79%	-2.56%	1.90%	-2.45%	
Fort Washington Medical Center	2,898	2,903	2,962	3,080		636	574	622	670		21.95%	19.77%	21.00%	<b>21.75%</b>	-2.17%	1.23%	0.75%	-0.19%	
Braddock Hospital	9,485	9,277	9,348	10,398		2,055	1,958	2,032	2,248		21.67%	21.11%	21.74%	<b>21.62%</b>	-0.56%	0.63%	-0.12%	-0.05%	
Southern Maryland Hospital Center	16,937	16,701	16,502	15,740		4,079	3,876	3,773	3,338		24.08%	23.21%	22.86%	<b>21.21%</b>	-0.88%	-0.34%	-1.66%	-2.88%	
Chester River Health System	3,501	3,415	3,297	3,026		560	601	715	640		16.00%	17.60%	21.69%	<b>21.15%</b>	1.60%	4.09%	-0.54%	5.15%	
Prince George's Hospital Center	12,925	12,274	12,858	12,404		2,604	2,876	2,915	2,554		20.15%	23.43%	22.67%	<b>20.59%</b>	3.28%	-0.76%	-2.08%	0.44%	
Dorchester General Hospital	3,331	3,524	3,666	3,460		736	742	664	702		22.10%	21.06%	18.11%	<b>20.29%</b>	-1.04%	-2.94%	2.18%	-1.81%	
Memorial of Cumberland	7,216	7,284	7,141	5,506		1,495	1,376	1,396	1,110		20.72%	18.89%	19.55%	<b>20.16%</b>	-1.83%	0.66%	0.61%	-0.56%	
GBMC	19,801	19,344	19,323	18,476		4,477	3,905	4,017	3,702		22.61%	20.19%	20.79%	<b>20.04%</b>	-2.42%	0.60%	-0.75%	-2.57%	
Northwest Hospital Center	12,841	12,788	12,742	13,306		2,662	2,560	2,589	2,636		20.73%	20.02%	20.32%	<b>19.81%</b>	-0.71%	0.30%	-0.51%	-0.92%	
Maryland General Hospital	10,846	10,849	10,675	10,624		1,320	1,682	1,885	2,104		12.17%	15.50%	17.66%	<b>19.80%</b>	3.33%	2.15%	2.15%	7.63%	
Sinai Hospital	21,984	23,022	22,965	23,104		4,822	5,201	4,985	4,536		21.93%	22.59%	21.71%	<b>19.63%</b>	0.66%	-0.88%	-2.07%	-2.30%	
Peninsula Regional Medical Center	19,761	19,789	20,100	20,876		3,746	3,725	3,692	4,070		18.96%	18.82%	18.37%	<b>19.50%</b>	-0.13%	-0.46%	1.13%	0.54%	
Shady Grove Adventist Hospital	17,753	18,408	19,634	19,330		3,775	3,848	3,901	3,766		21.26%	20.90%	19.87%	<b>19.48%</b>	-0.36%	-1.04%	-0.39%	-1.78%	
Johns Hopkins Bayview	20,251	19,860	19,448	19,482		4,631	4,094	3,722	3,708		22.87%	20.61%	19.14%	<b>19.03%</b>	-2.25%	-1.48%	-0.11%	-3.84%	
Holy Cross Hospital	22,727	22,666	23,082	23,862		3,416	3,026	4,199	4,478		15.03%	13.35%	18.19%	<b>18.77%</b>	-1.68%	4.84%	0.57%	3.74%	
Washington County Hospital	15,105	15,277	15,157	14,992		2,889	2,953	2,823	2,810		19.13%	19.33%	18.63%	<b>18.74%</b>	0.20%	-0.70%	0.12%	-0.38%	
Howard County General Hospital	12,349	11,993	12,692	13,124		2,394	2,285	2,451	2,404		19.39%	19.05%	19.31%	<b>18.32%</b>	-0.33%	0.26%	-0.99%	-1.07%	
Frederick Memorial Hospital	15,269	16,338	16,297	16,810		3,003	3,229	2,686	3,062		19.67%	19.76%	16.48%	<b>18.22%</b>	0.10%	-3.28%	1.73%	-1.45%	
Laurel Regional Hospital	6,297	6,320	6,121	5,734		1,242	1,231	1,092	1,030		19.72%	19.48%	17.84%	<b>17.96%</b>	-0.25%	-1.64%	0.12%	-1.76%	
Montgomery General Hospital	9,250	9,785	9,827	9,294		1,782	1,804	1,719	1,520		19.26%	18.44%	17.49%	<b>16.35%</b>	-0.83%	-0.94%	-1.14%	-2.91%	
Bon Secours Hospital	7,925	6,597	7,067	7,712		999	928	971	1,074		12.61%	14.07%	13.74%	<b>13.93%</b>	1.46%	-0.33%	0.19%	1.32%	
Sinai Oncology	1,450	1,454	1,541	1,458		195	200	190	174		13.45%	13.76%	12.33%	<b>11.93%</b>	0.31%	-1.43%	-0.40%	-1.51%	
University Oncology	859	825	841	870		116	91	64	94		13.50%	11.03%	7.61%	<b>10.80%</b>	-2.47%	-3.42%	3.19%	-2.70%	
James Lawrence Kernan Hospital	2,610	2,764	2,789	2,896		130	109	122	138		4.98%	3.94%	4.37%	<b>4.77%</b>	-1.04%	0.43%	0.39%	-0.22%	
Total	630,226	639,261	649,474	642,460		146,586	145,911	151,945	148,064		23.26%	22.82%	23.40%	<b>23.05%</b>	-0.43%	0.57%	-0.35%	-0.21%	

# **Dynamics of One Day Stays in Maryland and Related Implications**

## **Creation of “Rate Capacity” on ODS Cases and Denied Cases**

A contributing factor to the very strong financial incentive to admit lower acuity patients, is the ability of hospitals to generate what is referred to as “rate capacity” on one-day LOS cases. Rate capacity also plays a similar role in incentivizing hospitals to inaccurately submit denied cases to the HSCRC on their monthly revenue and volume reports.

Under the HSCRC payment system, hospitals are paid at discharge on a fee-for-service basis for all facility-related charges. Thus, the payment received by the hospital for any given allowed case will be a function of the HSCRC approved unit rates times the units of service by rate center for that case. **Figure 1** is an example of a sample bill (and payment) for a hypothetical one-day LOS case. Based on the resources used by this patient, the hospital will be paid approximately \$5,100 for this case at the time of discharge. However, because this case was ultimately assigned to a Diagnostic Related Group (“DRG”) that on average had charges of \$7,700 per case, the hospital gets “credit” for this average level of charging. This credit is factored in during the year when the HSCRC staff determines the hospital’s overall CPC constraint and “approved revenue” (i.e., what amount of revenue the hospital charged patients during the year that it ultimately gets to keep).

Figure 1

### **Example of a Hospital Bill for a One-Day LOS Cases**

Rate Center	Approved Rate		Units of Service		
Emergency Room	\$35.00	X	15 RVUs	=	\$525
Admission Charge	\$175.00	X	1 Per Pt.	=	\$175
Medical Surgical Unit	\$1,000.00	X	1 Day	=	\$1,000
Laboratory	\$7.50	X	52 RVU	=	\$390
Blood	114	X	5 CAPS	=	\$570
Radiology Diagnostic	\$18.00	X	15 RVU	=	\$270
Supplies	\$1,700.00	X	1 Per Pt.	=	\$1,520
<u>Drugs</u>	<u>\$950.00</u>	X	<u>1 Per Pt.</u>	=	<u>\$650</u>
Total Bill (Payments to hospital for this case)					\$5,100

Note: case assigned to DRG 100 which carries an average DRG weight of 0.77 if the average Maryland hospital case (index of 1.0) has a charge of \$10,000, this hospital ultimately gets DRG "credit" of 0.77 x \$10,000 = \$7,700.

Thus, in this circumstance, although the hospital received payments of \$5,100 for the short-stay case, it simultaneously generates the ability to raise its rates to all payers by an additional \$2,600 (the difference between the average DRG weight or credit and the actual payment for the specific one-day LOS case) and then receive this additional revenue during the course of the year through higher unit rates charged to all payers. This additional revenue is referred to as “rate capacity.” Hospitals, thus,

have a very strong incentive to admit short-stay cases in the Maryland system and the data provided previously shows that Maryland hospitals have been responding aggressively (relative to hospitals in other states) to this incentive.<sup>2</sup>

### **Hospital Generate Significant Rate Capacity for Denied Cases as well**

The concept of “rate capacity” also applies to the denied case issue as well. Hospital who inaccurately report denied cases to the HSCRC on their monthly revenue and volume reports receive full “rate capacity” for these cases, when in fact the denying payer has determined the case was not appropriately classified as an inpatient case. Cases that are not inpatient cases are not eligible for inclusion in the HSCRC’s CPC methodology and therefore should not generate any rate capacity for that hospital.

The implications of these two circumstances related to the issue of “rate capacity” are that: 1) for denied admissions, all payers are made to pay for cases that were deemed medically unnecessary denied as an inpatient case (as shown above); and 2) for one-day stay cases, Maryland hospitals have generated extra payments and windfall rewards for admitting a large proportion of patients that could otherwise be treated on an outpatient basis (as is the case in other states). Although the actual treatment costs (expenses incurred by the hospital) for one-day stay patients is alleged by hospital representatives to be the same in either setting, admitting these patients triggers inpatient payments that are in effect 50-60% higher than the same care in an observation/outpatient setting. Thus, Maryland hospitals have had little incentive to establish an outpatient observation service, when the use of such a service is quite common nationally.<sup>3</sup>

### **Maryland Vulnerabilities**

Hospitals nationally operating under Medicare Inpatient Prospective Payment System (“IPPS”) are paid on an average DRG-based per case payment basis. The payment they receive per case is a function of the particular DRG each patient is assigned to. Patient assignment to DRGs depends on the particular primary and secondary diagnoses codes abstracted from each patient’s medical record. DRG per case payment amounts reflect the average costs of all cases assigned to a DRG. Thus, hospitals nationally face similar incentives to aggressively admit – but only for payers that use per case DRG-based payment, such as Medicare.

The Centers for Medicare and Medicaid Services (CMS) instructed its RAC auditors to focus on short-stay cases because it presumed that some hospitals nationally have also been responding too aggressively to the financial incentives to admit under IPPS. In general, the RAC activities nationally, authorized in the Tax Relief and Health Care Act of 2006, are an attempt by Congress to “identify improper Medicare

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<sup>2</sup> Staff would note that while hospitals in other states have a similar incentive under Medicare’s per case payment system, Maryland hospitals face this very strong incentive to admit short-stay cases for all of their cases. The ability to generate “rate capacity” across all of their patients may be the primary reason for the aggressive response.

<sup>3</sup> Average payment weights developed for the HSCRC’s planned Charge per Visit Outpatient constraint system shows that outpatient observation cases may generate a payment of between \$4,500 – 5,000 per case compared to the approximate \$7,700 overall revenue credit generated for that same case if admitted to an inpatient service.

payments and fight fraud, waste and abuse in the Medicare program.” The perception that there remains considerable waste and inefficiency in the US health care system is a sentiment shared by the White House today, which also believes that significant improvements in inefficiency can be achieved by specifically targeting areas of waste and excess payments.

The RAC audits and review will cover multiple areas but are geared to explicitly target one-day LOS cases across the country. The State of Maryland is particularly vulnerable because of the high levels of one-day stays overall and the State’s high proportion of one-day stay cases in specific DRGs that have been the subject of RAC focus in other states. **Table 5** shows DRGs with the highest proportion of total cases that are one-day stay cases in Maryland. The table also compares Maryland’s proportion of select DRGs that are one-day stays with the proportion of cases by DRG that are one-day stays for the rest of the nation.

**Table 5**

Percent One Day Length of Stay by DRG Maryland Hospitals 2009					
APR DRG	APG Description	Total Cases	One Day Stay Cases	% One Day Stay Cases	National %
	All	620,102	140,673	23%	
203	CHEST PAIN	13,384	9,884	74%	44%
175	PERCUTANEOUS CARDIOVASCULAR PROCEDURES	9,534	6,890	72%	44%
198	ANGINA PECTORIS & CORONARY ATHEROSCLEROSIS	9,577	5,674	59%	30%
201	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS	10,132	3,605	36%	28%
204	SYNCOPE & COLLAPSE	8,078	3,166	39%	22%
225	APPENDECTOMY	5,358	2,953	55%	
249	NON-BACTERIAL GASTROENTERITIS, NAUSEA & VOMITING	8,005	2,888	36%	
243	OTHER ESOPHAGEAL DISORDERS	4,483	2,726	61%	
513	UTERINE & ADNEXA PROCEDURES FOR NON-MALIGNANT	5,315	2,189	41%	
140	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	15,134	2,181	14%	10%
310	INTERVERTEBRAL DISC EXCISION & DECOMPRESSION	3,939	2,153	55%	
141	ASTHMA	5,685	2,141	38%	
194	HEART FAILURE	18,921	2,140	11%	12%
139	OTHER PNEUMONIA	14,699	2,048	14%	
321	CERVICAL SPINAL FUSION & OTHER BACK/NECK PROCEDURES	3,558	2,040	57%	
192	CARDIAC CATHETERIZATION FOR ISCHEMIC HEART DISEASE	4,010	1,986	50%	
47	TRANSIENT ISCHEMIA	5,361	1,944	36%	21%
566	OTHER ANTEPARTUM DIAGNOSES	4,648	1,937	42%	
383	CELLULITIS & OTHER BACTERIAL SKIN INFECTIONS	11,684	1,830	16%	
254	OTHER DIGESTIVE SYSTEM DIAGNOSES	5,991	1,738	29%	
420	DIABETES	6,360	1,585	25%	
663	OTHER ANEMIA & DISORDERS OF BLOOD & BLOOD FORMATION	4,708	1,577	33%	
173	OTHER VASCULAR PROCEDURES	4,999	1,564	31%	
24	EXTRACRANIAL VASCULAR PROCEDURES	2,341	1,563	67%	65%
53	SEIZURE	5,614	1,447	26%	
144	RESPIRATORY SIGNS, SYMPTOMS & MINOR DIAGNOSES	3,375	1,383	41%	
199	HYPERTENSION	2,944	1,343	46%	
463	KIDNEY & URINARY TRACT INFECTIONS	9,753	1,303	13%	8%
404	THYROID, PARATHYROID & THYROGLOSSAL PROCEDURES	1,509	1,272	84%	

In the “chest pain” DRG for instance, 44% of all admissions for chest pain nationally are one-day LOS cases. In Maryland, 74% of all cases admitted for chest pain are one-day cases. **Table 6** is the results of an analysis of McBee and Associates, a local management consulting company, estimating Maryland hospital potential exposure to RAC denials of one-day LOS cases in RAC targeted DRGs.

Table 6

Targeted RAC DRGs (source McBee Associates Inc.)

	Admissions	1 Day Stays	% of 1 Day Stays	Potential RAC Loss
<b>Maryland</b>	<b>109,651</b>	<b>18,726</b>	<b>17.08%</b>	<b>(\$41,703,401)</b>
Washington DC	13,084	1,223	9.35%	(\$7,388,503)
Delaware	16,404	1,558	9.50%	(\$6,633,195)
Pennsylvania	232,956	24,649	10.58%	(\$98,254,117)
Virginia	122,956	14,182	11.53%	(\$51,996,991)

CMS recently reported that the RACs had succeeded in correcting more than \$1.03 billion in Medicare improper payments in the five pilot states. Approximately 96 percent (\$992.7 million) of the improper payments were overpayments collected from providers, while the remaining 4 percent (\$37.8 million) were underpayments repaid to providers. RAC audits of Maryland hospitals are expected to commence after January or 2010. In the pilot states, hospitals routinely appealed RAC auditor determinations which resulted in considerable expenditure on the part of providers on legal and consulting services since implementation of the RAC program in 2006.

Inevitably, Maryland hospital relatively unfavorable performance on one-day LOS cases will likely be a focus of future RAC audit activity. As noted previously, the HSCRC staff believes that the HSCRC can more appropriately address this issue through a systematic change to the incentives in the rate setting system. Staff would also seek to convince CMS of the value of implementing a more systematic approach to reducing one-day stays in the State. Discussions with CMS personnel are on-going. Staff's success in convincing the federal agency to divert its attention away from the one-day LOS issue, however, is highly dependent on the ultimate action taken by the Commission on this issue.

### **National Evidence that Outpatient Observation Care is both Cost and Quality-Effective**

These results above clearly reveal a tendency for Maryland hospitals to admit patients rather than treat them on an outpatient basis. Staff believes that treating patients on an outpatient observation basis will be both less costly to the paying public (from a payment standpoint) and arguably less-risky (from a quality of care standpoint) setting. These staff conclusions are supported by representatives from the Centers for Medicare and Medicaid Services (based on conversations between HSCRC staff and CMS and RAC audit personnel), private payers and hospitals from around the country.

**Appendix I** to this recommendation contains a recent white paper developed in 2007 by the Society of Hospital Medicine's Expert Panel on Observation Units. The introduction section to this paper provides an overview of the development and current status and benefits of observation services, specifically from the vantage point of practicing hospitalists. The Observation Unit Operations section to this paper describes the various options for staffing and providing observation services—i.e., dedicated units in the ED or elsewhere in the hospital, "virtual" units with patients scattered throughout the hospital—that

have all been successful models for providing these services. The Observation Unit Clinical Care and Outcomes section highlights the importance of selecting the appropriate diagnoses that are amenable to providing care consistent with established clinical protocols and that have demonstrated better outcomes when appropriate observation services are provided.

These results and discussions clearly show there are both efficiency and quality of care benefits of providing observation services. The conclusions and observations in this paper are consistent with comments and observations from payer representatives outside of Maryland contacted by staff. In light of these and earlier findings, staff examined whether the financial incentives in the Maryland hospital payment system somehow contributed to this excessive tendency to admit one-day LOS cases. Staff believe that both the currently handling of denied cases and the potential for generating so-called “rate-capacity” on denied and non-denied one-day cases, does indeed created too strong of a financial incentive for Maryland hospitals to admit short stay (most predominantly one-day LOS cases).

### **The Handling of Denied Cases in the HSCRC’s Charge per Case (CPC) Methodology**

During its review of Maryland hospital one-day LOS performance, staff also became aware of the way in which most hospitals are reporting denied admissions (a majority of which are likely one-day stay cases) to the HSCRC. When an inpatient case (either a one-day stay or longer LOS case) is denied for payment purposes, hospitals are not paid for services rendered and must account for the denied payments as a contractual allowance. In some circumstances, hospitals have the ability to self-disallow one-day cases, in the expectation that payers will not for these cases on an inpatient basis.<sup>4</sup> These cases by definition are not inpatient services and the charges associated with these cases should not be reported to the HSCRC as inpatient revenue, eligible for the Commission’s CPC methodology.

It appears, however, that many hospitals have been including these cases in the data they report to the HSCRC for the calculation of the hospitals’ approved CPC. As noted, the reporting of these denied cases as inpatient admissions generates full “DRG- weight” credit for the denied cases. This DRG-weight credit, gives the hospitals the ability to raise their unit rates to all other payers to generate the disallowed revenue associated with their denied cases. Staff does not believe this is appropriate

Based on this dynamic, the HSCRC staff requested that hospital provide a report of denied cases for FY 2009. Although staff has concerns about the accuracy and consistency of reporting by hospitals in this preliminary 2009 report, it does appear that approximately 4,000 cases were denied (either by payers or self-disallowed by hospitals on an annualized basis). Table 5 provides a summary by hospital for the first 9 months of FY 2009. Staff estimates that the improper reporting of these denied cases in the monthly HSCRC data resulted in unintentional rate capacity in excess of \$30 million for rate year 2009.

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<sup>4</sup> Per Medicare conditions of participation, acute care hospitals must initiate a utilization review (UR) infrastructure that provides for review of services furnished by that hospital and medical staff for Medicare patients. A UR review committee must be established by the hospital to carry out UR review for Medicare patients. The UR infrastructure must provide for review of Medicare and Medicaid patients with respect to the medical necessity of: 1) admission to the institution; 2) duration of stays; and 3) professional services furnished. If a particular case does not meet Medicare criteria for medical necessity, the UR committee may in effect self-deny that case and the hospital. The hospital will not then receive payment for inpatient services rendered on that case.

This denied case report is now a mandated report by the HSCRC. First quarter of FY 2010 is due in the first week of December 2009. The HSCRC will receive quarterly reports on all denied cases for each subsequent quarter. **Table 7** below provides the staff's report on denied cases submitted for the first two quarters of FY 2010. The table shows that on an annualized basis, hospitals are estimated to generate \$9.5 million in excess rate capacity on cases that ultimately were not deemed appropriate for inpatient treatment. However, because these cases were included as part of these hospitals' inpatient submissions, they generate additional rate capacity (increases in hospital rates) charged to all other payers. Staff believes this is inappropriate and these charges should be removed from hospitals' CPC for FY 2010 and future years.

**Table 7  
Data on Q1 and Q2 Denied Cases and Charges FY 2010**

Hospital name	Denied Cases	Denied Charges	Annualized	Approved	Annualized	Excess	Annualized
			Denied Charges	Revenue for Denied Cases by DRG	Approved Revenue for Denied Cases	Rate Capacity Earned	Excess Rate Capacity Earned FY 10
Washington County Hospital	38	\$216,167	\$432,334	\$224,345	\$448,691	\$52,475	\$104,950
University of Maryland	95	\$553,620	\$1,107,240	\$1,558,721	\$3,117,442	\$1,007,358	\$2,014,716
Prince Georges Medical Center	1	\$3,098	\$6,196	\$4,932	\$9,865	\$1,834	\$3,668
Holy Cross of Silver Spring	52	\$415,435	\$830,870	\$213,231	\$426,461	\$33,914	\$67,828
Frederick Memorial Hospital	53	\$253,658	\$507,317	\$261,242	\$522,485	\$61,196	\$122,392
Harford Memorial Hospital	3	\$7,128	\$14,257	\$8,960	\$17,921	\$2,553	\$5,106
St Joseph Hospital	12	\$109,726	\$219,452	\$177,136	\$354,273	\$70,164	\$140,329
Mercy Medical Center Inc	119	\$427,907	\$855,814	\$649,161	\$1,298,322	\$279,875	\$559,750
Johns Hopkins Hospital	25	\$157,234	\$314,468	\$350,537	\$701,074	\$204,101	\$408,203
St Agnes Healthcare	219	\$1,054,914	\$2,109,828	\$1,569,489	\$3,138,978	\$566,521	\$1,133,043
Sinai Hospital	17	\$70,485	\$140,969	\$230,047	\$460,094	\$159,562	\$319,124
Bon Secours Hospital	26	\$194,580	\$389,160	\$184,156	\$368,313	\$23,833	\$47,666
Franklin Square Hospital	71	\$256,711	\$513,422	\$317,589	\$635,178	\$82,108	\$164,216
Washington Adventist Hospital	25	\$189,439	\$378,879	\$268,522	\$537,045	\$105,499	\$210,998
Garrett County Hospital	9	\$54,486	\$108,973	\$30,280	\$60,560	\$3,962	\$7,925
Montgomery General Hospital	75	\$901,336	\$1,802,673	\$565,751	\$1,131,502	\$29,399	\$58,799
Peninsula Regional Medical Center	42	\$244,394	\$488,789	\$417,084	\$834,167	\$174,676	\$349,352
Suburban Hospital	70	\$432,296	\$864,593	\$646,254	\$1,292,508	\$234,944	\$469,888
Anne Arundel Medical Center	62	\$317,241	\$634,482	\$351,395	\$702,790	\$94,376	\$188,753
Union Memorial Hospital	53	\$623,640	\$1,247,280	\$1,188,515	\$2,377,031	\$569,699	\$1,139,399
Memorial Hospital of Cumberland	3	\$5,403	\$10,805	\$11,813	\$23,626	\$6,410	\$12,820
Sacred Heart Hospital	2	\$9,082	\$18,164	\$12,333	\$24,666	\$5,625	\$11,249
St Marys Hospital	5	\$10,966	\$21,931	\$7,632	\$15,264	\$409	\$818
Johns Hopkins Bayview Medical Center	61	\$270,837	\$541,675	\$372,954	\$745,908	\$125,396	\$250,791
Chester River Hospital Center	1	\$2,667	\$5,334	\$3,369	\$6,737	\$701	\$1,403
Union Hospital of Cecil County	55	\$198,222	\$396,443	\$177,233	\$354,465	\$27,255	\$54,510
Carroll County General Hospital	209	\$730,923	\$1,461,847	\$783,496	\$1,566,993	\$174,644	\$349,289
Harbor Hospital Center	84	\$432,228	\$864,457	\$443,280	\$886,561	\$105,872	\$211,745
Civista Medical Center	20	\$72,039	\$144,078	\$61,877	\$123,753	\$7,146	\$14,293
Memorial of Easton	2	\$10,358	\$20,716	\$10,675	\$21,350	\$2,179	\$4,358
Maryland General Hospital	54	\$242,222	\$484,445	\$355,136	\$710,272	\$152,948	\$305,895
Calvert County Memorial Hospital	48	\$186,665	\$373,330	\$115,858	\$231,717	\$7,381	\$14,762
Northwest Hospital Center	27	\$116,543	\$233,086	\$140,501	\$281,003	\$37,809	\$75,619
Baltimore Washington Med Ctr	19	\$136,172	\$272,345	\$167,555	\$335,111	\$53,915	\$107,830
Greater Baltimore Medical Center	73	\$483,456	\$966,912	\$391,322	\$782,645	\$59,561	\$119,123
Howard County General Hospital	51	\$304,706	\$609,411	\$242,136	\$484,272	\$42,094	\$84,188
Southern Maryland Hospital	23	\$66,946	\$133,892	\$72,108	\$144,215	\$18,658	\$37,316
Laurel Regional Hospital	1	\$4,779	\$9,558	\$2,891	\$5,783	\$0	\$0
Good Samaritan Hospital	28	\$104,527	\$209,053	\$224,032	\$448,064	\$120,951	\$241,902
Shady Grove Adventist Hospital	13	\$63,835	\$127,670	\$62,667	\$125,333	\$15,855	\$31,711
Fort Washington Hospital	9	\$47,046	\$94,092	\$35,229	\$70,458	\$873	\$1,746
Total	1,855	\$9,983,120	\$19,966,240	\$12,911,446	\$25,822,893	\$4,723,736	\$9,447,471

### Commission Directive to Staff Regarding One Day Length of Stay and Denied Cases

Given the concerns raised by the industry regarding the need to improve certain process issues at the HSCRC, the magnitude of the budget cuts imposed on the industry in 2010, and concerns raised by the hospital industry regarding the need for revised rate centers to appropriately charge for Observation cases, the Commission requested that HSCRC staff, hospital and payer industries undertake a concerted work effort to negotiate in good faith a reasonable compromise proposal for modifications to the All-



Payer Hospital Payment System to address issues associated with the most efficient and effective provision of care for One Day Length of Stay and Denied cases. The Commission requested that this recommendation attempt to address the following issues:

**Development of an Appropriate Charging Structure for Observation Cases:** A revised rate structure should be developed, which allows for appropriate charging for Observation cases. This revised rate structure should be ready for implementation no later than July 1, 2010.

**Appropriate Payment Incentives:** A modified payment recommendation should be developed that provides sufficient (but not unreasonably punitive) financial incentives for hospitals to transition to the use of observation services for short-stay cases over a reasonable time-frame.

**Sufficient Time for Transition:** Hospitals will require sufficient time to change their operations and respond to the new incentives to provide care for short-stay patients in an observation setting. As such the modified proposal should be implemented over the course of 2 years to allow for a deliberate but reasonable transition to lower health care costs and more efficient provision of care by hospitals.

**Cost Savings to the Public:** While the Commission acknowledges the need for the development of an appropriate incentive structure and for the industry to have sufficient time to adjust to payment system changes designed to promote more effective and efficient care, it also recognizes the urgent need to reduce excess cost and inefficiency in the health care system. Given this need, any compromise proposal should be designed to achieve some reasonable magnitude of cost savings (to the public) and promote more efficient operation by hospitals. The Commission, however, believes the most appropriate way to realize such savings is in the context of the annual update factor, with any final rate incentives associated with one-day length of stay cases applied on a revenue-neutral basis.

**Allowance for Case Mix Change:** Hospitals that appropriately establish observation units and shift observation-eligible cases to these units will necessarily realize increases in measured case mix increases. Consideration should be given to appropriate adjustments to hospital case mix allowances to recognize reasonable measured case mix growth resulting from this practice.

**A Systematic and Fair Approach:** The compromise proposal should be developed in the context of other policy and payment changes and also designed to move the industry, in a systematic way, toward lower cost and more effective/efficient provision of care. Commission sees this approach as superior to the potentially contentious and costly payer/hospital specific method of case-by-case denials and appeal. The Commission and the payer and hospital industries should strive to address the short-stay issue prospectively and systematically. Staff should work deliberately with both public and private payers to achieve a systematic solution to this issue in lieu of other less-productive and more resource-intensive approaches.

**Impact on the Medicare Waiver:** Finally, consideration should be given to the impact of any final proposal on the Maryland Medicare waiver test, and ways in which any negative waiver impact can be minimized.

The Commission also requested that the staff present this revised Draft Recommendation by the April 2010 public meeting and that a final recommendation be before the Commission in time for implementation of the proposed policies by July 1, 2010 (applying to FY 2011).

## **Activities of the One Day Length of Stay Work Group**

Since the Commission issued this request, the One Day Length of Stay Work Group and Technical sub-groups have met eleven times over the course of the past three months. These groups have made considerable progress in developing a consensus approach that addresses the priorities and principles articulated by the Commission in January of this year. The issues considered thus far by the Work Group include the following:

### **1) Treatment of One Day Length of Stay Cases (ODS) Relative to Hospitals' Charge per Case Targets**

Both the HSCRC staff and the hospital representatives believe that all ODS cases should be excluded from hospitals' inpatient charge per case targets and treated as a separate category for compliance and other rate regulatory purposes.

### **2) Application of a Per Case Constraint and Case Mix Constraint on the Excluded ODS Cases**

Staff believes that hospitals do respond to financial incentives and when payment is structured in a way to establish a set target or per case payment standard per case it does influence them to be efficient in the delivery of resources necessary to treat that case (i.e., constrain increases in ancillary services, and supply and drug use). In the absence of such a payment structure (Per case Charge limit) the tendency is to over-utilize these services. Given the HSCRC's experience in this regard, staff believes that the ODS cases now excluded from the Commission's normal CPC target should have separate CPC targets established for them.

Additionally, the staff advocates the establishment of a case mix cap or limit on this new Charge per Case category (ODS cases). In the past the Commission has under-estimated the hospital industry's capacity for responding to incentives to improve coding and documentation and associated case mix. In order to assure the State that is held harmless for these potential coding issues, the staff believes it is prudent to apply a case mix cap for ODS cases.

MHA representatives do not believe it is necessary to apply either a separate CPC standard for ODS or limit case mix.

### **3) Link to the Productivity Factor in the Update to Hospital Rates for FY 2011**

Originally, the Commission suggested linking any "savings" associated with reductions in excess rate capacity associated with ODS cases be linked to other system savings achieved through the application of a "productivity" factor in the annual update. After further consideration both HSCRC staff and hospital representatives believe that there should be a "revenue-neutral" reallocation of a specified amount (related to rate capacity and case mix increases foregone by hospitals who moved early on to establish Observation units (OBS) and shift cases from the ODS category to outpatient care (the so-called "early adopters of OBS") away from hospitals who have generated excess rate capacity and avoided case mix reductions by not establishing OBS units or otherwise treating patients in an ambulatory setting. Thus, all parties believe that a revenue-neutral reallocation of revenue should occur (to the "early adopter" hospitals away from non-early adopter hospitals) but that this calculation and reallocation occur separate from the application of a productivity factor in the FY 2011 rate update.

All parties believe that a reallocation of this nature is fair given that hospitals who proactively established OBS units gave up considerable rate capacity and case mix allowances.

**4) Method Used for Revenue-Neutral Re-Allocation**

There is still some debate over the best way to achieve this reallocation of revenue associated with foregone rate capacity and case mix allowance. The MHA has been working on a method that appears to accomplish the staff’s goal of restoring foregone rate case mix to hospitals that proactively established OBS units and presumably also decreased their number of ODS patients as a proportion of total admissions. The staff could support such a proposal if the industry can achieve consensus on how best to reallocate revenues associated with lost rate capacity and case mix.

In the absence of an acceptable MHA proposal, staff has proposed the use of a scaling calculation that compares hospitals proportion of ODS cases to total admissions by APR-DRG and SOI cell. Additionally, staff would seek to reallocate lost case mix allowances for early adopter hospitals and handle then apply this increase in system revenue as slippage in the update factor.

**5) Application of a Continued Incentive for Hospitals to Shift Cases from ODS to OBS**

Staff believes that the Commission should establish a “soft system target” for the proportion of inpatient cases that are ODS cases (over the short term for FY 2011 - FY 2014) and also apply a system of revenue-neutral rewards and penalties to hospitals to continue to incentivize Maryland hospital to treat more cases in the more cost-effective and quality-effective OBS and ambulatory settings. By “soft target,” staff means merely stating a set of desired interim goals and then checking and monitoring system performance over time. This soft target would then also be accompanied by a system of rewards and penalties to induce the desired behavior over time. **Table 8** below outlines the staff proposed and desired “soft” targets (not enforced by rate action – but merely illustrating desired performance). **Tables 9a and 9b** display two proposals for the application of continued rate incentives to encourage the movement of cases to outpatient settings (where the net result of this activity, staff anticipates, will be lower overall cost and better quality of care for Maryland patients). The “soft-targets” were developed based on a review of the rates of change of “early-adopter” hospitals as shown in Table 4a above. The top performing “early-adopters” appeared to reduce their proportions of ODS cases by about 1.0% per year. Therefore staff thought it reasonable to apply this performance standard to the industry as a whole.

**Table 8**

Proposed "Soft Targets" for Maryland  
Desired Performance on One Day Stay (ODS)  
Cases as a Proportion of Total Admissions

Current Medicare Performance	YTD					Proposed "soft targets" for ODS cases			
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Maryland	17.83%	17.59%	17.49%	17.50%	17.00%	<b>16.00%</b>	<b>15.00%</b>	<b>14.00%</b>	<b>13.00%</b>
US Medicare	13.75%	13.68%	13.40%	NA	NA				
Difference	4.08%	3.91%	4.09%						
Maryland All-Payer	22.48%	23.26%	22.82%	23.40%	23.05%	<b>22.05%</b>	<b>21.05%</b>	<b>20.05%</b>	<b>19.05%</b>
US All-Payer	16.58%	NA	NA	NA	NA				
Difference	5.90%								

NA = "Not Available"

Table 8a

Summary Results of the ODS Revenue Neutral Continued Incentive  
Option 1: Scaling \$10 Million of Statewide Inpatient Revenue (weaker incentives)

Hospital	ODS Index	Rank	Percentile Rank	Proposed Adjustment	Revenue Impact
Franklin Square Hospital	1.2431	1	0%	-0.1222%	(\$350,116)
Union Memorial Hospital	1.2403	2	4%	-0.1222%	(\$379,587)
Harford Memorial Hospital	1.187	3	6%	-0.0984%	(\$59,793)
Upper Chesapeake Medical Center	1.1727	4	8%	-0.0920%	(\$128,008)
Anne Arundel General Hospital	1.1307	5	10%	-0.0732%	(\$190,485)
Calvert Memorial Hospital	1.1278	6	12%	-0.0720%	(\$44,290)
Carroll County General Hospital	1.1069	7	14%	-0.0626%	(\$89,563)
Johns Hopkins Oncology Center	1.0921	8	16%	-0.0560%	(\$40,503)
Johns Hopkins Hospital	1.0816	9	18%	-0.0513%	(\$431,357)
Mercy Medical Center, Inc.	1.0774	10	20%	-0.0494%	(\$101,810)
Sinai Hospital	1.0753	11	22%	-0.0485%	(\$177,137)
St. Josephs Hospital	1.049	12	24%	-0.0368%	(\$107,125)
Baltimore Washington Medical Center	1.0296	13	27%	-0.0281%	(\$55,975)
Univ. of Maryland Medical System	1.0293	14	29%	-0.0280%	(\$156,705)
Garrett County Memorial Hospital	1.0213	15	31%	-0.0244%	(\$4,989)
Memorial Hospital at Easton	1.0185	16	33%	-0.0231%	(\$22,278)
Union Hospital of Cecil County	1.0116	17	35%	-0.0201%	(\$13,424)
Suburban Hospital Association, Inc	1.0104	18	37%	-0.0195%	(\$32,911)
Maryland General Hospital	1.0053	19	39%	-0.0172%	(\$23,874)
St. Agnes Hospital	1.0022	20	41%	-0.0159%	(\$39,859)
Howard County General Hospital	0.9761	21	43%	-0.0042%	(\$6,113)
Washington Adventist Hospital	0.9758	22	45%	-0.0041%	(\$8,834)
Good Samaritan Hospital	0.9621	23	47%	0.0034%	\$7,075
Greater Baltimore Medical Center	0.9615	24	49%	0.0039%	\$8,947
St. Marys Hospital	0.9569	25	51%	0.0073%	\$4,872
Atlantic General Hospital	0.9448	26	53%	0.0163%	\$6,196
Harbor Hospital Center	0.9086	27	55%	0.0433%	\$65,227
Johns Hopkins Bayview Med. Center	0.9037	28	57%	0.0470%	\$121,593
Doctors Community Hospital	0.9005	29	59%	0.0494%	\$56,710
Washington County Hospital	0.8958	30	61%	0.0529%	\$84,049
Laurel Regional Hospital	0.8904	31	63%	0.0569%	\$35,207
Sinai Oncology	0.8835	32	65%	0.0620%	\$18,313
Holy Cross Hospital of Silver Spring	0.8688	33	67%	0.0730%	\$209,434
Prince Georges Hospital	0.852	34	69%	0.0855%	\$152,378
Montgomery General Hospital	0.8479	35	71%	0.0886%	\$88,799
Shady Grove Adventist Hospital	0.8448	36	73%	0.0909%	\$194,061
Dorchester General Hospital	0.8378	37	76%	0.0961%	\$28,987
Northwest Hospital Center, Inc.	0.8318	38	78%	0.1006%	\$128,075
Peninsula Regional Medical Center	0.8291	39	80%	0.1026%	\$269,514
James Lawrence Kernan Hospital	0.829	40	82%	0.1027%	\$49,766
Western Maryland Regional Medical Center	0.8258	41	84%	0.1050%	\$176,956
Civista Medical Center	0.8254	42	86%	0.1053%	\$72,148
Southern Maryland Hospital	0.8157	43	88%	0.1126%	\$177,144
Frederick Memorial Hospital	0.804	44	90%	0.1213%	\$204,337
McCready Foundation, Inc.	0.7688	45	92%	0.1475%	\$9,142
Chester River Hospital Center	0.7187	46	94%	0.1849%	\$54,794
Fort Washington Medical Center	0.6989	47	96%	0.1997%	\$47,216
Bon Secours Hospital	0.6931	48	98%	0.2040%	\$152,133
University (UMCC)	0.4963	49	100%	0.2040%	\$41,661
Statewide Total				0.0000%	\$0

Table 8b

Summary Results of the ODS Revenue Neutral Continued Incentive  
 Option 2: Scaling \$20 Million of Statewide Inpatient Revenue (stronger incentives)

Hospital	ODS Index	Rank	Percentile Rank	Proposed Adjustment	Revenue Impact
Franklin Square Hospital	1.2431	1	0%	-0.2444%	(700,232)
Union Memorial Hospital	1.2403	2	4%	-0.2444%	(759,174)
Harford Memorial Hospital	1.187	3	6%	-0.1968%	(119,586)
Upper Chesapeake Medical Center	1.1727	4	8%	-0.1840%	(256,017)
Anne Arundel General Hospital	1.1307	5	10%	-0.1465%	(380,971)
Calvert Memorial Hospital	1.1278	6	12%	-0.1439%	(88,580)
Carroll County General Hospital	1.1069	7	14%	-0.1252%	(179,125)
Johns Hopkins Oncology Center	1.0921	8	16%	-0.1120%	(81,006)
Johns Hopkins Hospital	1.0816	9	18%	-0.1026%	(862,713)
Mercy Medical Center, Inc.	1.0774	10	20%	-0.0989%	(203,620)
Sinai Hospital	1.0753	11	22%	-0.0970%	(354,274)
St. Josephs Hospital	1.049	12	24%	-0.0735%	(214,249)
Baltimore Washington Medical Center	1.0296	13	27%	-0.0562%	(111,950)
Univ. of Maryland Medical System	1.0293	14	29%	-0.0559%	(313,409)
Garrett County Memorial Hospital	1.0213	15	31%	-0.0488%	(9,977)
Memorial Hospital at Easton	1.0185	16	33%	-0.0463%	(44,557)
Union Hospital of Cecil County	1.0116	17	35%	-0.0401%	(26,848)
Suburban Hospital Association, Inc	1.0104	18	37%	-0.0390%	(65,822)
Maryland General Hospital	1.0053	19	39%	-0.0345%	(47,749)
St. Agnes Hospital	1.0022	20	41%	-0.0317%	(79,718)
Howard County General Hospital	0.9761	21	43%	-0.0084%	(12,227)
Washington Adventist Hospital	0.9758	22	45%	-0.0081%	(17,668)
Good Samaritan Hospital	0.9621	23	47%	0.0069%	14,150
Greater Baltimore Medical Center	0.9615	24	49%	0.0078%	17,893
St. Marys Hospital	0.9569	25	51%	0.0146%	9,745
Atlantic General Hospital	0.9448	26	53%	0.0327%	12,393
Harbor Hospital Center	0.9086	27	55%	0.0866%	130,453
Johns Hopkins Bayview Med. Center	0.9037	28	57%	0.0939%	243,186
Doctors Community Hospital	0.9005	29	59%	0.0987%	113,420
Washington County Hospital	0.8958	30	61%	0.1057%	168,099
Laurel Regional Hospital	0.8904	31	63%	0.1138%	70,414
Sinai Oncology	0.8835	32	65%	0.1241%	36,626
Holy Cross Hospital of Silver Spring	0.8688	33	67%	0.1460%	418,867
Prince Georges Hospital	0.852	34	69%	0.1710%	304,757
Montgomery General Hospital	0.8479	35	71%	0.1771%	177,598
Shady Grove Adventist Hospital	0.8448	36	73%	0.1818%	388,122
Dorchester General Hospital	0.8378	37	76%	0.1922%	57,974
Northwest Hospital Center, Inc.	0.8318	38	78%	0.2011%	256,150
Peninsula Regional Medical Center	0.8291	39	80%	0.2052%	539,028
James Lawrence Kernan Hospital	0.829	40	82%	0.2053%	99,532
Western Maryland Regional Medical Center	0.8258	41	84%	0.2101%	353,913
Civista Medical Center	0.8254	42	86%	0.2107%	144,295
Southern Maryland Hospital	0.8157	43	88%	0.2252%	354,288
Frederick Memorial Hospital	0.804	44	90%	0.2426%	408,673
McCready Foundation, Inc.	0.7688	45	92%	0.2951%	18,285
Chester River Hospital Center	0.7187	46	94%	0.3698%	109,588
Fort Washington Medical Center	0.6989	47	96%	0.3993%	94,433
Bon Secours Hospital	0.6931	48	98%	0.4080%	304,266
University (UMCC)	0.4963	49	100%	0.4080%	83,322
Statewide Total				0.0000%	0

The use of a continued incentive structure would seek to reallocate a certain magnitude of revenue from poorer performing hospitals (hospitals who continue to have proportions of ODS cases in excess of the State-wide average – by APR-SOI cell) to better performing hospitals (those who have proportions of ODS cases below the State-wide average). The staff presents two alternative magnitudes of revenue for reallocation – Table 8a shows a simulation of placing \$10 million at risk for reallocation and Table 8b shows a simulation of placing \$20 million of revenue at risk. This methodology is described in more detail in Appendix III to this recommendation.

The MHA is currently opposed to the development of any “soft targets” for Maryland ODS performance (vs. the US). They are also opposed to the application of any additional incentive structure to further encourage the use of OBS and ambulatory surgical services for lower acuity cases that have traditionally been admitted for inpatient care in the State.

#### **6) Denied Cases**

Staff has been adamant about the need to adjust hospitals’ CPCs for the presence of denied cases that generate excess rate capacity. A majority of denied cases in the system also appear to be ODS cases and thus will be subject to the policy changes associated with ODS cases. Thus the ODS policy will largely handle the denied case issue in future years. Staff continues to believe that denied cases for FY 2010 should be removed from hospital CPC targets for compliance and charging purposes. Denied cases are by definition not inpatient cases and should not count toward the generation of a hospital’s “rate capacity.” To do so, would be to charge all payers for cases and charges denied by one payer. Hospital representatives disagree with this approach and recommend removal of denied cases beginning in FY 2011.

The MHA is opposed to the removal of denied cases and associated excess rate capacity in FY 2010.

#### **7) Rate Structure**

Staff and the industry continue to make progress in identifying and operationalizing the steps necessary to develop and implement a revised rate structure for both OBS and surgical recovery services. Staff expects to have a recommendation for a revised rate structure for these services before implementation July 1, 2010 (for FY 2011). Staff will then monitor the charging structure and hospitals charging practices in FY 2011 and make any necessary changes or modifications to this structure over time.

#### **8) Charge per Visit (CPV) Issues**

The staff and the industry remain in disagreement about certain factors related to the treatment of OBS cases with in the CPV constraint mechanism (schedule to being in FY 2011). Hospital representatives have requested that OBS cases be excluded from the CPV or at not have these OBS cases held to any case mix limit (if a limit is applied on CPV case mix). Failure to do so will allow hospitals no constraint on their charging practices associated with these OBS and one-day surgical cases. In fact, excluding these cases from the base CPV provides a strong incentive for hospitals to over-utilize services per case in order to establish a higher than appropriate base, upon which they will be measured for future year to year changes in case charges and resource use.

Staff is receptive to exempting OBS cases from a limitation on case mix but believes strongly that OBS cases be included in the outpatient constraint (CPV) system.

**Table 9** below summarizes the issues and the staff and industry positions.

Table 9

Issue	MHA Position	HSCRC Position
1. CPC and ODS	Exclude ODS from CPC	Exclude ODS from CPC
2. ODS Constraint	Opposed to a constraint on ODS cases and opposed a constraint on ODS case mix growth	Recommends constraining both ODS per case & limiting CMI growth associated with ODS cases
3) Link ODS "savings" to Productivity Factor in the Annual Update	No link to Productivity in Update Factor Working on a proposal to allocate a proportion of lost rate capacity and lost Case Mix allowance back to hospitals who were "early adopters" of Observation Services in Maryland (see next section)	Staff in Agreement with MHA
4) Reallocation of lost Case Mix by "early adopting" hospitals (hospitals who were the first to establish observation units)	MHA is working on a proposal to reallocate "lost" Case mix from late adopters to early adopters.	Staff receptive to a MHA proposed method for reallocating lost Case Mix from poor performing hospitals to better performing hospitals (the so-called "early adopters" of observation services). In the absence of a viable industry proposal however, staff would propose a method for reallocating both lost rate capacity and case mix at the July public meeting.
5. Continued incentive to move ODS cases to OBS	Opposed to the establishment of performance targets and opposed to the application of rate incentives.	Recommends establishing short-term "soft targets" (desired future performance) for Maryland for both Medicare ODS cases and All-Payer ODS cases as a proportion of total admissions.  Also recommends the application of continued financial incentives for Maryland hospitals to continue to shift ODS cases to ambulatory settings
6. Denied Cases	Opposed to any adjustment for denied cases and excess rate capacity earned in FY 2010	Remove denied cases and rate capacity from CPC in 2010 and all future years
7. Restructuring Unit Rates	Recommend creating separate rate center for OBS and restructuring surgical recovery rate center	Recommend creating separate rate center for OBS and restructuring surgical recovery rate center
8. CPV Issues	Opposed to including OBS cases in the CPV in FY 2011 and in agreement with staff about excluding OBS from any Case Mix cap on outpatient.	Recommend including OBS cases and 1 day surgical cases in the CPV in FY 2011 but exclude OBS cases from Case Mix caps if Case Mix caps are applied for the CPV

## Final Staff Recommendations

1) Exclude all One Day Stay (ODS) cases from hospitals' Charge per Case Standards effective July 1, 2010 (applying to the rate year FY 2011);.

2a) Establish a separate Charge per Case standard for all excluded ODS cases; and 2b) establish a case mix cap or limit on this new Charge per Case category (ODS cases). This limit would be subject to discussion and negotiation in the context of the FY 2011 Rate Update;

3) Do not explicitly link to the Productivity Factor in the Update to Hospital Rates for FY 2011;

4) Utilize the MHA-Proposed method for reallocating lost Case-mix to hospitals who established observation units in previous years (the “early-adopters”) and away from hospitals who have failed to establish observation capacity;<sup>5</sup>

5a) Adopt a set of “soft” (or desired) targets for Maryland hospital industry performance for Medicare and All-payer categories in terms of the number of ODS cases as a proportion of total admissions (see **Table 7**); and 5b) apply an additional incentive mechanism (either option 1 or option 2 – shown in **Tables 8a and 8b**) presented in the body of this recommendation to continue to induce Maryland hospitals to appropriately shift ODS cases to ambulatory settings;

The use of a continued incentive structure would seek to reallocate a certain magnitude of revenue from poorer performing hospitals (hospitals who continue to have proportions of ODS cases in excess of the State-wide average – by APR-SOI cell) to better performing hospitals (those who have proportions of ODS cases below the State-wide average). The staff presents two alternative magnitudes of revenue for reallocation – Table 8a shows a simulation of placing \$10 million at risk for reallocation and Table 8b shows a simulation of placing \$20 million of revenue at risk. This methodology is described in more detail in Appendix III to this recommendation.

6) Adjust all hospitals’ FY 2011 CPCs for the presence of denied cases that generate excess rate capacity that occurred in FY 2010. A majority of denied cases in the system also appear to be ODS cases and thus will be subject to the policy changes associated with ODS cases. Thus the ODS policy will largely handle the denied case issue in future years. Staff continues to believe that denied cases for FY 2010 should be removed from hospital CPC targets for compliance and charging purposes. Denied cases are by definition not inpatient cases and should not count toward the generation of a hospital’s “rate capacity.” To do so, would be to charge all payers for cases and charges denied by one payer.

7) Establish a separate OBS Rate Center for FY 2011 and revise the current rate method for charging for Recovery Room time;

8a) Make OBS cases and one-day surgical cases subject to the CPV starting in FY 2011. Excluding these cases from the base CPV provides a strong incentive for hospitals to over-utilize services per case in order to establish a higher than appropriate base, upon which they will be measured for future year to year changes in case charges and resource use; and 8b) exempt OBS cases from the application of any case mix cap imposed on outpatient cases (based on the final approved FY 2011 Rate Update Recommendation).

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<sup>5</sup> This MHA proposal is currently under development and subject to final MHA approval – however staff is currently in basic support of the proposed discussed thus far. It is expected that this proposal will be available for review and consideration by staff and the HSCRC by the June public meeting of the Commission. In the event this proposal does not receive final hospital industry endorsement or the proposal is not acceptable to HSCRC staff, staff will propose its own method for reallocating both lost rate capacity and case mix at the June meeting of the HSCRC.



## **Commission Decision**

On May 5, 2010, the Commission took the following action:

- Adopted staff recommendations 1, 3, 5(a) and (b) using the \$10 million scaling option (option #1), 7, and 8(a) and (b);
- Rejected staff recommendation 2(a) and (b);
- Deferred on staff recommendation #4 until the June 2010 Commission Meeting; and
- Amended staff recommendation #6 by making the FY 2011 adjustment for the presence of denied cases that generate rate capacity apply to cases occurring after January 1, 2010 (not July 1, 2009 as in staff recommendations).

Appendix I – White Paper by the Society of Hospital Medicine’s Expert Panel  
on Observation Units

## **The Observation Unit: An Operational Overview for the Hospitalist**

This White Paper is a collaborative effort of the Society of Hospital Medicine's Expert Panel on Observation Units. Adrienne Green, MD, Chair of the Expert Panel, provided leadership for the work and is largely responsible for both the content and conceptual framework of the white paper.

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## **Introduction**

Observation services are provided to patients with an acute clinical condition whose need for acute care hospitalization is unclear after their initial evaluation and management. Per Medicare, "hospital observation services are defined as those services ... that are reasonable and necessary to evaluate the outpatient's condition or determine the need of that patient's admission to the hospital as an inpatient."<sup>(1)</sup> Some patients have a diagnostic syndrome which may indicate a life threatening disease (e.g. the patient with chest pain that may represent acute myocardial infarction). Others have an emergent condition (e.g. an asthma exacerbation) requiring treatment for a longer time period than can be provided in the Emergency Department (ED). With a period of observation and focused management, 4 out of 5 patients such patients avoid the need for hospitalization.<sup>(2)</sup> Observation units have been used to manage these patients with improved patient outcomes, avoidance of unnecessary admissions, shorter lengths of stay, cost savings, improved compliance with regulatory standards, decreased malpractice liability, and improved patient satisfaction.<sup>(3-5)</sup>

Historically, the observation unit has been within the purview of the emergency physician but with the advent of Hospital Medicine, there is an increasing role for the hospitalist to provide clinical care in the observation unit and to participate in observation unit leadership. The Society of Hospital Medicine convened an expert panel in July 2007 including hospitalists, emergency physicians, cardiologists, nurse specialists, pharmacists, and a case manager. The goal of the panel was to develop a review article on observation medicine and its implications for the hospitalist.

## **Observation Unit Operations**

There are several critical administrative components to successful observation units. There must be high-level institutional support for the program with a commitment to adequate staffing, resources and facilities (to be described further below). The service must be managed by strong physician and nurse leaders whose responsibilities include maintaining appropriate staffing, acquiring needed resources, enforcing policies and procedures and interfacing with hospital leadership.<sup>(4)</sup> These leaders use continuous quality improvement to advocate best practices, design and implement improvement initiatives, and provide feedback of a credible process and outcome dashboard to staff. Ideally, the physician leader is also clinically active in the observation unit.<sup>(3)</sup>

Staffing for observation services varies dependent upon the structure of the unit and the services provided. Physicians who provide the appropriate spectrum of care include emergency physicians, internists, family practitioners, pediatricians and pediatric or adult hospitalists. Emergency and critical care trained nurses are particularly well suited to provide care in the observation unit. Mid-level providers (e.g. nurse practitioners and physician's assistants) are used in many units to supplement physician services. Housestaff do not usually provide care in observation units. However, interested housestaff in academic programs with well developed observation services may devote some of their elective time to observation medicine. This should be a considered rotation for pediatric and internal medicine residents interested in hospital medicine or hospital medicine fellows. Other providers such as clinical pharmacists, nurse case managers and social workers should be available to and familiar with the practices of the observation unit.

Physician staffing of observation units can be divided into "open" and "closed" models. The open model allows all hospital clinicians to admit to the observation unit. This is

similar to the traditional hospital model for inpatient care where all physicians in the community can admit their patients to the hospital. The closed model limits privileges to admit to the observation unit to a select group of physicians (e.g. emergency physicians or hospitalists) with expertise in providing observation services. Many advocate that the best practice is the closed model of care. In the closed model, patients admitted to the observation unit are more likely to have appropriate diagnoses for observation, physicians are more likely to use standard protocols, and are more readily available to make disposition decisions. The structure and benefits of this model are similar to the current hospitalist model of inpatient care.

To maintain quality and efficient patient care, physicians should have the observation unit as their first priority and schedules should allow physicians to fully develop skills in observation medicine. Infrequent rotation of a large number of physicians through the observation unit is not conducive to optimal care. Effective coverage is on-site (i.e. in the hospital) and does not rely on an "on-call" system from home. Competencies are important for all observation unit staff and should be tailored to the type of services provided. Providers should receive targeted training and be comfortable with the high patient turnover that occurs in these units.

Location of observation services varies between institutions. Some programs have a specifically designated area within the ED, a discrete unit adjacent to the ED, or a specific unit on a distinct hospital ward. Others have no designated unit but scatter the observation patients throughout the institution. These "virtual units" allow for flexibility but can lead to decreased efficiency. The best practice is to have a distinct unit which supports the concentration of a staff trained in the nuances of observation services and enhances the ability to implement clinical protocols and maintain consistency of care.

### **Observation Unit Clinical Care and Outcomes**

Carefully chosen diagnoses with established clinical pathways are crucial to a successful observation program. A new program should focus on relatively few diagnoses and expand as staff gain experience. The observation unit should not be used for "social admits" nor as an overflow unit.

Common adult observation unit admission diagnoses include asthma exacerbation, chest pain/rule out acute coronary syndrome, congestive heart failure (CHF), syncope, electrolyte disturbances and dehydration (table 1). Common pediatric observation unit admission diagnoses include asthma exacerbation, gastroenteritis and dehydration, and concussion. Some patients have diagnostic syndromes that may represent life threatening diseases such as shortness of breath from CHF or abdominal pain from acute appendicitis. Other patients are those with a condition requiring acute therapy but who have a high probability of successful treatment within 24 hours if managed in an observation unit. Examples include the patient with asthma who has not improved or the patient with CHF who continues to experience symptoms of fluid overload after four hours of therapy in the ED.

The success rate of diagnostic evaluation of potentially dangerous syndromes is improved with observation. For example, for patients with chest pain the use of observation nearly eliminates the problem of missed diagnosis of myocardial infarction (<1%).<sup>(2)</sup> The average performance without an observation unit is a 2% to 5% missed diagnosis rate with a doubling of mortality.<sup>(7)</sup> Additionally, inpatient admission for these

patients would result in higher cost without clinical benefit and missed diagnoses could lead to significant cost with respect to malpractice.

Treatment of emergent conditions is also improved with observation. Patients with acute emergent conditions treated in an observation unit have been shown in clinical trials (including randomized clinical trials) to be successfully treated in 80% of cases with length of stays (and thus costs) less than half of the traditional acute inpatient service.<sup>(8, 9)</sup> For example, approximately 20% of patients with acute asthma exacerbations are not successfully treated during their 3 to 4 hour ED stay. With an observation unit stay 80% of such patients, who would otherwise have to be admitted to the hospital, can be discharged home after 12 hours.<sup>(8, 9)</sup>

Explicit inclusion and exclusion criteria should be established to delineate patients appropriate for observation versus inpatient admission. Exclusion criteria are typically factors that indicate the patient is too sick for or requires more services than can be provided in an observation unit. Examples of inclusion and exclusion criteria for admission to a Heart Failure Observation Unit are outlined in tables 2 and 3.

Medical care provided in the observation unit should be protocol based and diagnosis specific. For example, the chest pain patient should be placed on a continuous cardiac monitor, have serial cardiac enzymes and a stress test if indicated. An asthma clinical pathway should include routine vital signs, pulse oximetry, and medications such as bronchodilators and corticosteroids.<sup>(5)</sup> All clinical protocols should include: admission inclusion/exclusion criteria, observation unit interventions (e.g. diagnostic options, monitoring, and preferred treatment modalities), and discharge criteria.<sup>(4)</sup>

Validated observation unit heart failure pathways (figure 1) have demonstrated improved outcomes compared with non-standardized care.<sup>(10)</sup> A before and after study of observation unit heart failure patients compared uncontrolled physician management to protocol driven care. Protocol managed patients had a 44% lower rate of 30 day HF revisits ( $p=0.000$ ), 36% fewer 30 day HF readmissions ( $p=0.007$ ), and despite an absolute 9% increase in observation unit discharge rates ( $p=0.008$ ), a 10% decrease in hospitalizations ( $p=0.008$ ).<sup>(10)</sup> Protocols also increase compliance with The Joint Commission standards for quality of care for heart failure.<sup>(10, 11)</sup>

The protocol driven approach also applies to the patient with chest pain. Low to moderate risk patients may be admitted to a Chest Pain Unit (CPU). CPU protocols may be used for further evaluation and a determination can be made regarding which patients can be safely discharged to home versus those who require inpatient admission for further workup and intervention.<sup>(12-19)</sup>

Sample discharge criteria and recommendations for an effective CPU discharge are outlined in table 4. These may be adapted for observation unit patients with other diagnoses. Highlights include education, medication reconciliation and prescriptions and communication with the patient's primary care physician or physician for appropriate follow up.

### **Observation Unit Economics**

The economics of observation units are complex yet important to understand when determining if an observation unit will be beneficial for your hospital. Most of the

research demonstrating cost savings in observation units has been done in the area of chest pain evaluation. It has shown that for patients with chest pain observation provides significantly reduced cost of care compared with inpatient hospital admissions (table 5).<sup>(2, 15, 17, 20-28)</sup> Similar savings have been observed for a variety of other conditions including heart failure, asthma, and upper gastrointestinal bleeding (table 6).<sup>(8, 9, 29-36)</sup>

The economics of observation for heart failure are multifaceted because most heart failure patients are elderly and have Medicare. Because of the nuances of Medicare DRG (diagnostic related group) and APC (ambulatory patient classification) reimbursement, the economic benefits of a HF observation unit are derived from decreased length of stay, decreased number of unreimbursed readmissions and lower intensity of service (observation unit costs being significantly lower than intensive care or other inpatient care). The economic benefits of observation unit heart failure management are borne out even for those patients who fail 24 hours of OU care and require inpatient hospitalization. Observation unit management has been shown to decrease the median inpatient length of stay, inclusive of the observation unit admission time, from 4.5 to 3.0 days ( $p=0.08$ ).<sup>(10)</sup> In the above study, the HF protocol cost a mean of \$81 per patient, this was offset by a savings, predominately the result of unreimbursed readmission avoidance, of an annualized \$89,321 in 1997 dollars.<sup>(10)</sup>

In an observational cohort study, low to moderate risk patients with heart failure who were treated in an observation unit had a length of stay half that of similar patients directly admitted to the hospital. Of patients hospitalized after a heart failure observation unit stay, the length of hospital stay was shorter than the direct admission group, saving a mean of 43.2 bed hours. Savings by observation unit use was estimated at \$3600 per patient.<sup>(37)</sup>

Physician compensation for observation services is comparable to compensation for inpatient services and was standardized with the development of two sets of CPT (current procedural terminology) codes for observation in 1993 and 1998.<sup>(38)</sup>

### **Performance Measurement for the Observation Unit**

All observation units should have a robust quality improvement program led by the observation unit medical director. The quality improvement program is charged with maintaining safe, high quality, efficient care in the observation unit. The consistent use of relevant and established clinical practice guidelines (e.g those developed by the American College of Cardiology (ACC) and American Heart Association (AHA) for acute coronary syndrome and heart failure) should be mandatory.<sup>(39-41)</sup> Other relevant quality and regulatory requirements include, but are not limited to, 1) the CMS and Joint Commission "pay for reporting" requirement for outpatient quality measures which include patients with acute myocardial infarction (AMI) who are treated in a hospital observation unit and subsequently transferred to a different hospital for treatment<sup>(11)</sup> and 2) the AQA and the American Medical Association Physician Consortium for Performance Improvement (AMA PCPI) physician level measures (e.g. Electrocardiogram Performed for Non-Traumatic Chest Pain).<sup>(42)</sup>

Patient safety standards such as "Safe Practices" by the National Quality Forum and the National Patient Safety Goals by the Joint Commission should also be reviewed by



observation unit leaders, adopted as appropriate and then assessed for effectiveness. Important practices to evaluate include communications, medication reconciliation, transitions between care settings and documentation standards.

Hospitals, and therefore observation units, must evaluate patient experience and satisfaction through the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) which was recently mandated by CMS for public reporting.(43, 44) Traditional patient satisfaction surveys administered by proprietary firms such as Press-Ganey and The Jackson Organization are also recommended.

Table 7 outlines a "starter set" of performance measures for an observation unit. A standardized and multidisciplinary approach for monitoring OU quality, safety and efficiency is necessary. Review of clinical and administrative policies, procedures, protocols, and standardized order sheets, should be a part of this process. The program should also analyze financial performance, including utilization, reimbursement rates, revenue and costs in the context of hospital operating performance.

### **Conclusion**

The outcome and efficiency benefits that observation medicine and observation units have provided for patients requiring observation services are similar to those that hospitalists have provided for inpatients. Over the last decade, hospitalists have diversified to include not only clinicians with an expertise in inpatient care but also expertise in quality and safety, hospital leadership and, from the academic perspective, clinical and outcomes research. Hospitalists, therefore, seem well situated to integrate the opportunities and challenges of observation medicine into their expanding scope of work. Collaboration between hospitalists, emergency physicians, hospital administrators and academicians will serve not only to promote outstanding observation care but also to focus quality improvement and research efforts for the observation unit of the 21<sup>st</sup> century.

**Table 1: Examples of Conditions Appropriate for Adult Observation Unit Admission**

<b>Evaluation of Diagnostic Syndromes</b>	<b>Treatment of Emergent Conditions</b>
Chest pain	Asthma
Abdominal pain	Congestive Heart Failure
Fever	Dehydration
Gastrointestinal bleed	Hypo or hyperglycemia
Syncope	Hypercalcemia
Dizziness	Atrial fibrillation
Headache	
Chest Trauma	
Abdominal Trauma	

Table 2:

**Suggested Observation Unit Heart Failure Protocol Entry Guidelines (45)**

Adapted with permission from Peacock FW, *Ann Emerg Med* 2006; 47(1): 26.

<b>OU HF Protocol Entry Guidelines</b>	
<b>Must have at least 1 from each category below</b>	
History	<ul style="list-style-type: none"><li>▪ Orthopnea</li><li>▪ Exertional dyspnea</li><li>▪ Paroxysmal nocturnal dyspnea</li><li>▪ Shortness of breath at rest</li><li>▪ Leg or abdominal edema</li><li>▪ Weight gain</li></ul>
Physical Examination	<ul style="list-style-type: none"><li>▪ Jugular venous distension or abdominal jugular reflux</li><li>▪ S3/S4</li><li>▪ Rales</li><li>▪ Edema</li></ul>
CXR	<ul style="list-style-type: none"><li>▪ Cardiomegaly</li><li>▪ Pulmonary vascular congestion</li><li>▪ Kerley B lines</li><li>▪ Pulmonary edema</li><li>▪ Pleural effusion</li></ul>
Laboratory	<ul style="list-style-type: none"><li>▪ BNP &gt; 100 pg/mL</li></ul>

Table 3:

**Observation Unit Heart Failure Protocol Exclusion Criteria (10)**

Adapted with permission from Peacock FW, *CHF* 2002; 8(2): 68-73.

<b>OU HF Protocol Exclusion Criteria</b>	
<b>Requires inpatient admission/not a candidate for OU if meets any criteria below</b>	
<b>Clinical</b>	<ul style="list-style-type: none"><li>▪ Unstable vital signs despite ED therapy (BP &gt; 220/120 mmHg, RR &gt;25 breaths/min, HR &gt;130 bpm, or T &gt; 38.5° C)</li><li>▪ Unstable airway, or nasal cannula oxygen requirement &gt; 4 L/min to maintain SaO<sub>2</sub> &gt; 90%</li><li>▪ Clinical scenario suggests cardiogenic shock, or patient with signs of end organ hypoperfusion</li><li>▪ Require continuous vasoactive medication other than nesiritide (e.g. nitroglycerin)</li><li>▪ Clinically significant cardiac arrhythmia</li><li>▪ Acute mental status abnormality</li><li>▪ Chronic renal failure requiring dialysis</li><li>▪ Peak flow &lt;50% of predicted, with wheezing</li></ul>
<b>Laboratory and Testing</b>	<ul style="list-style-type: none"><li>▪ ECG or serum markers diagnostic of myocardial ischemia or infarction</li><li>▪ Severe electrolyte imbalances</li><li>▪ CXR with pulmonary infiltrates</li></ul>

**Table 4: Chest Pain Unit: Discharge Criteria and Elements of an Effective Discharge Plan**

<b>Discharge Criteria</b>	<ul style="list-style-type: none"><li>▪ No anginal pain</li><li>▪ No significant new ECG changes</li><li>▪ No significant new arrhythmia</li><li>▪ Normal cardiac biomarkers.</li><li>▪ Negative noninvasive study or arrangements for outpatient stress testing within 3 days in selected patients at low risk.</li><li>▪ No other existing medical condition identified which would require inpatient evaluation</li></ul>
<b>Elements of an Effective Discharge Plan</b>	<ul style="list-style-type: none"><li>▪ Patient education re: risk factor reduction for CAD</li><li>▪ PCP appointment within one week.</li><li>▪ Appointment for stress testing as outpatient within 3 days in carefully selected low risk patients</li><li>▪ Notify PCP or other of OU admission (e.g. phone call or detailed discharge summary)</li><li>▪ Medication reconciliation and prescriptions prior to discharge</li><li>▪ Follow up phone call, if possible, 24 hours after discharge to review medications and appointments with the patient and/or family</li></ul>

**Table 5: Economic Effect of Use of Observation for Chest Pain Patients(2, 15, 17, 20-28)**

Date of Study	Author	All* Obs/Hosp n	Obs/Hosp Change \$	Saving Obs Hosp (%)	D/C Home Bs/Hosp n	Obs/Hosp Charges \$	Savings Obs Hosp (%)
1989	DeLeon	327/354		20			
1993	Kern						
1994	Hoekstra	375/72	2700/3958	68	289/58	1358/3061	44
1994	Rodriquez		1246/2810	44			
1994	Sayre		1299/2748	47		995/2748	36
1996	Gomez	49/160	893/2063	43			
	Gomez	49/43	893/1349				
2000	Graff				1494/233	2214/5464	41
Date of Study	Author	All* Obs/Hosp n	Obs/Hosp Change \$	Saving Obs Hosp (%)	D/C Home Bs/Hosp n	Obs/Hosp Charges \$	Savings Obs Hosp (%)
1994	Gaspoz	312/551	1318/2914	45			
1995	Field		1018/2477	41			
1997	Mikhail				502/611	894/2364	38
1997	Roberts	82/83	1528/2095	73	45/37	803/2410	33
1997	Graff		1210/2704	45		945/2714	35
1998	Farkouh	212/212		62			

\* n hosp = number of hospitalized patients      n obs = number of observation patients

**Table 6: Economic Effect of the Use of Observation on Various Clinical Conditions(8, 9, 29-36)**

<b>Diagnosis</b>	<b>Date of Study</b>	<b>Author</b>	<b>Cost Savings \$/case</b>	<b>Percentage of \$ Hospital (%)</b>	<b>Charge Savings \$/case</b>
<b>Infections</b>	1997	Roberts	1025		
<b>Heart Failure</b>	1993	Dunbar			2866
<b>Asthma</b>	1982	Zwiche			854
	1985	Willet			888
	1997	McDermott	1045		
	1998	Rydman	1045	54	
<b>Pneumothorax</b>	1986	Talbot-Stern			2640
	1988	Vallee			4244
<b>Upper GI Bleeding</b>	1995	Longstreth	990		
	1998	Tham	2943		

**Table 7: Suggested domains of Performance Measures for an Observation Unit**

Quality of Care	<ul style="list-style-type: none"> <li>▪ ACC/AHA Quality Measures</li> <li>▪ ACEP Quality Measures</li> <li>▪ IDSA Quality Measures</li> <li>▪ AMA PCPI Quality Measures</li> <li>▪ Discharge Instructions provided to patient</li> <li>▪ Patient Education documented</li> </ul>
Patient Safety & Risk Management	<ul style="list-style-type: none"> <li>▪ Medication Reconciliation</li> <li>▪ Adverse Events (e.g. falls, medication error)</li> <li>▪ Unanticipated Returns to the ED/OU</li> <li>▪ Return visits post discharge for same diagnosis (72 hrs, 3 months, 6 months)</li> <li>▪ Misdiagnosis</li> <li>▪ Care Coordination/Follow up with Primary Care, Cardiology and other relevant treating physicians</li> <li>▪ # patients leaving AMA</li> <li>▪ Evaluation of closed malpractice claims</li> <li>▪ NQF Safe Practices</li> <li>▪ Joint Commission National Patient Safety Goals</li> </ul>
Efficiency & Utilization	<ul style="list-style-type: none"> <li>▪ Physician response time to patient evaluation, History and Physical Exam, and orders</li> <li>▪ Time from order entry to patient arrival in CPOU</li> <li>▪ Patient volume</li> <li>▪ Appropriateness of admissions</li> <li>▪ LOS (in OU and total LOS if admitted)</li> <li>▪ % OU patients admitted as inpatient (overall goal all diagnoses &lt; 30%*)</li> </ul>
Patient/Provider Experience & Satisfaction	<ul style="list-style-type: none"> <li>▪ Patient Experience of Care (CAHPS)</li> <li>▪ Patient Satisfaction</li> <li>▪ ED Department Satisfaction</li> <li>▪ Inpatient Physician Satisfaction</li> <li>▪ Follow up Physician Satisfaction</li> </ul>
Compliance	<ul style="list-style-type: none"> <li>▪ Physician Documentation and Coding meets regulatory standards</li> </ul>

\* may be higher for some diagnoses (e.g. CHF)



**Figure 1: Observation Unit Heart Failure Management Protocol (45)**

Adapted with permission from Peacock FW, *Ann Emerg Med* 2006; 47(1): 26.

Monitoring	<ul style="list-style-type: none"> <li>▪ Continuous ECG and pulse oximetr</li> <li>▪ Strict input and output, 1,800-mL fluid restriction, no added-salt diet</li> <li>▪ Patient weights</li> </ul>
Therapy (based on patient status and clinical judgment)	<ul style="list-style-type: none"> <li>▪ ACE inhibitor recommended (may hold if using nesiritide)</li> <li>▪ Topical nitrates</li> <li>▪ Furosemide algorithm               <ul style="list-style-type: none"> <li>○ Up to double daily 24-h dose, given as single IV bolus (180mg maximum)</li> <li>○ Double previously administered dose and repeat if fail to meet 2-h urine output goal 2-h urine output goals</li> </ul> </li> <li>▪ 500 mL if creatinine &lt;2.5 mg/dL</li> <li>▪ 250 mL if creatinine &gt;2.5 mg/dL</li> <li>▪ Nesiritide 2 ug/kg IV bolus followed by 0.01 ug/kg/min</li> </ul>
Diagnostic Procedures	<ul style="list-style-type: none"> <li>▪ Ejection fraction, measured by echocardiography, unless systolic HF is known or diastolic HF was diagnosed within 1 year</li> <li>▪ CK-MB and troponin T measured every 6 h, For 12 h</li> </ul>
Consultation/education	<ul style="list-style-type: none"> <li>▪ HF specialist consult in all; social work home health care, and dietary as indicated</li> <li>▪ View 15-min HF video and smoking cessation video as indicated</li> <li>▪ Receive personalized discharge instruction packet</li> </ul>

## References

1. Section 455. Medicare Hospital Manual. In: CMS, ed.
2. Graff LG, Dallara J, Ross MA, et al. Impact on the care of the emergency department chest pain patient from the chest pain evaluation registry (CHEPER) study. *Am J Cardiol* 1997;80:563-568
3. Mace SE. Observation medicine- an update. March 12, 2001. Available at: <http://www.EMedHome.com>
4. Mace SE. Continuous quality improvement for the clinical decision unit. *J Healthc Qual* 2004;26:29-35; quiz 35-26
5. Mace SE. Asthma therapy in the observation unit. *Emerg Med Clin North Am* 2001;19:169-185
6. Graff L, Zun LS, Leikin J, et al. Emergency department observation beds improve patient care: Society for Academic Emergency Medicine debate. *Ann Emerg Med* 1992;21:967-975
7. Lee TH, Rouan GW, Weisberg MC, et al. Clinical characteristics and natural history of patients with acute myocardial infarction sent home from the emergency room. *Am J Cardiol* 1987;60:219-224
8. Rydman RJ, Isola ML, Roberts RR, et al. Emergency Department Observation Unit versus hospital inpatient care for a chronic asthmatic population: a randomized trial of health status outcome and cost. *Med Care* 1998;36:599-609
9. McDermott MF, Murphy DG, Zalenski RJ, et al. A comparison between emergency diagnostic and treatment unit and inpatient care in the management of acute asthma. *Arch Intern Med* 1997;157:2055-2062
10. Peacock WF, Remer EE, Aponte J, et al. Effective observation unit treatment of decompensated heart failure. *Congest Heart Fail* 2002;8:68-73
11. JCAHO. Available at: <http://www.jointcommission.org/PerformanceMeasurement/PerformanceMeasurement>. Accessed Dec. 22, 2007
12. Zalenski RJ, McCarran M, Roberts R, et al. An evaluation of a chest pain diagnostic protocol to exclude acute cardiac ischemia in the emergency department. *Arch Intern Med* 1997;157:1085-1091
13. Tatum JL, Jesse RL, Kontos MC, et al. Comprehensive strategy for the evaluation and triage of the chest pain patient. *Ann Emerg Med* 1997;29:116-125
14. Mark DB, Shaw L, Harrell FE, Jr., et al. Prognostic value of a treadmill exercise score in outpatients with suspected coronary artery disease. *N Engl J Med* 1991;325:849-853
15. Gomez MA, Anderson JL, Karagounis LA, et al. An emergency department-based protocol for rapidly ruling out myocardial ischemia reduces hospital time and expense: results of a randomized study (ROMIO). *J Am Coll Cardiol* 1996;28:25-33
16. Gibler WB, Runyon JP, Levy RC, et al. A rapid diagnostic and treatment center for patients with chest pain in the emergency department. *Ann Emerg Med* 1995;25:1-8
17. Farkouh ME, Smars PA, Reeder GS, et al. A clinical trial of a chest-pain observation unit for patients with unstable angina. Chest Pain Evaluation in the Emergency Room (CHEER) Investigators. *N Engl J Med* 1998;339:1882-1888
18. Hollander JE, Litt HI, Chase M, et al. Computed tomography coronary angiography for rapid disposition of low-risk emergency department patients with chest pain syndromes. *Acad Emerg Med* 2007;14:112-116
19. Hollander J, et al. Abstracts of the 2007 Society of Academic Emergency Medicine (SAEM) Annual Meeting. *Acad Emerg Med* 2007;14:S1-219

20. Sayre MR, Bender AL, Chayan C, et al. Evaluating chest pain patients in an emergency department rapid diagnostic and treatment center is cost effective. *Acad Emerg Med* 1994;1:A45
21. Rodriguez S, Cowfer JP, Lyston DJ, et al. Clinical efficacy and cost effectiveness of rapid emergency department rule out myocardial infarction and noninvasive cardiac evaluation in patients with acute chest pain. *J Amer Col Cardiol* 1994;23:suppl 284A
22. Roberts RR, Zalenski RJ, Mensah EK, et al. Costs of an emergency department-based accelerated diagnostic protocol vs hospitalization in patients with chest pain: a randomized controlled trial. *Jama* 1997;278:1670-1676
23. Mikhail MG, Smith FA, Gray M, et al. Cost-effectiveness of mandatory stress testing in chest pain center patients. *Ann Emerg Med* 1997;29:88-98
24. Hoekstra JW, Gibler WB, Levy RC, et al. Emergency-department diagnosis of acute myocardial infarction and ischemia: a cost analysis of two diagnostic protocols. *Acad Emerg Med* 1994;1:103-110
25. Graff L, Prete M, Werdmann M, et al. Improved outcomes with implementation of emergency department observation units within a multihospital network. *J Qual Improv* 2000;26:421-427
26. Gaspoz JM, Lee TH, Weinstein MC, et al. Cost-effectiveness of a new short-stay unit to "rule out" acute myocardial infarction in low risk patients. *J Am Coll Cardiol* 1994;24:1249-1259
27. Field JL. Emergency evaluation of chest pain: an economic case for definitive MI rule out in the ED. *Clinician* 1995;13:48-51
28. DeLeon AC, Farmer CA, King G, et al. Chest Pain Evaluation Unit: A Cost Effective Approach for Ruling Out Acute Myocardial Infarction. *Southern Med J* 1989;82:1083-1089
29. Zwicke DL, Donohue JF, Wagner EH. Use of the emergency department observation unit in the treatment of acute asthma. *Ann Emerg Med* 1982;11:77-83
30. Willert C, Davis AT, Herman JJ, et al. Short term holding room treatment of asthmatic children. *J Pediatr* 1985;106:707-711
31. Vallee P, Sullivan M, Richardson H, et al. Sequential treatment of a simple pneumothorax. *Ann Emerg Med* 1988;17:936-942
32. Tham KY, Kimura H, Nagurney T, et al. Retrospective review of emergency department patients with non-variceal upper gastrointestinal hemorrhage for potential outpatient management. *Acad Emerg Med* 1999;6:196-201
33. Talbot-Stern J, Richardson H, Tomlanovich MC, et al. Catheter aspiration for simple pneumothorax. *J Emerg Med* 1986;4:437-442
34. Roberts RR, Flemming J, Mensah E, et al. Outcomes of emergency department based accelerated treatment protocol therapy of infectious disease patients. *Acad Emerg Med* 1997;4:517
35. Longstreth GF, Feitelberg SP. Outpatient care of selected patients with acute non-variceal upper gastrointestinal haemorrhage. *Lancet* 1995;345:108-111
36. Dunbar LM. *Congestive Heart Failure*. Andover, MA: Butterworth Heineman.; 1993
37. Storrow AB, Collins SP, Lyons MS, et al. Emergency department observation of heart failure: preliminary analysis of safety and cost. *Congest Heart Fail* 2005;11:68-72
38. *Current Procedural Terminology CPT 2008 Professional Addition*. Chicago, IL: American Medical Association; 2007
39. Krumholz HM, Anderson JL, Brooks NH, et al. ACC/AHA clinical performance measures for adults with ST-elevation and non-ST-elevation myocardial infarction: a report of the American College of Cardiology/American Heart Association Task Force on Performance Measures (Writing Committee to Develop Performance Measures on ST-

- Elevation and Non-ST-Elevation Myocardial Infarction). *J Am Coll Cardiol* 2006;47:236-265
40. Bonow RO, Bennett S, Casey DE, Jr., et al. ACC/AHA clinical performance measures for adults with chronic heart failure: a report of the American College of Cardiology/American Heart Association Task Force on Performance Measures (Writing Committee to Develop Heart Failure Clinical Performance Measures) endorsed by the Heart Failure Society of America. *J Am Coll Cardiol* 2005;46:1144-1178
41. Improvement PCfP. Clinical Performance Measures Chronic Stable Coronary Artery Disease. Available at: <http://acc.org/qualityandscience/clinical/measures/CAD/cadmeasures.pdf>. Accessed Dec. 22, 2007
42. Auerbach BS, Schneider EC, et al. Physician Performance Measure Set. 2006. Available at: <http://www.ama-assn.org/ama1/pub/upload/mm/370/emergmedws120406.pdf>. Accessed Dec. 22, 2007
43. HCAH. Available at: <http://www.hcahpsonline.org/>. Accessed Dec. 22, 2007
44. CMS. HCAHPS: Patients' Perspectives of Care Survey. Available at: [http://www.cms.hhs.gov/HospitalQualityInits/30\\_HospitalHCAHPS.asp](http://www.cms.hhs.gov/HospitalQualityInits/30_HospitalHCAHPS.asp). Accessed Dec. 22, 2007
45. Peacock WF, Young J, Collins S, et al. Heart failure observation units: optimizing care. *Ann Emerg Med* 2006;47:22-33

## Appendix II – MHA Paper on ODS Cases

MHA Paper on One Day Length of  
Stay Cases

March 5, 2010

# **HSCRC One Day Stay Workgroup**

## **Summary of One Day Stay Issues**

March 5, 2010

### **Introduction**

The purpose of this paper is to present MHA's position regarding "One Day Stay" Cases ("ODS") in the HSCRC system. Developing appropriate payment levels for ODS cases involves many complex and interrelated issues. Key considerations include:

- Amount of One Day Stay Cases in the Rate Setting System
- Historical perspective of the HSCRC's Charge per Case ("CPC") system, including treatment of third party denials.
- Current HSCRC Rate Structure of Observation Services (including CPV)
- Financial incentives in the CPC system
  - Payment levels and rate capacity
  - Effect on changes in Case Mix Index ("CMI")
- Financial and compliance risks associated with ODS cases and payment levels
- The costs associated with treatment of ODS cases in both inpatient and outpatient settings
- Clinical validity and medical necessity of treating ODS cases

Staff recently proposed a number of changes to the regulatory system to address ODS cases and the expected increased use of Observation services. This paper will discuss the issues above in detail, including the effects of proposed system changes on payment levels and the use of observation services.

### **History/Background**

One Day Stay Cases have always been a part of the Maryland rate setting system. ODS cases are defined as hospital admissions with a length of stay of zero days or one day. (LOS = 0 or 1). ODS cases include both medical and surgical cases. The decision to admit a patient is ultimately based on a physician's decision in the best interest of treating the patient. There are valid clinical reasons for admitting a short stay patient, rather than providing outpatient services only.

As a percentage of total cases in Maryland, ODS cases accounted for 23% of Rate Year 2009 total admissions. Nationally, ODS cases accounted for 18% of all cases in 2006, the most recent year of HCUP data provided. As a percentage of Maryland's Rate Year 2008 Medicare cases, ODS cases accounted for 17.5% of the total Medicare cases. Nationally, Medicare ODS cases accounted for 13.4% of Medicare cases.

### **Establishment of the HSCRC's CPC System**

In the late 1990's, the HSCRC's rate setting methodology established an inpatient revenue constraint system, known as its Charge per Case ("CPC") system. The CPC system calculated the average charge per case during a base period agreed to by the hospitals and the HSCRC. The system established a CPC target that constrains inpatient

# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues


March 5, 2010

revenue growth based on the annual update factor and the annual allowable change in case mix ("CMI"). It is important to note that Hospital rates were based on reasonable costs as determined by the commission. These rates were utilized to set the base.

As established above, ODS cases have historically been a part of hospital reporting and were included when hospital CPC's were initially calculated based on reasonable costs. The HSCRC's CPC system is based on averaging the actual charges of all cases together within an APRDRG/Severity of Illness (SOI) cell (a "cell"), and weighting all cells based on the overall hospital average. (At the time of CPC inception, the system was based on MD CMS DRG's by Payor classification.) Table 1 below is an example of the establishment of an initial CPC and DRG weight for an example cell, updated over a ten year period.

Table 1

LOS	CPC: Year 1			CPC: Year 10 (3% Inflation; 10 yrs)			Payment Increase
	Cases	CPC	Charges	Cases	CPC	Charges	
1	10	\$ 2,000	\$ 20,000	10	\$ 2,600	\$ 26,000	30.0%
2	30	4,000	120,000	30	5,200	156,000	30.0%
3	30	8,000	240,000	30	10,400	312,000	30.0%
4+	10	20,000	200,000	10	26,000	260,000	30.0%
Total	80	\$ 7,250	\$ 580,000	80	\$ 9,425	\$ 754,000	30.0%


  
 30% Increase in CPC

Overall base payment	\$ 10,000	\$ 13,000
Case Weight	0.73	0.73

The averaging of the actual charges within a cell creates the concept of "rate capacity" created by the actual charge above or below the approved charge for each cell. Rate capacity, or negative rate capacity, was built into the original CPC targets and still holds true today. Table 2 reflects rate capacity using the example from Table 1 above.



# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

Table 2

LOS	CPC: Year 1				CPC: Year 10 (3% Inflation; 10 yrs)			
	Cases	Actual CPC	Approved CPC	Rate Capacity	Cases	Actual CPC	Approved CPC	Rate Capacity
1	10	\$ 2,000	\$ 7,250	\$ (5,250)	10	\$ 2,600	\$ 9,425	\$ (6,825)
2	30	4,000	7,250	(3,250)	30	5,200	9,425	(4,225)
3	30	8,000	7,250	750	30	10,400	9,425	975
4+	10	20,000	7,250	12,750	10	26,000	9,425	16,575
<b>Total</b>	<b>80</b>	<b>\$ 7,250</b>	<b>\$ 7,250</b>	<b>\$ -</b>	<b>80</b>	<b>\$ 9,425</b>	<b>\$ 9,425</b>	<b>\$ -</b>

30% Increase in CPC →

Overall base payment	\$ 10,000	\$ 13,000
Case Weight	0.73	0.73

In Table 2 above, all cases were averaged to create an approved payment for each cell establishing rate capacity or negative rate capacity in the base period. CPC's were developed using cases with different lengths of stay, and thus, different actual payment levels. The average payment is reduced by including ODS cases, and conversely, the average payment is increased by including cases with longer lengths of stay. The CPC system adjusts only the overall target, thus rate capacity holds in the current period.

When the CPC system was established in the late 1990's, ODS cases were included in developing the average payment levels within each cell. From 1998 – 2000, the period which was used to establish the CPC system, approximately 20% of total cases were ODS cases. In 2008, 21% of Maryland cases were ODS cases, thus the overall percentage of Maryland's ODS cases has remained constant throughout the period. As reflected in Table 2 above, ODS cases generated rate capacity since they were below the average payment level within the specified cell.

Using 1998 data, Table 3 below reflects a summary of rate capacity by LOS, when the initial charge per case system was established. This table uses included CPC data only.

# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

Table 3

	LOS		Total
	0 or 1	2 +	
Cases	116,299	472,799	589,098
Approved Charges	\$ 579,369,336	3,505,551,820	\$ 4,084,921,156
Actual Charges	319,671,143	3,697,326,136	4,016,997,279
Approved charges above (below) actual charges	\$ 259,698,193	\$ (191,774,316)	\$ 67,923,877
<b>% Variance - Actual Charges Above/(Below) Approved Charges</b>	<b>44.82%</b>	<b>-5.47%</b>	<b>1.66%</b>
<i>% of Total Cases</i>	<i>19.7%</i>	<i>80.3%</i>	<i>100.0%</i>

As reflected in Table 3, the system was based on average payments within a cell to establish case weights and payment levels. ODS cases accounted for 19.7% of the total cases when CPC was established. At its inception, ODS cases generated rate capacity of \$260 million. Conversely, cases with a LOS of 2+ decreased rate capacity by \$192 million.<sup>1</sup> This is an important concept when developing payment levels, as by definition, ODS cases increased rate capacity while cases with longer LOS decreased rate capacity, similar to Table 2 above.

The concept of average payment levels was constructed purposefully to provide financial incentives in the system. By receiving an average payment per DRG/cell, the CPC system was designed to reward hospitals that reduce length of stay. A byproduct of the system is that substantial financial impacts occur when and if the number of ODS cases in the system changes. If the percentage of ODS cases had increased over time, hospitals would recognize a greater financial benefit under the CPC system. Conversely, if the number of ODS cases had decreased over time, hospitals would be negatively impacted under the system. Neither case applies however, as the percentage of ODS cases has remained constant over time. A review of the literature regarding the adoption of the CPC system reveals no discussion about ODS cases. They were simply part of the arithmetic.

Table 4 below is similar to Table 3 above, using Rate Year 2009 data. Table 4 reflects rate capacity in Rate Year 2009; comparing cases with a LOS of 0 or 1 to cases with a LOS of 2 +, using included CPC data only.

<sup>1</sup> Table 3 reflects an approximate calculation of rate capacity in 1998 and is not exact. It calculates the actual payment by MDCMS/Payor cell compared to the "approved" payment for that cell. The "approved" payment was calculated by applying the approved 1998 case weight of a cell to the actual average payment for all DRG's by hospital. 1998 Hospital CPC data was not available for all hospitals. The net total suggests a 1.66% overcharge which is not likely.

# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

Table 4

	LOS		Total
	0 or 1	2 +	
Cases	161,904	593,049	754,953
Approved Charges	\$ 1,224,225,510	\$ 6,906,362,098	\$ 8,130,587,608
Actual Charges	838,755,784	7,299,250,599	8,138,006,383
Approved charges above (below) actual charges	\$ 385,469,726	\$ (392,888,501)	\$ (7,418,775)
<b>% Variance - Actual Charges</b>			
<b>Above/(Below) Approved Charges</b>	<b>31.49%</b>	<b>-5.69%</b>	<b>-0.09%</b>
<i>% of Total Cases</i>	<i>21.4%</i>	<i>78.6%</i>	<i>100.0%</i>

As reflected in Table 4, ODS cases generated rate capacity of \$385 million, while cases with a LOS of 2 + reduced rate capacity by \$392 million. The percentage of ODS cases increased only slightly from 1998 to 2009 (19.7% to 21.4%). As a percentage variance, ODS cases generated a lower level of rate capacity versus the 1998 base period, 31.5% versus 44.8%. Overall, Table 4 reflects the continued balance of rate capacity generated by ODS cases versus reductions in rate capacity generated by cases with a LOS of 2 +.

### Current HSCRC Rate Structure for Outpatient Observation Services

The rate system currently provides a structure to bill separately for medical observation services. Hospitals can charge 1.5 Emergency Department RVU's for every documented hour of care the patient receives. This structure was developed as a proxy for the payment of one day of clinical care. For example, a hospital with an EMG rate of \$40 per RVU would generate a charge of \$1,080 to observe a patient for eighteen hours, similar to the approximate charge of an inpatient Medical/Surgical day. To bill separately for observation services, the hospital must document that the patient was in the care of a physician during the observation, and must frequently capture data that the patient is progressing toward admission or release.

With respect to outpatient surgical cases, a Same Day Surgery ("SDS") charge is applied to capture the cost of patient recovery. The SDS charge is an average charge that is applied regardless of recovery time. In many cases, patients may require an extended period of recovery and the patient is ultimately placed on an inpatient unit to be monitored. CMS guidelines allow hospitals to *bill* for this additional time, but add on payments for extended recovery are not recognized as the APC bundled payment for outpatient surgery includes all recovery time without regard to length of recovery.

In addition to the unit rate structure, the HSCRC will implement its CPV system in FY2011. Similar to the CPC, CPV provides an overall outpatient target for the hospital to manage its outpatient business utilizing FY2010 as a base. As part of its CPV system, separate weights will be created for patients requiring extended observation services. Similar to Medicare's requirements for observation payment, hospitals must

# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

document outpatient services provided and record CPT code G0378 for observation services, along with a high level (Level 4 or 5) emergency or clinic visit.

Creating separate weights for observation services is an improvement over the previously proposed CPV system, however certain issues warrant further investigation. The historical data used to develop separate weights for observation services is based on the limited number of hospitals with fully implemented observation services. A review of the HSCRC 2009 data reveals that only ten hospitals used observation services with some degree of magnitude, as defined by the presence of the appropriate billing codes. There are likely more than ten hospitals using Observation services but the RY2009 data do not reflect them.

It appears that some confusion over use of the proper codes may make the data incomplete and inaccurate. Without the presence of the appropriate codes, the charges for hospitals "observing" patients for extended periods without admission (e.g., long ED stays) are not captured in the data. Furthermore, costs associated with treating observation patients may not be fully captured in the current ED structure, resulting in lower observation charges and lower payment levels under CPV.

### **Financial Impact of Moving ODS Cases to Observation**

When considering moving ODS Cases to Observation, it is important to understand the financial impacts on the hospital, keeping in mind the mechanics of the CPC as outlined above. In the CPC system, there are two primary financial barriers to moving ODS cases to Observation. First, as reflected above, the hospital will lose rate capacity of ODS cases that was historically established in the system. Second, hospitals may be subject to the HSCRC's annual "governor" that limits overall increases in CMI. There are also additional financial barriers in the new CPV system as well as the utilization of observation services, which will be discussed in a separate section.

As established in the Tables above, hospitals generate rate capacity on ODS cases, a concept inherent in the CPC system since its inception. Removing ODS cases from the CPC without other adjustments reduces inpatient rate capacity since payments for cases with longer lengths of stay remained unchanged during the same period. As noted in Table 4, the aggregate rate deficit under the CPC in RY2009 for cases with LOS 2+ was \$392.9 million. Simply removing the low charge cases from any average distorts the system, and since the CPC is an average, the same result would occur unless the CPC is adjusted to reflect the removal of the ODS cases. Table 5 below reflects an example of decreasing the number of ODS cases in the CPC system.

# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

Table 5

LOS	CPC: Current Year				
	Cases	Actual CPC	Approved CPC	Rate Capacity	Net Rate Capacity
1	8	\$ 2,600	\$ 9,425	\$ (6,825)	\$ (54,600)
2	30	5,200	9,425	(4,225)	(126,750)
3	30	10,400	9,425	975	29,250
4+	10	26,000	9,425	16,575	165,750
<b>Total</b>	<b>78</b>	<b>\$ 9,600</b>	<b>\$ 9,425</b>	<b>\$ 175</b>	<b>\$ 13,650</b>
Net Over/(Under) Charge			\$ 175		
% Over/(Under) Charge			1.9%		

In this case, removing two cases with LOS = 1 resulted in overall lost CPC rate capacity of \$175 per case (1.9%), or total CPC rate capacity of \$13,650 (\$6,875 x 2 cases). The hospital must reduce charges on all other cases to achieve the compliance target of \$9,425, or incur an overcharge of 1.9%. When the cases are moved to Observation, the hospital will likely receive payments of \$2,600 per case in Observation and ancillary charges. The net financial impact is the loss of the \$9,425 average payment, net of receiving \$2,600 for Observation services, or \$6,875 per case.

The rate capacity issue must be addressed when discussing how best to move ODS cases to Observation. As demonstrated in Tables 1 – 4, the system was established based on average payment levels that represented reasonable costs, including ODS cases. Simply eliminating ODS cases from the average prospectively does not account for the historical development of CPC, including ODS cases that lowered the overall payment average.

The second financial issue to consider in how to address ODS cases in the CPC system is the effect on CMI. Cells with a higher percentage of ODS cases tend to have a lower case weight than other cells. By shifting cases with lower case weights to Observation, hospital CMI's will increase. Currently, the HSCRC's CMI governor limits the amount of overall CMI growth allowable in a given year. Hospitals CMI increases are governed, or reduced, to achieve the overall CMI growth target. Table 6 below reflects the effect of CMI governor if ODS cases are reduced.

# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

Table 6

DRG	Base Period				Current Period			
	A Cases	B CPC	C CMI	D = A*C Case Weights	A Cases	B CPC	C CMI	D = A*C Case Weights
1	10	\$ 9,600	0.74	7.38	8	\$ 9,600	0.74	5.91
2	30	12,000	0.92	27.69	30	12,000	0.92	27.69
3	30	18,000	1.38	41.54	30	18,000	1.38	41.54
4	10	25,000	1.92	19.23	10	25,000	1.92	19.23
Total	80	\$ 15,575	1.20	95.85	78	\$ 15,728	1.21	94.37
Overall base payment		\$ 13,000				\$ 13,000		
<b>CMI Change</b>								<b>1.0%</b>
<b>Governed CMI Change (Assuming 50% Governor)</b>								<b>0.5%</b>

In this example, two cases from DRG 1 were shifted to Observation in the current period, causing an overall CMI increase of 1.0% (1.20 to 1.21). Assuming a 50% governor, the allowable CMI increase is 0.5%, reducing payment levels by 50% on all CPC cases. In addition to reducing rate capacity, hospitals would not receive full payment for the cases that remain under CPC as a result of the CMI governor.

### Financial Risk in the Rate System and Financial Risk from Enhanced Compliance Programs Associated With Shifting ODS Cases to Observation

As demonstrated by the tables above, there are significant revenue issues that must be addressed when adjusting the CPC system to properly align revenues with costs, as is required by the Commission's mandate to approve charges that in total are reasonable related to the expense incurred in providing care. In addition to this HSCRC imperative, hospitals also face the financial risk of payment denials if it is demonstrated that any given admission was not medically necessary. Currently, most non-governmental payors use some form of concurrent Utilization Review ("UR") to determine if admissions are medically necessary. They work with hospital departments and deny inpatient payments for admissions that are deemed to be medically unnecessary. Governmental payors, most notably Medicare's Recovery Audit Contractor ("RAC") program are increasing regulatory enforcement by retroactively reviewing ODS admissions. Hospitals face large scale reviews of clinical data to determine whether admissions were medically necessary.

Increased use of Observation services is likely to mitigate the financial risk inherent in retroactive denials on any large scale. Hospitals in Maryland generally fall into one of three categories regarding Observation use. They include:

- Hospitals with historic use of observation services, developed before the implementation of Charge per Case. Hospitals historically using Observation would have had fewer cases in the CPC base period, resulting in a higher initial

# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

CPC. In addition, prior to CPC, all hospitals were paid based on unit rates, and thus hospitals historically using Observation would have approximately the same revenue base (inpatient and outpatient combined) as other hospitals. By definition, these hospitals will not significantly increase use of Observation and would not be subject to lost rate capacity and the CMI governor as a result of implementing observation services. Further, these hospitals should have less compliance exposure to RAC and commercial denials by using Observation to a greater extent.

- Hospitals that recently implemented Observation. Hospitals that recently implemented Observation had ODS cases included in the CPC base and were subject to lost rate capacity and the CMI governor as a result of implementing observation services. These hospitals may have less compliance risk to RAC and commercial denials by using Observation to a greater extent, but they have already suffered revenue losses as a result of observation.
- Hospitals that have not implemented Observation. Hospitals that have not implemented Observation would not be subject lost rate capacity and the CMI governor as cases have not been shifted to Observation. These hospitals may have higher levels of compliance risk to RAC and commercial denials.

Because Observation services were not adopted at a uniform point in time, hospitals face different levels of financial risk from system changes (rate capacity/CMI governor) and from retrospective payment denials. Prospective changes to the rate system to address ODS cases will therefore affect hospitals differently. As noted above, payment levels were reduced for hospitals that recently implemented Observation, however they will logically have less risk associated with payment denials. Conversely, payment levels remained unchanged for hospitals that have not adopted Observation, however they may ultimately incur more denied cases.

### **Patient Care Costs: Inpatient versus Observation**

The costs of the clinical care provided to patients in an inpatient or Observation setting must be analyzed when determining appropriate payment levels. There are many similarities and certain differences in the costs of treating patients as inpatients or observation patients. Unadjusted charge comparisons are not necessarily appropriate. An inpatient admission generates a fixed charge per day, while Observation generates hourly charges. Any unadjusted "charge" comparison will naturally suggest Observation "costs" are lower since the hourly charges may not equate to a full daily charge. If admission and observation are separated on an hourly "cost" or "charge" basis, the results may be similar. Detailed cost accounting for inpatient and observation services is required to identify true opportunities for cost savings, if they exist. Understanding costs, the true costs of care provided, is a critical component to providing adequate reimbursement for services provided

In many cases, the costs to treat inpatient and observation patients are the same. Whether inpatient or observation services are provided, the attending physician deemed

# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

that the patient should progress further before release from the hospital. Patients that are admitted are placed on inpatient units and monitored for changes in symptoms. In hospitals using a "virtual observation" service, patients that have not been "admitted," but rather "observed," are also placed on inpatient units and monitored. Observation patients may stay at the hospital for an extended period of time, even in excess of 24 hours. Additionally, many hospitals "observe" patients for extended periods of time without regard to reimbursement structure. Requirements to capture the appropriate documentation to bill for observation services are onerous, especially in the context of a busy emergency department. Hospital and physician missions are to provide appropriate patient care. Hospitals must necessarily pay appropriate attention to reimbursement consequences to maintain their mission, but providing proper care is always foremost. Hospitals may monitor patients as outpatients in an emergency department for extended periods of time without billing for observation services, which may have reimbursement consequences without patient care consequences.

When a patient initially presents, a physician makes a clinical decision to admit, observe, or release a patient based on the patient's condition. Whether the physician decides to admit the patient as an inpatient or places the patient in Observation, hospital services are used at higher rate during the initial period. Various ancillary tests are usually immediately ordered to determine underlying causes for the patient's condition to determine the course of care. Nursing care may be provided at higher levels during the initial period to more frequently monitor and document signs and symptoms that lead to the appropriate diagnosis. The administrative burden on physicians and hospital staff to more frequently document patient progress in order to get paid for observation services may require additional staffing and physician coverage. Physician coverage expenses are an important consideration when implementing large scale changes to care delivery, although we recognize that these costs are outside of the HSCRC's regulatory authority. Hospitals across the country have also faced this challenge and many have opted to only bill for the Part B ancillary services incurred, and not bill for the Part A inpatient services for the particular patient. This is appropriate to address Medicare billing issues in other states. However, the regulatory system in Maryland requires a more comprehensive solution.

It is possible that observation services may provide opportunities to generate cost savings. As an example, a hospital specializing in cardiac care with large cardiac volumes may be able to more rapidly diagnose, treat, admit or release patients than a non-specialized cardiac hospital. Even in this case, utilization of services is likely the same as an inpatient but compressed into a smaller time period. However, real cost savings from observation services should be understood and quantified before large scale payment adjustments are warranted.

From a cost accounting perspective, costs to treat "observation" patients are spread among various departments depending on hospital operation. For hospitals that do not have a true medical observation service, the cost to treat a patient for an extended period may be captured in the Emergency Department (without corresponding RVUs) or on the inpatient unit if admitted. Hospitals with a virtual observation service may capture



# **HSCRC One Day Stay Workgroup**

## **Summary of One Day Stay Issues**

March 5, 2010

costs in the inpatient routine centers, ultimately reclassifying costs to the emergency department as part of the annual cost report. To account for these costs however, hospitals use some inexact method of cost allocation, usually based on the number of observation patients to inpatients treated on the unit. A dedicated observation unit requires space, and fixed management and support costs to operate. From a surgical perspective, extended recovery costs may be captured in the recovery room during a standard recovery or, on an inpatient unit if an extended recovery is required.

In our discussions, Staff stated the need to reduce hospital costs and increase efficiencies. Our proposed recommendations below will address certain opportunities to recognize cost savings in the system, if validated by the data. Additionally, system savings (revenue reductions) may be generated by other forces outside of the HSCRC's regulatory authority. Hospitals may experience revenue reductions for observation patients either through operational changes or future RAC audits for medical necessity from October 2007 - present. Due to the complex documentation requirements and operational challenges with Observation, Maryland hospitals, like the rest of the country, may not fully capture revenue sufficient to cover the cost of all observation services provided. These factors will reduce the overall revenue stream of the hospital but they are not explicit components of the rate setting system.

Future cost savings from observation services, if any, should be quantified and applied to future rates. The Commission establishes an update factor on an annual basis and any discussion of global efficiencies with respect to ODS cases should be discussed in the payment workgroup. We recognize that the Commission's goal is to provide reimbursement that is fair and that is reasonably designed to cover the expense of providing care. The goal of our recommendations below is to adjust the system and provide reasonable rates to cover expenses.

### **Clinical Validity and Medical Necessity**

The decision to admit a patient is a complex medical decision requiring a physician's judgment based on circumstances of the patient's medical condition. There are valid and appropriate reasons for admitting patients to the hospital for a brief period of time. Hospitals have different patterns of ODS admissions based on a variety of factors, including types of clinical services provided, physician practice patterns, the services and resources available at the hospital and others. Case managers and UR personnel can work with physicians to determine the most appropriate treatment, but it is ultimately a physician's decision to determine the course of care, including whether to admit a patient.

Medicare regulations require that hospitals establish UR to determine appropriate levels of care. The current UR landscape involves reviewing inpatient admissions versus a set of medical criteria to determine if admission is/was required. Medicare requires that some set of standard criteria are used for review, whether generally accepted (Milliman and Roberts, Interqual), or a standard developed by the individual hospitals. The criteria

# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

used to determine an appropriate admission are guidelines and are not absolute in nature.<sup>2</sup> Non governmental commercial payors have their own forms of UR, in the form of case managers and other personnel that work with hospital staff to “steer” the patient what the payor believes to be an appropriate level of care. On site, telephone and electronic approvals are used by commercial payors to authorize admission to the hospital. Market based forces in the form of payment denials provide powerful financial incentives to ensure efficient and effective hospital UR programs.

The HSCRC’s rate system has a variety of financial incentives for hospitals to control costs on an aggregate basis (Annual Payment Update, CPC, CPV, ICC/ROC etc.). These incentives allow hospitals the flexibility to manage global costs in the context of payment levels. The rate system was never designed to dictate medical necessity of hospital admissions, or how physicians provide care. It is designed to provide reasonable rates to cover reasonable hospital costs. As noted above, an unintended and unforeseen consequence of the CPC averaging system is the disparate result in reimbursement for services with comparable costs, which should be corrected. UR is a required and a necessary function of the hospital and the payors to prevent inappropriate use of medical services. Each admission involves a specific interaction between patient and physician. It is ultimately a physician’s decision to admit a patient to the hospital, but if the costs of treating a patient as a ODS or as an observation patient are the same, the reimbursement should also be the same. If the costs of treating an observation patient are lower than a ODS patient, the savings should be identified and adjusted for in future years. The MHA proposals address these issues.

### **MHA Proposal**

As reflected in the narrative above, the underlying payment issues regarding ODS cases require careful consideration of proposed changes. The HSCRC’s February 19<sup>th</sup> proposal outline addresses many of these factors, discussed at length during our last workgroup meeting. Our recommendations present the hospitals proposal, noting where we support and disagree with the Staff’s outline. Correcting the flaws in the established CPC system and aligning payment incentives in the current system will make Observation versus inpatient admission indifferent to reimbursement, as it should be.

### **Recommendation 1: Exclude ODS Cases from the CPC system**

We agree with the Staff that ODS Cases should be excluded from CPC and that the CPC system should be rebased. As demonstrated in the examples above, the rate system was built on a system of averages. The original CPC targets included a percentage of ODS cases that has remained unchanged over time. Excluding ODS cases from CPC and rebasing the rate system is the most effective way to align revenue with

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<sup>2</sup> CMS does not recognize any empirical criteria, but relies on medical judgment to determine appropriate levels of care.

# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

cost, and make the system indifferent to the admission versus observation decision. Consider the example in Table 7 below:

Table 7

LOS	Cases	CPC: Current Year			
		Actual CPC	Approved CPC	Rate Capacity	Net Rate Capacity
1	10	\$ 2,600	\$ 2,600	\$ -	\$ -
2	30	5,200	10,400	(5,200)	(156,000)
3	30	10,400	10,400	-	-
4+	10	26,000	10,400	15,600	156,000
Total	70	\$ 10,400	\$ 10,400	\$ -	\$ -

In Table 7, cases with a LOS = 1 have been removed from calculating the average payment and treated as “CPC pass throughs,” similar to the current low charge exclusions. As such, a hospital would generate a \$2,600 charge per case and receive no rate capacity benefit since they would not receive the full DRG payment. Since the outpatient observation payment for the service is expected to equal the actual payment of \$2,600, the hospital is financially indifferent to the physician decision whether to admit the patient, or to treat the patient as an outpatient. After the system is rebased, the financial incentive is aligned appropriately since the hospital is at risk for the entire payment of \$2,600. The hospital is indifferent to use of observation services from a reimbursement perspective.

As stated previously, the HSCRC’s CPC system is a system of averages. This example increases the overall average payment for this cell, which occurs as the new mix of actual cases and charges are weighted. Rate capacity for cases with a LOS = 2 increases, however the negative rate capacity for cases with a LOS = 3 or 4 is reduced or eliminated, again as a product of a system based on averages. (In this example, cases with a LOS = 3 equal the overall average payment.) This maintains the integrity of the CPC system as the original CPC targets included the same level of ODS cases as the current experience. The rebased CPC is higher as a result, but it retains the incentives to manage inpatient cases within the overall revenue constraint of the system.

Another consideration is introduced by this approach - that an incentive may be created to increase LOS to gain rate capacity with a LOS = 2. This is unlikely to occur because compliance incentives in the market provide sufficient barriers to a hospital increasing LOS. Although ultimately unknown, the RAC program and third party payers

# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

are in the position to deny medically unnecessary patient days on the “back end” of a hospital stay. We believe there is no risk that hospitals will increase LOS for these cases.

By definition this recommendation eliminates the effect of the CMI governor for appropriate changes in CMI. Historical experience suggests that it is much easier to isolate changes in CMI by absolute means (eliminating ODS cases from CPC) rather than by more subjective means (hospital specific review, e.g. “Root” DRG changes).

Conceptually, we agree with the Staff that we should consider constraining the charge per admission for ODS cases. When we reviewed the technical aspects of the issue, we identified several concerns that should be discussed further. The charge per admission of ODS cases should increase, by design, for two reasons. As cases currently with a LOS = 2 gradually move to LOS = 1 as a result of treatment advances, they will be excluded from CPC. This will likely increase the charge per admission for ODS cases since the current two day stay cases will have higher acuity than the ODS cases being removed today. In addition, moving two day stay cases to ODS will reduce the remaining CPC rate capacity resulting in system savings, since the two day stay cases will likely fall below the rebased average charge. The same will likely hold true as ODS cases shift to Observation, since the remaining ODS cases are likely to have higher acuity as the lower acuity ODS cases will shift to Observation first. Based on these issues, we should discuss this concept further in a technical capacity before implementing a constraint system.

In addition, there are two existing constraints to consider. First, the HSCRC’s existing unit rate price structure ensures that hospitals must comply with unit prices. Second, since by definition these cases are one-day admissions, utilization of ancillary services is unlikely to increase by any measurable amount. Finally, the workgroup should consider the effect that proposed changes to the medical and surgical rate structures will have on the remaining ODS cases and charges.

Excluding ODS cases from the CPC system should be re-evaluated after a multi year period (e.g., three years). At that point, observation services delivered at hospitals will have matured reducing the number of ODS cases. It is also important to point out that unintended consequences may arise from this structure. As previously stated, hospitals improving efficiency may reduce LOS from two or three days to one day. As such, the hospital’s rate capacity will be reduced since the case will now be excluded from CPC and treated as a pass through. This potential risk does not outweigh the benefit of rebasing the system and will be addressed if ODS cases are included after some period. The current ODS problem is largely an unintended and unforeseen consequence of the CPC system that was intended to be, and was successful at being, a revenue constraint system. Further discussion and review as the changes are being implemented is needed to prevent unintended consequences in the future.

### Recommendation 2: Removing Identified “Cost Savings”

# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

We believe that any true cost savings from Observation use should be identified in the future and applied to future rates. Staff is proposing that an amount of the “rate capacity” associated with ODS cases should be removed from the system and that system savings as a result of this adjustment would be applied to the annual payment update. We understand this to be a “net neutral” payment reduction in the context of the annual payment update. We recommend this issue be discussed as part of the Annual Payment Update workgroup. Historically, the payment workgroup discusses the overall level of funding in the rate system and we believe that the payment workgroup is the appropriate forum for this discussion.

Staff also discussed the possibility of “scaling” this cost savings to address those hospitals that were early adopters of Observation, causing reductions to rate capacity and increased impacts from the CMI governor. As a means to address the early adopters, this idea should be investigated further. Determining the appropriate scaling logic is the critical factor. The hospitals do not believe that a strict average of ODS cases (even by APRDRG/SOI) should be used for this purpose. Staff and the hospitals should perform a detailed investigation of hospital data to isolate hospitals that recently adopted Observation and then determine magnitude of financial impacts under the current system. Consideration may also be given to potential reduction in denials or in RAC exposure.

### Recommendation 3: No Payment Reward/Incentive Policy is Required

Staff’s February 19<sup>th</sup> proposal includes a system of rewards and penalties. The proposed system would be based on hospital actual versus hospital expected (state average) percentage of ODS cases, adjusted for patient mix (APRDRG/SOI). The hospitals disagree with Staff that this incentive is either required to achieve the desired reduction in ODS cases, or an appropriate methodology to use..

As noted in Recommendation 1 and concurrently proposed by Staff, removing ODS cases from CPC will be the largest driver of changes in hospital behavior. The guiding principal is to eliminate the reimbursement differences of treating patients in the most appropriate care level. Implementing a reward/penalty system based on averages may erode part of that principal. We strongly disagree that there should be rewards and penalties based on a statewide benchmark, since there are no accepted clinical benchmarks. As mentioned before, determining if any inpatient stay is appropriate is a medical determination and should be a function of Utilization Review, not a formulaic approach. Furthermore, as discussed in the February 19<sup>th</sup> meeting by both hospitals and payors, market forces provide powerful incentives to change behavior since the hospital would be at risk for the entire payment of a ODS should the case be denied. (See Recommendation 9 below).

In addition to the proposed system of rewards and penalties, we are concerned with the use of any hard “target” of ODS cases as a percentage of total cases, comparing Maryland to the Nation. The Maryland regulatory system is much different than market based system in the rest of the nation, which creates distortions among payment levels by payer classification. Instead, progress toward the original goal of increasing observation

# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

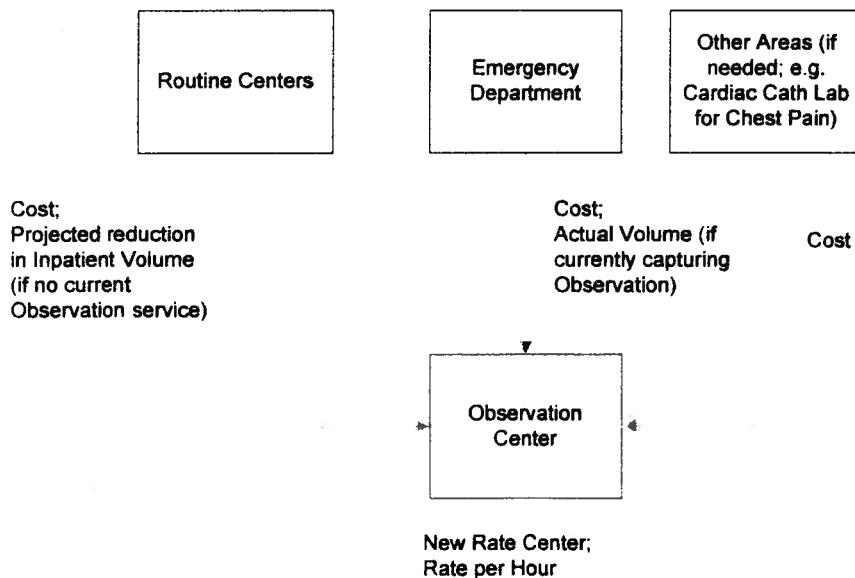
use should be measured. If observation is adopted by a large majority of hospitals, the percentage of ODS cases should be irrelevant. Though the percentage of ODS cases is likely to decline, improving efficiency will shift “two day” stay cases to ODS cases, offsetting movement of ODS cases to Observation. Since the longer term effects of this are unclear, we recommend that Staff review hospital adoption of observation after each year, rather than establish a targeted percentage of ODS cases.

### Recommendation 4: Restructure the System to Create a Separate Medical Observation Rate Center

The current structure of the rate system captures Observation charges in the Emergency Department. While the current system is usable, it is not ideal to isolate the costs and charges of Observation. Creating a separate rate center for Observation would permit hospitals to account for costs more appropriately to avoid mixing Emergency Department charges and RVUs. Some hospitals have expressed concern over the propriety of charging patients via EMG charges when they treated in inpatient units. This is particularly appropriate given the recent State budget challenges in the Medicaid program. Medicaid patients use the ED more frequently than non-Medicaid patients. Segregating costs appropriately may reduce any unintended cost increases in the ED under the current rate structure.

Figure 1 below depicts the cost accounting required to create the new observation rate center.

Figure 1:



In Figure 1, costs are allocated to the new Observation center from the appropriate patient care areas. In the case of hospitals currently using Observation, costs, charges and

# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

volume should be moved from the Emergency Department to the new rate center. In some cases, hospitals with Observation may be observing patients in other hospital departments, routine or otherwise. In the event that costs have not been appropriately allocated to the ED, those costs should be reclassified to the new Observation center. There should be no "double counting" of Observation costs that have already been allocated to the ED. Hospitals without Observation should project costs and charges that should be moved from the inpatient routine centers, along with the projected reduction of inpatient days.

The new rate center should be established using an RVU scale. One (1) RVU would equal one hour of observation care provided. Tables 8 and 9 below reflect the mechanics of this rate conversion.

Table 8

Rate Center	Pre Conversion				Post Conversion			
	Volume	Rate	Cost	Charges	Volume	Rate	Cost	Charges
EMG	150,000	\$ 40.0	\$ 5,100,000	\$ 6,000,000	135,000	\$ 40.0	\$ 4,590,000	\$ 5,400,000
MSG	-	-	-	-	-	-	-	-
MOBS	-	-	-	-	10,000	60.0	510,000	600,000
Total			<u>\$ 5,100,000</u>	<u>\$ 6,000,000</u>			<u>\$ 5,100,000</u>	<u>\$ 6,000,000</u>

In Table 8, a hospital is currently capturing Observation charges, cost and volume in its ED. 15,000 EMG RVUs are related to Observation, translating to 10,000 hours of observation care (15,000/1.5 RVUs per hour). The associated Observation charges and costs are reclassified to the new Medical Observation rate center (MOBS). No cost is reclassified from MSG as the hospital appropriately accounted for all costs in the ED even though observation patients may have been physically placed on inpatient units.

Table 9

Rate Center	Pre Conversion				Post Conversion			
	Volume	Rate	Cost	Charges	Volume	Rate	Cost	Charges
EMG	-	-	-	-	-	-	-	-
MSG	30,000	1,000.0	25,500,000	30,000,000	27,000	1,000.0	22,950,000	27,000,000
MOBS	-	-	-	-	60,000	50.0	2,550,000	3,000,000
Total			<u>\$ 25,500,000</u>	<u>\$ 30,000,000</u>			<u>\$ 25,500,000</u>	<u>\$ 30,000,000</u>

In Table 9, a hospital is not currently capturing Observation charges. As such, it is projecting its observation volume in the new rate center. This example assumes that 3,000 patient days would be moved to MOBS, averaging 20 hours per observation. With no historical experience, charges at the current MSG rate would be moved to MOBS.

# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

### Recommendation 5: Restructure the System to Adjust the Same Day Surgery Rate Center

Although this discussion primarily focuses on medical observation cases, surgical observation cases also require consideration. Unlike medical observation cases, active monitoring of the recovery (“observation”) of surgical patients is included in the Operating Room (OR) and Same Day Surgery (SDS) rate centers. The current rate structure of the OR and SDS rates do not allow hospitals to “tier” rates based on resource use. In most cases, this arrangement is sufficient, however it lacks flexibility to capture the true costs (and charges) associated with certain outpatient surgery cases.

Reasonable costs to treat surgical cases requiring extended outpatient recovery are comingled with routine service cost. Whether treated as an outpatient surgical patient who recovered for an extended period in a routine bed, or was admitted for a one day stay, certain patients require an extended period of recovery. In the first example, the patient is not admitted but costs associated with recovery aren’t fully captured since a portion of the patients monitoring and recovery takes place on an inpatient floor. The OR and SDS rates do not fully capture these costs and it is arguable that the OR and SDS rates should not include these costs. In the second example, the patient is admitted at the risk of denial for medical necessity, although possibly more appropriately capturing the costs required. There is likely little difference in patient care under either example.

In conjunction with revising the CPC methodology and creating a structured Medical Observation service, we recommend:

- The SDS rate be restructured to capture outpatient recovery costs, and;
- The SDS rate be tiered to allow for appropriate and effective charging for outpatient surgical cases

Similar to changes in the Medical Observation service, the SDS rate center would contain costs associated with observing and monitoring patients for a period beyond the normal recovery time. While some of these costs are captured in the OR and SDS rate centers, extended recovery costs are likely included in routine rate centers. Whether an outpatient was recovered on an inpatient unit, or the patient was admitted for a ODS, the costs are similar. A tiered charge structure based on reasonable costs should reduce the number of ODS surgical admissions, and, should reduce the number of denials for medical necessity.

It is important to note that Medicare does not reject claims for the presence of a surgical procedure (T code) with the presence of an observation code (G code). Medicare does not provide the add-on APC payment for observation services associated with surgical cases but it is appropriate to code observation services if recovery exceeds eight hours and a complication arises. The HSCRC’s regulatory system is different from Medicare’s APC system. Providing appropriate payments to cover reasonable costs is the mandate of the HSCRC’s system. As such, additional charges for extended recovery (observation) should be allowable for certain complications. This maintains the integrity



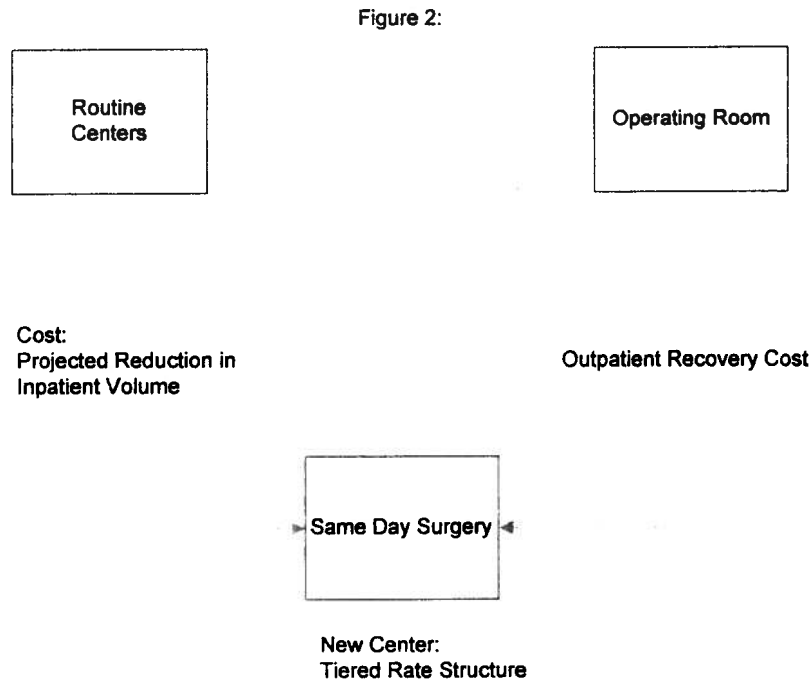
# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

of the OR and SDS rates and will result in the reduction of ODS surgical cases when the charge structures are tiered.

Figure 2 below depicts the cost accounting required to create the new observation rate center.



In Figure 2, costs are allocated to the SDS rate center from the appropriate patient care areas. Costs for outpatient recovery that are included in the Operating Room should be moved to SDS, leaving only the actual operating room costs and charges in the OR rate center rate. If hospitals are currently capturing extended recovery costs in routine centers, i.e. “observing” the patient on an inpatient unit, and they are reclassifying those costs to OR or SDS, then those costs should either be moved from OR to SDS or left in the SDS rate center.

Table 10

Rate Center	Pre Conversion				Post Conversion			
	Volume	Rate	Cost	Charges	Volume	Rate	Cost	Charges
OR	500,000	\$ 20.0	\$ 8,500,000	\$ 10,000,000	500,000	\$ 18.0	\$ 7,650,000	\$ 9,000,000
MSG	30,000	1,000.0	25,500,000	30,000,000	27,000	1,000.0	22,950,000	27,000,000
<b>SDS</b>	<b>4,000</b>	<b>350.0</b>	<b>1,190,000</b>	<b>1,400,000</b>	<b>7,000</b>	<b>771.4</b>	<b>4,590,000</b>	<b>5,400,000</b>
Total			<u>\$ 35,190,000</u>	<u>\$ 41,400,000</u>			<u>\$ 35,190,000</u>	<u>\$ 41,400,000</u>

Table 10 reflects the mechanics of converting costs from inpatient routine centers and OR to the revised SDS Rate Center. This example assumes that 3,000 patient days

# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

related to one day surgical cases would be moved to SDS. In addition, this assumes that 10% of OR cost is related to outpatient surgical recovery which should be moved to SDS. The resulting SDS rate increases to \$771.4, however this rate should be tiered in some fashion. Table 11 below reflects the possible mechanics of tiering the revised SDS rate.

Table 11

Level	Recovery Time (hrs.)	Cases	Alternative 1: Per Case		Alternative 2: Per RVU			
			Rate/Case	Charges	RVU	RVUs	Rate/RVU	Charges
1	0 - 4	1,000	\$ 134.33	\$ 134,328	2	2,000	\$ 67.16	\$ 134,328
2	4 - 8	2,000	402.99	805,970	6	12,000	67.16	805,970
3	8 - 12	600	671.64	402,985	10	6,000	67.16	402,985
4	12 - 16	200	940.30	188,060	14	2,800	67.16	188,060
5	16 +	3,200	1,208.96	3,868,657	18	57,600	67.16	3,868,657
Total		7,000	\$ 771.43	\$ 5,400,000		80,400	\$ 67.16	\$ 5,400,000

In Table 11, two alternatives are presented to structure the new SDS rate. In this example, the SDS rate is composed of five levels, similar to the HSCRC's EMG structure. In Alternative 1, a tiered per case rate is computed based on the number of cases in each level. In Alternative 2, an RVU structure is created based on RVU's by level. Hospital billing managers should review the proposed structure for feasibility, efficiency and effectiveness.

### Recommendation 6: Exclude Observation Cases from CPV for One Year

As discussed above, the proposed CPV structure with separate weights for observation services requires more time to accumulate Observation data. With the expected increase in observation cases, we recommend that observation cases be treated as a "pass through" for a one year period (FY 2011). Since many hospitals will be "converting" to new Observation rates, actual hours of Observation may vary from the initial projection. It is unclear what effect the differences in actual versus projected Observation utilization will have when compared against the change in CPV case mix during the first year. Substantially more data will be included under the CPV, improving the measurement of observation cases under CPV. Additionally, as more patients bypass the emergency department/clinic and are placed directly in observation, the overall case weight for the observation APGs may be lower as emergency department and clinic charges will not be included in those records.

### Recommendation 7: Monitoring of Rate Conversion

Similar to other HSCRC rate conversions, there should be a monitoring period to ensure compliance with the conversion so that hospitals receive no more, or no less revenue than appropriate. Given the uncertain nature of hospitals "converting"

# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

admissions to Observation services, many hospitals will forecast their expected use of the new services. In this respect, projected volumes and charges will be moved from routine centers to the new Medical and Surgical Observation centers.

If the conversion effective date is July 1, 2010, FY2011 will be the first year using the new approved rates. FY2012 data will be compared to the FY2011 initial period, with any subsequent adjustments applied to FY2013 to settle FY2011 and FY2012. In this way, hospitals will have a few years of experience data in which to compare their initial conversion.

The hospitals agree that any cost savings resulting from outpatient versus inpatient services should be acknowledged in the system, after two years of experience data. Comparing FY2012 data versus FY2011 data in the hospitals annual filing will allow the HSCRC to assess the true cost impact after almost two full years of converted data. Similar to the previous clinic conversion, any significant variances over or under the initial rate setting should be applied to a future period.

### Recommendation 8: July 1, 2010 Effective Date

To align these changes with the HSCRC's rate year, all changes should be incorporated July 1, 2010. As noted above, some adjustments may be required for early adopters. However, hospitals will still be "at risk" from Medicare's RAC program and from commercial payor denials until the system has matured.

### Recommendation 9: Denied Cases in the Rate Setting System

Inpatient cases denied as "not medically necessary" ("Denied cases") are cases that were admitted to the hospital, which upon retrospective review were denied as having not been medically necessary for inpatient services. Denied cases include retrospective denials by third party payers or hospital self denials by internal Utilization Review ("UR"). These cases include cases where all inpatient routine charges (room and board, and, admission) were subsequently denied.

From an HSCRC reporting perspective, hospitals have consistently included Denied cases in their HSCRC data, both monthly financial and utilization data, along with quarterly inpatient data abstracts. COMAR 10.37.01.02 requires hospitals to record revenue "at the full established rates regardless of the amounts actually paid to the hospital or on behalf of patients." This requirement correlates to COMAR 10.37.01.03 requiring hospitals to submit Gross Patient Revenues (RSA, RSB, RSC). COMAR 10.37.06.01 requires the collection and submission of (abstract) data along with "the reconciliation of inpatient data between the discharge data and the financial data filed with the Commission." This section further requires that the reconciliation submitted "shall be made in the manner, form, and time frame prescribed by the HSCRC Staff." Finally, Staff's December 17, 2009 memo regarding Inpatient Case-Mix/Financial Data Reconciliation Report, requires the financial and abstract data reconcile within 1%.

# HSCRC One Day Stay Workgroup

## Summary of One Day Stay Issues

March 5, 2010

Since Denied cases are by definition part of the gross revenues reported by all hospitals, hospitals would not be in compliance with these Commission regulations if they omit these cases from the gross revenues being reported or the data abstract as reported. An exhaustive review of HSCRC documentation by the hospitals reveals no direction to exclude denied cases from the data abstracts or the financial data. Based on all the published regulations and instructions, MHA believes all hospitals in the State were appropriately including these cases in their inpatient data abstracts. We agree with the Staff's verbal confirmation of this finding in the February 19, 2010 workgroup meeting.

Recommendation 1 excludes ODS cases from the system and the large majority of cases denied for medical necessity fall into this category. As reflected in Table 7 above, when ODS cases are excluded from CPC, a denial would result in the loss of the total payment of \$2,600, without creating any rate capacity. Hospitals expect to see fewer inpatient Denied Cases when the system appropriately reimburses all cases. No further adjustments to CPC would be required as the majority of Denied Cases in the LOS = 1 category would be removed from CPC. UR incentives in the market provide sufficient barriers to a hospital increasing LOS to receive additional rate capacity for cases with a LOS = 2. When the mechanics of the system are changed prospectively, Denied cases do not need to be excluded from the inpatient abstract and CPC compliance, since only the billed charges are involved, and the Hospital is entirely at risk for the billed charge.

### Recommendation 10: The Maryland Waiver Test

We recognize that these proposed system changes will affect the Maryland Waiver Test. We recommend working with Staff to project the potential impacts of these changes on the Maryland's Waiver Cushion. Other considerations include the effect of moving Medicare inpatients to observation outside of Maryland, and the process underway to reexamine the structure of Maryland's existing Waiver Test.

### **Summary**

The issue of ODS cases in the HSCRC's rate setting system is affected by the complex nature of the HSCRC's rate setting methodologies. The hospital field's proposal provides a comprehensive solution to reduce ODS cases and maintains the integrity of the CPC system, while being compliant with the HSCRC mission to assure purchasers of hospital care that the rates in total paid for the care they receive are reasonably related to the costs of that care. The changes required to the CPC system are needed as a result of totally unintended and unforeseen consequences when the original CPC system was adopted. We agree with the Staff regarding much of their proposal – it corrects the problem without creating other unintended consequences, and it maintains the proper incentives the CPC system was designed to create.

# Appendix III – Staff Proposed Method for Applying a Continued Incentive for Maryland Hospitals to Shift ODS to More Appropriate Outpatient Settings

## **Proposed Method to Reduce Current Excessive Incentives to Admit One-Day LOS Cases**

As noted above, there is clearly too strong a set of incentives under the current CPC rate setting methodology, for hospitals to admit certain patients to an inpatient unit for one day rather than observe these patients in a less costly outpatient. Patients admitted to the hospital for one day generate ‘rate capacity’ because the total charge for the admission is much less than the approved revenue for the case. There is a need to put in place a structure that will incentivize hospitals to shift a portion of inpatient one-day LOS cases to the more appropriate outpatient setting.

The proposed approach will focus on only a portion of the existing rate capacity that hospitals currently earn for one-day LOS cases. This methodology will quantify the charge capacity generated at each hospital for one day stay cases that exceed a reasonable standard. FY09 data will be used to set the expected rate of one-day LOS cases by APR/SOI and performance will be measured in FY2010. The following describes the steps to calculate the better practice standards, ‘excess’ one-day stay cases, and the rate capacity associated with the excess cases:

### **Step 1 - Method to develop ‘best practice’ 1-day LOS standard for each APR/SOI:**

For each APR/SOI, calculate the percent of 1-day stay cases by hospital. Develop a ‘better practice’ standard rate of 1-day LOS cases for each APR/SOI by using the State-wide average performance for 1-day LOS rates. Staff would note, that the use of the State-wide average performance is still a relatively relaxed standard compared to US hospital performance would otherwise represent a “best practice” standard in Maryland (50<sup>th</sup> percentile standard based on Maryland data).

### **Step 2 – Calculation of excess 1-day LOS cases:**

Multiply the better practice standard, as developed in Step 1, by the total cases in the corresponding APR/SOI at each hospital to determine the ‘expected’ number of 1-day LOS stay cases for each APR/SOI. For each hospital, subtract the expected number of 1-day LOS cases from the actual to determine the number of excess 1-day LOS cases in each APR/SOI.

### **Step 3 – Establish an Index of Relative Performance based on the State-wide Standard:**

An overall index of performance is created for each facility based on that hospital’s performance relative to the SWA proportion of ODS cases by APR/SOI cell. Hospitals are then ranked based on this index and the specified “at-risk” revenue (either option 1: \$10 million or option 2: \$20 million) is differentially allocated from poorer performing hospitals to better performing hospitals. Hospitals who on average have fewer admitted ODS cases will be rewarded in their rate structure while hospitals who retain ODS cases and treat them in an inpatient setting more frequently – will be penalized. This incentive structure should stay in place for a minimum of two years. The SWA-standard used should be based on CY 2009 experience and made available to hospitals so they may track their performance during the course of the rate year FY 2011.

**Final Recommendations on Continued  
Financial Support for the Maryland Patient  
Safety Center**

**May 5, 2010**

**Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, MD 21215**

**This Final Recommendation was approved by the Commission on  
May 5, 2010.**

# **Final Recommendations on Request for HSCRC Financial Support of Maryland Patient Safety Center in FY 2011**

## **Background**

The 2001 General Assembly passed the “Patients’ Safety Act of 2001,” charging the Maryland Health Care Commission (MHCC), in consultation with the Department of Health and Mental Hygiene (DHMH), with studying the feasibility of developing a system for reducing the number of preventable adverse medical events in Maryland including, a system of reporting such incidences. The MHCC subsequently recommended the establishment of a Maryland Patient Safety Center (MPSC or Center) as one approach to improving patient safety in Maryland.

In 2003, the General Assembly endorsed this concept by including a provision in legislation to allow the MPSC to have medical review committee status, thereby making the proceedings, records, and files of the MPSC confidential and not discoverable or admissible as evidence in any civil action.

The operators of the MPSC were chosen through the State of Maryland’s Request for Proposals (RFP) procurement process. At the request of MHCC, the two respondents to the RFP to operate the MPSC, the Maryland Hospital Association (MHA) and the Delmarva Foundation for Medical Care (Delmarva), agreed to collaborate in their efforts. The RFP was subsequently awarded jointly to the two organizations for a three-year period (January 2004 through December 2006). The RFP authorizes two one-year extensions beyond the first three years of the pilot project. MHCC extended the contract for two years ending December 31, 2009. The Center was subsequently re-designated by MHCC as the state’s patient safety center for an additional five years – through 2014.

In 2004, the HSCRC adopted recommendations that made it a partner in the initiation of the MPSC by providing seed funding through hospital rates for the first three years of the project (FY 2005-2007). The recommendations provided funding to cover 50% of the reasonable budgeted costs of the Center for each of those fiscal years. The Commission annually has received a briefing and documentation on the progress of the MPSC in meeting its goals as well as an estimate of expected expenditures and revenues for the upcoming fiscal year. Based on these presentations, staff evaluated the reasonableness of the budget items presented and made recommendations to the Commission.

Over the past 6 years, the rates of eight Maryland hospitals were increased by the following amounts, and funds have been transferred on a biannual basis (by October 31 and March 31 of each year):

- FY 2005 - \$ 762,500
- FY 2006 - \$ 963,100
- FY 2007 - \$1,134,980
- FY 2008 - \$1,134,110
- FY 2009 - \$1,927,927
- FY 2010 - \$1,636,325

Last year, as part of its approval for continued financial support of the MPSC, the Commission adopted a recommendation requiring for future years that the percentage of budgeted costs covered through hospital rates should be reduced by at least 5% per year, but in no year shall the funding (on a dollar basis) exceed the amount provided in the previous year. The approved recommendation stated that the percentage decline shall be determined annually based on a continued review of MPSC activities which shall take into account the existence of demonstrable evidence of improved outcomes, efficiency, and cost savings resulting from MPSC's programs, as well as the viability and success of MPSC's strategic fund raising plan. The Commission expressed its belief in the value of the MPSC by continuing to be a minority partner with the Center, and intending to continue to provide a base level of support (potentially 25% of budgeted costs).

### **Maryland Patient Safety Center Request to Extend HSCRC Funding**

On March 23, 2010, the HSCRC received the attached request for continued financial support of the MPSC through rates in FY 2011 (Attachment 1). The MPSC is requesting to continue the 45% HSCRC match into FY 2011. The result would be a reduction in total support from \$1,651,275 in FY 2010 to \$1,544,594 in FY 2011.

### **Maryland Patient Safety Center Purpose, Accomplishments, and Outcomes**

The purpose of the MPSC is to make Maryland's healthcare the safest state in the nation focusing on the improvement of systems of care, reduction of the occurrences of adverse events, and improvement in the culture of patient safety at Maryland health care facilities. The MPSC's new strategic plan directs concentration on the following 6 areas:

- Measurement of vision success and program impact;
- Patient and family voices at all levels;
- Institutions create and spread excellence;
- Institutions safety culture hardwired;
- Continuity of care initiatives; and
- Demonstrate the value of safety.

Below is a general description of the various initiatives put in place by the MPSC to accomplish the aforementioned goals as well as estimated outcomes and expected savings of each initiative.

#### 1. Adverse Event Information System and Data Analysis

The Center has developed software that it has provided to hospitals free of charge to be used as a fully operational adverse event data collection tool. However, hospitals may report adverse events and near misses by using their existing software. Data collected through the project may be used to benchmark events against other facilities as well as to explore trends and patterns relating to the types of events occurring at hospitals. This knowledge will assist MPSC and Maryland hospitals to develop



standardized best practices in an effort to prevent or reduce the number of adverse events occurring in the future.

## 2. Patient Safety Education Programming

The MPSC has conducted a series of educational programs designed to train leaders and practitioners in the health care industry and share strategies to improve patient safety and quality. These programs have focused on the following areas:

- Patient safety tools training including root cause analysis;
- Management development;
- Condition H (Help) Workshops which assist hospitals with initiating and sustaining rapid response teams;
- Process improvement including LEAN workshops and Six Sigma certification;
- TeamSTEPPS Train the trainer programs;
- Sharing information on MedSAFE, hospital information technology, and patient falls; and
- Leadership issues.

These programs, particularly the LEAN and Six Sigma programs are designed to improve efficiency and reduce costs at hospitals and nursing homes. One facility has reported savings of up to \$20,000 related to pharmacy inventory reductions and annualized saving of up to \$2.2 million due to reduced cases of missing or reordered medications.

## 3. MEDSAFE Medication Safety Initiative

The MEDSAFE program was initiated by the Maryland Hospital Association has been in existence since 1999. After being moved to the MPSC, the Initiative continues to promote the implementation of safe medication practice at Maryland hospitals. The Safe Medication Practices' Medication Safety Self-Assessment tool is used to survey hospitals and develop customized reports. The survey solicits responses from individuals at hospitals across various hospital departments on more than 200 questions relating to the level of compliance with evidence-based practices aimed at reducing medication errors.

**Outcomes:** Between 2005 and 2009, Maryland hospitals showed an increase of 9.2% in overall median score for medication safety on the annual MEDSAFE survey, most notably in communication related to medications (23% improvement) and staff competency/education (23% improvement).

## 4. Patient Safety Collaborative Program

The MPSC has initiated a series of Collaboratives focused on the implementation and development of safe practices and culture change in high hazard settings. The Center's collaborative workshops bring together Maryland providers and national experts to focus on safety culture and specific process improvements, with the goal of

implementing measurable and sustained improvement. The following Collaborative programs have been implemented by the Center:

### *ICU Safety and Culture Collaborative*

The ICU Collaborative, which ran from 2005 to 2007, included teams from thirty-eight of Maryland hospitals' intensive care units. The program was aimed at eliminating preventable death and illness associated with healthcare-associated bloodstream infections (BSI) and pneumonia in patients on ventilators.

**Outcomes:** Since this was the first Collaborative implemented by the MPSC, data is available to estimate the benefits of the project:

- ICUs at 5 hospitals met the challenge of zero ventilator-associated pneumonia episodes during its data collection period;
- Overall, ventilator-associated pneumonia was reduced by 20% in participating ICUs;
- An estimated 755 ventilator-associated pneumonia infections were prevented – based on statistical modeling; it is estimated that about 75 lives have been saved, reducing hospital costs by about \$35 million;
- Ten hospitals achieved zero catheter-associated BSI episodes during the data collection period;
- Catheter-associated BSI have been reduced by 36%;
- An estimated 358 BSI infections have been avoided – based on statistical modeling, it is estimated that about 62 lives have been saved thereby reducing hospital costs by about \$5 million;
- In total, an estimated 1,113 ventilator associated pneumonia or catheter-related bloodstream infections have been prevented, saving approximately 140 lives, and resulting in about \$40 million in cost savings at hospitals each year.

### *Emergency Department Collaborative*

The Emergency Department Collaborative began in 2006 and continued through 2007. This Collaborative was conducted with the intent of improving emergency room flow and getting time-sensitive treatments to patients quickly. Twenty-nine multidisciplinary teams representing over half of the hospitals in the State worked towards achieving a broad spectrum of ambitious goals geared towards ensuring that the sickest ED patients get the care they need quickly, and that all patients are cared for in a timely manner with the smallest possible exposure to preventable healthcare associated harm. As a starting point, the collaborative teams implemented a series of change strategies that have been recommended in the scientific literature or reported as successful by other hospitals.

A Handoff and Transition Network has grown out of the discussions of the ED Collaborative.

**Outcomes:** Based on a sample of 748,237 patients seen during a one-year period at 15 participating hospitals, median length of stay was reduced by 30 minutes saving

about 374,000 hours. The median number of visits per treatment space has increased by 90 visits. In addition, ambulance diversions were reduced at many participating hospitals - 24% hospitals reduced yellow alert times, and 48% reduced red alert time. It is estimated that 189 additional pneumonia patients were given an antibiotic during the appropriate time frame. This was estimated to save \$130,000 in hospital costs, or, on average, \$688 per patient.

### *Perinatal Collaborative*

The Perinatal Collaborative began in September 2006 and included participation from 28 labor and delivery units at Maryland hospitals. The mission of the Collaborative is to create perinatal units that deliver care safely and reliably with zero preventable adverse outcomes. The goal is to reduce infant harm through the implementation and integration of systems improvements and team behaviors into maternal-fetal care using various proven methods.

#### **Outcomes:**

- Zero neonatal or maternal deaths at participating facilities in Year 2 of the Collaborative;
- Admission to the NICU (for >2500 grams, >37 weeks gestational age for more than 24 hours) declined by 23% from the 2006 base period despite an increasing number of births over the data period; therefore, 78 more mothers when home with their babies resulting in an estimated reduction in the cost of care by \$185,000;
- Maternal returns to the OR declined by 10%; and
- Elective inductions prior to 39 weeks have been reduced by 17% and Cesarean Sections by 23%.

### 5. New Projects

#### *Patient Falls*

Data collected by MPSC over the past two years indicate that patient falls are the second most frequently occurring, event after medication errors; however, patient falls rank first in terms of severity. The MPSC intends to reduce the number of patient injuries resulting from falls by developing standardized protocols using best practices and testing them over time.

Currently 28 hospitals, 42 long term care facilities, and 13 home health agencies are participating in the falls prevention program. Data from existing participants for the 6 months of the program show a declining trend in the rate of falls with injury among the pilot group.

**Expected Outcomes:** According to the Centers for Disease Control and Prevention (CDC), reducing the rate of falls in Maryland by 5% could save \$1.5 million annually.

## *Maryland Hand Hygiene Collaborative*

Hand Hygiene is a critical factor in preventing the costly spread of potentially devastating infections. The Maryland Hospital Hand Hygiene Collaborative started in November 2009 and currently 96% of hospitals have registered for the program. The goal is to reduce infections, improve care, and reduce waste which can lead to savings throughout the healthcare system. The program intends to achieve a hand hygiene compliance rate of at least 90% or all units/participants. The Collaborative is expected to continue until February 2011. The Department of Health and Mental Hygiene through a American Recovery and Reinvestment Act of 2009 (ARRA) request has provided \$100,000 to support this program.

**Expected Outcomes:** CDC estimates that hand hygiene adherence rates nationally are at about 40%. To achieve 90% compliance will reduce the number of hospital acquired infections at Maryland hospitals and save costs through improved outcomes, and reduced length of stay and acuity. Participants will be providing data to determine achievement of goals and potential cost savings.

### **Recognition**

- In September of 2005, the Maryland Patient Safety Center was honored with the 2005 John M. Eisenberg Patient Safety and Quality Award for national/regional innovation in patient safety.
- In 2009, the Center was re-designated by MHCC as the state's patient safety center – continuing its relationship with the State. In addition, the Center is now listed as a federal Patient Safety Organization (PSO).
- In a recent survey, hospital leaders identified MPSC as the most effective and important healthcare initiative underway in the State.
- The Governor's Health Quality and Cost Council selected the MPSC to lead the state's hand hygiene campaign.

### **Funding Raising Initiative**

In FY 2010, MPSC implemented a strategic funding initiative to attempt to diversify its sources of support over time. MPSC and its partners secured program-specific funding in the following amounts:

- \$100,000 from DHMH (through American Recovery and Reinvestment Act funding) for the Hand Hygiene Collaborative;
- \$250,000 from DHMH for continued support of the Maryland Perinatal Learning Network; and
- \$215,000 from CareFirst in continued support of the Neonatal Collaborative.

In March 2010, the Board of MPSC approved a contract for assistance in managing a comprehensive fundraising campaign.

## Findings

The All-Payer System has provided funding support for the Maryland Patient Safety Center during its initial six years with the expectation that there would be both short-term and long-term reductions in hospital costs – particularly as a result of reduced mortality rates, lengths of stays, patient acuity, and malpractice insurance costs. The activities of the MPSC have now begun to result in discernable positive outcomes for patients, which have been demonstrated to achieve costs savings at Maryland hospitals. A goal of the MPSC should be to ensure that such outcomes and related cost savings are sustained after the collaborative networks and educational programs have concluded.

HSCRC staff believes there to be potential for further reductions in hospital costs through continued education and collaborative networking. Further, there is value in allowing the MPSC to continue its work as one component of a broad patient safety initiative to improve quality of care by reducing adverse health events at Maryland hospitals and nursing homes. In order to do so, the Center requires continued financial support and is requesting that the All-Payer system continue to fund a portion of its budgeted expenditures for FY 2011 and into the future.

Staff believes that this endeavor continues to be consistent with the goals of the HSCRC under its quality initiatives. Commission staff is confident that the MPSC will continue to bring Maryland closer to achieving the health care quality goals expressed by both the MHCC and the HSCRC by reducing medical errors and improving clinical and administrative efficiency. The research and better practices that result from the operation of the MPSC will likely assist the Commission, as it continues to consider criteria, measures, and benchmarks for the HSCRC Quality-based Reimbursement Initiative. These initiatives together provide a unique opportunity to improve both health care outcomes and, at the same time, reduce costs in the health care system.

While staff is encouraged that MPSC has begun a strategic fund raising plan to ensure financial sustainability into the future, it is disheartened by the lack of progress in accessing other private and public funding prior to FY 2011. Last year the Commission recognized that fund raising would be challenging in FY 2010, but believes that a strategic funding plan should have put into place much sooner. Year after year, in its recommendations the Commission clearly stated that the MPSC should aggressively seek other funding resources to support the Center into the future.

## Staff Recommendations

**Therefore, after reviewing the accomplishments and financing of the MPSC, staff believes that the All-Payer System should continue to be a partner in the funding of the MPSC in FY 2011 and into the future. Specifically, staff makes the following recommendations:**

- 1. In FY 2011, funding should be provided through hospital rates to cover 45% of budget costs of the Center (There is no expected carry over from FY 2010). However, 5% of the 45% shall be contingent on the submission of a fundraising plan and, to the satisfaction of staff, evidence**

that the plan will begin to bear a reasonable amount of revenue for the MPSC in FY 2011 and FY 2012. Therefore, staff recommends providing funding through the All-Payer System in the amount of \$1, 544,594. Of that amount, \$171,622 shall be held in abeyance until the MPSC demonstrates that a viable fundraising plan is in place.

2. For future years, the percentage of budgeted costs covered through hospital rates should be reduced by at least 5% per year, but in no year shall the funding (on a dollar basis) exceed the amount provided in the previous year. The percentage decline shall be determine annually based on a continued review of MPSC activities which shall take into account the existence of demonstrable evidence of improved outcomes, efficiency, and cost savings resulting from MPSC's programs, as well as the viability and success of MPSCs strategic fund raising plan.
3. Since staff believes that there is value in the HSCRC continuing to be a minority partner with the MPSC, it is the intent that funding decline over time but to maintain a reasonable base level of support (potentially 25% of budgeted costs). The pace at which such a floor should be reached shall be determined based on annual reviews of MPSC activities, taking into account the existence of demonstrable evidence of improved outcomes, efficiency, and cost savings resulting from MPSC's programs, as well as the viability and success of MPSCs strategic fund raising plan.
4. Staff should communicate with the Agency for Healthcare Research and Quality (AHRQ) and other relevant organizations to learn more about how to best evaluate the value and efficacy of patient safety program options to the citizens of Maryland. In doing so, staff should focus on those programs that have broad-based and measurable impacts.
5. The MPSC should update the Commission periodically on health care outcomes and expected savings resulting from the programs sponsored by the Center. As collaborative networks and educational programs expire, the MPSC should track the sustainability of any positive outcomes achieved as a result of its work and determine whether other outcomes emerge over time.
6. The MPSC should aggressively pursue other sources of revenue, including from other provider groups that benefit from the programs of the Center, to help support the Center into the future.
7. In order for the MPSC to budget for FY 2011, staff recommends that the 60-day comment rule be waived so that these recommendations may be considered for final approval during the May Commission meeting.

# FY2011 MPSC Program Plan & Budget: Building on Success & Enhancing Leadership in Patient Safety

Presented to



March 2010

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## Table of Contents

<b>EXECUTIVE SUMMARY.....</b>	<b>I</b>
<b>MARYLAND PATIENT SAFETY CENTER OVERVIEW .....</b>	<b>1</b>
BACKGROUND .....	2
PARTICIPATION & SUPPORT .....	2
IMPROVEMENT.....	3
PROJECTED SAVINGS.....	4
RECOGNITION .....	5
PUBLICATIONS & COMMUNICATION.....	6
<b>FY2011 PROGRAM DETAILS .....</b>	<b>7</b>
SAFE FROM FALLS.....	8
PERINATAL LEARNING NETWORK.....	9
NEONATAL LEARNING NETWORK.....	10
MARYLAND HOSPITAL HAND HYGIENE COLLABORATIVE .....	11
TEAMSTEPS™ LEARNING NETWORK .....	13
EDUCATION PROGRAMS .....	13
<i>Process Improvement Programs.....</i>	<i>14</i>
<i>Professional Development Programs .....</i>	<i>14</i>
<i>Patient Safety Tools Training .....</i>	<i>15</i>
<i>Annual Conference.....</i>	<i>15</i>
RESEARCH PROGRAMS.....	16
<i>Adverse Event Reporting Tool.....</i>	<i>16</i>
MEDSAFE.....	17
<i>State of the State Measurement Plan .....</i>	<i>19</i>
OTHER SPECIAL PROJECTS .....	19
<i>Condition H.....</i>	<i>19</i>
<i>Get on the Bandwagon for Patient Safety.....</i>	<i>20</i>
<i>MPSC Patient Safety Officers Forum .....</i>	<i>21</i>
<i>Annual Leadership Breakfast.....</i>	<i>21</i>
<i>Boards on Board.....</i>	<i>21</i>
MPSC CORE ADMINISTRATION.....	22
FUNDRAISING PLAN – KEEPING PATIENTS SAFE CAMPAIGN .....	23
<b>BUDGET.....</b>	<b>24</b>
<b>ATTACHMENTS.....</b>	<b>26</b>
ATTACHMENT A: SUMMARY OF STRATEGIC AGENDA AIMS FROM THE MPSC STRATEGIC PLAN .....	26
ATTACHMENT B: MPSC ANNOUNCES EXECUTIVE DIRECTOR RETIREMENT.....	28
ATTACHMENT C: MPSC ANNOUNCES NEW EXECUTIVE DIRECTOR .....	30
ATTACHMENT D: BUDGET NARRATIVE, MPSC FY2011 BUDGET .....	32
<b>ENDNOTES .....</b>	<b>37</b>

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## Executive Summary

As the Maryland Patient Safety Center (MPSC) enters its sixth year of innovative programming, issues at all levels underscore the need for comprehensive, effective efforts to improve patient safety. Each of us has been touched by somebody who has experienced a medical error. In fact, medical errors result in 98,000 in-hospital deaths each year, more than deaths in the US from car accidents, breast cancer or AIDS. By some estimates, 1 in 4 adults over 50 experiences a major medical error. The cost implications are staggering – up to \$29 billion a year.

Maryland is well positioned as a recognized leader in patient safety to address and improve these measures. Hospitals, long term care providers, and home health agencies in the Mid-Atlantic region continue to join MPSC's programs and initiatives aimed at improving care for all. With such focused commitment, MPSC and its partners are poised to expand our efforts to make medical errors a thing of the past.

Some of the key highlights from this past year include:

- ✓ Bringing innovation statewide through our Hand Hygiene and SAFE from FALLS programs
- ✓ Engaging patients and families in safety by expanding access to Condition Help teams
- ✓ Learning from experts through the record-breaking attendance at the MPSC Annual Conference, and talks from leaders such as Paul O'Neill
- ✓ Steady improvement on medication practices as evidenced by MPSC's annual survey and conference on improving medication safety
- ✓ Communicating to improve safety through our Patient Safety Officers Forum, quarterly newsletter, and enhanced Website

MPSC, providers, and the state have developed a strong foundation on which to grow and further ensure patient safety in our communities. With this Fiscal Year 2011 Program Plan & Budget, MPSC requests a continued commitment to and investment in patient safety on the part of the Health Services Cost Review Commission (HSCRC).

**MPSC offers the most diverse, comprehensive programming of any patient safety center in the nation**

*"The Maryland Patient Safety Center is **transforming healthcare** organizations across the state."*

-Tina Gionet, RN, MS  
Patient Safety Officer  
Sinai Hospital

Regarding the Maryland Hospital Hand Hygiene Collaborative:

*"When community hospitals and public agencies work collaboratively, **great things can happen.**"*

-Secretary John M Colmers  
Maryland Department of Health  
and Mental Hygiene

Regarding the MPSC Perinatal & Neonatal Collaboratives:

*"Really, the State of Maryland has done **something that few, if any, other states have done** – this is worth acknowledging."*

- Ann Burke, MD  
Holy Cross Hospital

MPSC's strategic fundraising initiative, entitled the *Keeping Patients Safe Campaign*, aims to develop diversified sources of support to further expand MPSC's reach and success. In FY2010, MPSC and partners were successful in securing program-specific funding in the following amounts:

- \$100,000 in support of the Maryland Hospital Hand Hygiene Collaborative from the Maryland Department of Health & Human Services (DHMH) through an American Recovery and Reinvestment Act of 2009 (ARRA) stimulus request.
- \$250,000 from DHMH for continued support of the Maryland Perinatal Learning Network.
- \$215,000 from CareFirst BlueCross BlueShield in continued support of the Maryland Neonatal Collaborative as it transitions into a Learning Network.

*"These programs are great evidence that teamwork to solve problems and **save patient lives** really works."*

- Conference Attendee  
MPSC Annual Conference  
April 2009

MPSC, participating facilities, and partners are proud to report our notable results and progress, highlights of which are summarized in the table below.

## MPSC - Key Recent Results

### Participation

100% of Maryland hospitals participate in MPSC events and programs, and an increasing number of long term care, home health, and other participants join MPSC's initiatives. More than 1400 providers and leaders participated in MPSC's 6<sup>th</sup> Annual Conference on March 19, 2010.

### Saving Lives & Improving Quality in Labor & Delivery

Program data from the Perinatal Learning Network continue to show improved quality of care for mothers and babies in Year Two, including:

- Zero neonatal or maternal deaths in Year Two.
- 22% decrease in maternal ICU admissions, and returns to the OR/L&D declined by 10%.
- NICU admissions declined by 23% from the 2006 baseline despite increasing birth rates in Level 3 NICUs. This means 78 more moms went home with their babies in the past year than in the baseline period.
- 17% reduction in elective inductions and 23% reduction in scheduled Cesarean Sections prior to 39 weeks, a trend associated with reduced risks.

### Cost Savings

- MPSC's Lean and Six Sigma training has focused on cost savings and efficiencies. One facility reports savings of up to \$20,000 related to pharmacy inventory reduction and annualized savings of up to \$2.2 million due to reduced cases of missing and reordered medications.
- Reductions in NICU admissions and reduced length of stay among MPSC's Perinatal Learning Network participants resulted in an estimated \$185,000 in cost savings in Year 1 (2008-2009), with similar, additional savings anticipated for Year 2 (2009 -2010) based on continued reductions in NICU admissions.

### Cost Savings continued

- MPSC is monitoring cost savings from the SAFE from FALLS program. In addition to avoiding injury and suffering, falls result in costly complications for the patients. Examining hospitals alone, MPSC's targeted annual 5% reduction in the rate of falls could save an estimated \$1.5 million annually upon full rollout of the program. With six months of data, acute care facilities participating in the statewide SAFE from FALLS rollout are reporting lower rates of falls with injury than rates reported among the pilot group. MPSC will continue to monitor the data over time to establish a trend and cost savings and as we recruit additional facilities.

### Improved Processes

MPSC has facilitated Lean events in two hospitals. In addition to the cost savings noted above, they have resulted in significant process and patient safety improvement in the two participating facilities, including:

- 33% reduction in turnaround time for medication orders
- 31% reduction in the time to admit a patient from the ED to an inpatient unit

### Maryland hospital mortality improvement in national studies

Maryland has demonstrated landmark improvement in hospital mortality from 2005 to 2008, key years in which MPSC initiated its efforts.

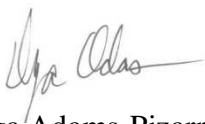
- Maryland has among the most improved in mortality rates in the nation (16.5% improvement from 2005-2007)<sup>i</sup> and 15.7% improvement in critical care mortality from 2006-2008<sup>ii</sup>.
- Maryland ranks second for states with the highest percentage of hospitals that have achieved distinction in clinical excellence, with 48% of hospitals in that category<sup>iii</sup>.

### Awards & Distinctions

- In 2009, MPSC staff and partners were highlighted at the National Patient Safety Foundation Annual Conference, the March of Dimes Annual Conference, and the Institute for Healthcare Improvement Annual Conference.
- MPSC was selected by the Governor's Health Quality & Cost Council to lead its cornerstone activity on reducing healthcare associated infections through a hand washing campaign.
- MPSC was honored with the 2005 John M. Eisenberg Patient Safety and Quality Award.
- Hospital leaders endorse the Center, and, in a recent survey, identified MPSC as the most effective and important healthcare initiative underway in the state.

The enclosed plan includes strategic programming that works across care settings, measures improvement, and retains support for successful programs. A budget follows at the end of the document. Additional information related to specific programs is available upon request.

Thank you for your willingness to review MPSC's progress to date and plans for the future. We look forward to a continued partnership in these efforts with the HSCRC.



Inga Adams-Pizarro  
Director, Operations & Development

## Maryland Patient Safety Center Overview

This report provides an overview of the Maryland Patient Safety Center's (MPSC) achievements, describes specific programs and approaches, and summarizes the strategic next steps that are creating a sustainable infrastructure for patient safety improvement in Maryland.

MPSC embarks on a landmark year in programming and reach for fiscal year 2011 (FY2011, July 2010 – June 2011). Stakeholders across the state and region are reaching out to MPSC for leadership and guidance on patient safety and quality issues. MPSC's innovative approaches are in alignment with our mission and Strategic Plan, which calls for a focus on:

- Measurement of Success & Program Impact
- Patient & Family Voices at All Levels
- Institutions Create & Spread Excellence
- Institutions' Safety Culture Hardwired
- Continuity of Care Initiatives
- Demonstrate the Value of Safety

These focus areas provide an evolutionary view of how safety is grown in the healthcare system over time. Change happens on the ground, institution by institution. Initial pockets of excellence create a beachhead from which an institution's committed leadership can spread safety throughout the institution, then across to other organizations. The MPSC is creating and supporting that peer learning system in which institutions can learn and work together to make safety a standard operating procedure.

Multiple high-profile programs have been launched in the past year, including the SAFE from FALLS Program and the Maryland Hospital Hand Hygiene Collaborative, initiated in partnership with the Governor's Health Quality & Cost Council. All have demonstrated strong support of and need for the cooperative and regionally-oriented programs that MPSC uniquely offers.

MPSC and its partners seek continued support of its core operations and programs. This includes amplified efforts to formally enroll healthcare providers across the continuum of care in MPSC programs and targeted measurement tracking. We believe that the six strategic areas provide the cornerstone for continued engagement in and success of MPSC programs.

The following provides some highlights from MPSC's activities and programs that describe participation, improvements, projected cost savings, and local and national recognition.

### MPSC Mission: Making Maryland's Healthcare the Safest in the Nation

- ◆ Innovative programs with high uptake among healthcare providers
- ◆ Convener of local and national leaders to improve the quality of healthcare
- ◆ Data-driven study of adverse events to set priorities and enable safety
- ◆ Education programs provide a foundation of skills and knowledge
- ◆ Clinical change in priority areas
- ◆ Focus on cross-setting improvement

## Background

In 2008 the Center completed a strategic reorganization, becoming an incorporated organization with the Maryland Hospital Association and the Delmarva Foundation continuing to act as primary members of the Center. A voluntary Board of Directors participates in setting a strategic agenda for MPSC and provides fiduciary oversight of the Center's direction and budget.

Several achievements underpin the Center's ability to support Maryland's relentless quest to provide effective, safe and efficient care for our citizens:

- The Maryland Governor's Health Quality & Cost Council recognized MPSC's role as a leader in improving patient safety via involvement on the Council and its initiatives
- The Maryland Health Care Commission re-designated the Center for an additional five years, through 2014
- The Internal Revenue Service granted the Maryland Patient Safety Center status as a tax-exempt 501(c)(3) organization
- MPSC became listed as a Federal Patient Safety Organization
- MPSC receives local and national recognition for its model and programs

## Participation & Support

MPSC's outreach to long term care associations, national campaigns and organizations, consumer organizations, and others, in addition to partnership with hospitals and Delmarva, creates a robust base of support for Center and state initiatives. In fact, **100% of Maryland hospitals** participate in MPSC events and programs, and an increasing number of long term care, home health, and other care settings are enrolling.

*"You know you are not alone in your challenges. We all appreciate the opportunity to learn and share with each other."*

-Karen Twigg, BSN, RN, CMCN  
Director of Risk Management &  
Quality Improvement  
Chester River Hospital Center

Current Programs:

- Perinatal Learning Network: Twenty-nine hospitals, including **28 (85%)** of the 33 hospitals in Maryland offering obstetrical services, are involved, up from 27 last year.
- Neonatal Collaborative: Includes **28 hospitals** teams from across the region.
- SAFE from FALLS Initiative: Among MPSC's first large-scale programs to include long-term care (LTC) and home health participants, this program includes **28 hospitals, 42 LTC facilities and 13 home health agencies**, and plans to expand in the coming year.
- Hand Hygiene: This newly launched program involves **95% of Maryland hospitals**.

Sample Past Programs:

- ED Collaborative: Teams from 61% (28 out of 46) of Emergency Departments in Maryland representing nearly **65% (1,076 out of 1,682)** of the state's emergency department treatment spaces.

- ICU Collaborative: Teams from 83% (38 out of 46) of Maryland hospitals representing nearly 90% (**799 out of 893**) of the state's intensive care unit beds.

In addition to enrollment in formal programs, more than **12,000 hospital and long-term care providers** have been trained in safety practices and/or involved in targeted improvement programs. MPSC also engages facility **Patient Safety Officers** in bimonthly focused meetings to discuss and address patient safety topics of broad interest.



*Communication to Improve Patient Safety:  
Maryland Patient Safety Officers Bimonthly Forum*

### Improvement

In concert with the MPSC Board's Measurement Committee, MPSC is in the process of designing a comprehensive reporting strategy outlining achievements by program and including patient safety data available in the public domain. This measurement package is planned to be completed in the current fiscal year ending June 2010, and MPSC will be pleased to provide that report to the Commission when it is complete.

Maryland has shown landmark improvement in hospital mortality from 2005 to 2007, key years in which MPSC initiated its efforts. In a recent national survey of hospital mortality, Maryland had the second lowest risk-adjusted mortality rate. It is among the most improved in mortality rates in the nation (16.5% improvement from 2005-2007)<sup>iv</sup> and saw 15.7% improvement in critical care mortality from 2006-2008<sup>v</sup>.

*"Patient safety is achievable!"*

- Conference Attendee  
MPSC Annual Conference  
April 2009

MPSC programs continue to show remarkable results. Highlights from current and past programs include:

- **Improved outcomes and processes**, including reductions in ventilator associated pneumonia and catheter-related blood stream infections during the Intensive Care Unit Collaborative, resulting in an estimated 1,113 infections prevented, 140 lives saved, and \$40,775,070 avoided hospital costs.



- **Program data from the Perinatal Learning Network show improved quality of care for mothers and babies:**
  - **Zero neonatal or maternal deaths** in Year Two.
  - **22% decrease** in maternal admissions to the ICU.
  - NICU admissions (for >2500 grams, >37 weeks gestational age for more than 24 hrs) declined by **23%** from the 2006 baseline despite increasing birth rates. This means **78 more moms went home with their babies** in the past year than in the baseline period.
  - Returns to the OR/L&D **declined by 10%**.
  - Hospitals are implementing policies to reduce elective inductions prior to 39 weeks gestational age, resulting in a **17% reduction in elective inductions and 23% reduction in scheduled Cesarean Sections** prior to 39 weeks, a trend associated with **reduced complications**.
- Pilot facilities report a **decreasing trend of falls with injury** among long term care (LTC) facilities through the MPSC SAFE from FALLS program. We are monitoring this trend, and intend to study the potentially considerable cost savings associated with reductions in falls with injury.
- From 2005 to 2009, Maryland hospitals showed an increase of 9.2% in the overall median score for medication safety on the annual MEDSAFE survey, most notably in communication related to medications (+23%) and staff competency/education (+23%). The results were published in the October 2009 edition of *Quality & Safety in Healthcare*, a peer-reviewed journal.
- Emergency Department Collaborative data reveal that during the course of the program **189 additional pneumonia patients** were given antibiotic on-time, resulting in an estimated **\$130,032 in hospital costs avoided**.

#### MPSC's Impact:

- ◆ More moms going home with their babies due to fewer admissions to the NICU
- ◆ Decrease in elective induction and C-sections before 39 weeks
- ◆ Decreasing trend of injury related to falls among LTC pilot participants
- ◆ Improved medication safety scores on the annual MEDSAFE survey
- ◆ 33% reduced turnaround time for medication orders in one facility.
- ◆ 31% improvement in ED time to inpatient admission in one facility.

**MPSC has observed a strong willingness among participants to report data for improvement.** For example, Neonatal Collaborative participants gathered baseline measures, with follow-up measurement underway. Hand Hygiene Collaborative participants are reporting their first months of hand hygiene observation data, with 75% of reporting data for January 2010.

#### Projected Savings

- Reductions in NICU admissions and reduced length of stay among MPSC's Perinatal Learning Network participants resulted in an estimated \$185,000 in cost savings in Year 1 (2008-2009), with similar, additional savings anticipated for Year 2 (2009 -2010) based on continued reductions in NICU admissions.
- MPSC's Lean and Six Sigma training has focused on cost savings and efficiencies related to medication safety and emergency department processes. One facility reports savings of up to \$20,000 related to pharmacy inventory reduction, 33% reduction in turnaround time for

medication orders, and annualized savings of up to \$2.2 million due to reduced cases of missing and reordered medications. Analysis from a second site that targeted emergency department (ED) efficiencies is underway, but has already shown to decrease the time to admit a patient from the ED to an inpatient unit from 360 minutes to 250 minutes (-31%).

- MPSC is monitoring cost savings from the SAFE from FALLS program. In addition to avoiding injury and suffering, falls result in costly complications for the patients. Examining hospitals alone, MPSC's targeted annual 5% reduction in the rate of falls could save an estimated \$1.5 million annually upon full rollout of the program. With six months of data, acute care facilities participating in the statewide SAFE from FALLS rollout are reporting lower rates of falls with injury than rates reported among the pilot group. MPSC will continue to monitor the data over time to establish a trend and cost savings and as we recruit additional facilities.

### Recognition

MPSC, its partners, and programs have garnered significant recognition and leadership opportunities in the past year. These include but are not limited to the following examples:

- Maryland's Perinatal Learning Network was highlighted at the Institute for Healthcare Improvement's Annual Conference in December 2009.
- Maryland hospital leaders endorse the Center, and, in a recent survey, identified MPSC as the most effective and important healthcare initiative underway in the state.
- MPSC is the recognized national leader in State and regional patient safety efforts. MPSC continues to offer the most comprehensive set of innovative programs and success of any state patient safety center in the country.
- The Maryland Health Care Commission re-designated MPSC as the state's patient safety center for an additional five years, through 2014.
- MPSC was listed as a federal Patient Safety Organization (PSO), and was selected by the Agency for Research and Quality to be highlighted as a model PSO at the National Patient Safety Foundation Conference in May 2009.
- The Maryland Patient Safety Center was honored with the 2005 John M. Eisenberg Patient Safety and Quality Award for national/regional innovation in patient safety. The award recognizes the achievement of individuals and organizations that have made an important contribution to patient safety and health care quality in research or system innovation.
- MPSC representatives serve on regional panels and initiatives, linking MPSC's with groups including the Governor's Health Care Quality & Cost Council, the Delmarva Patient Safety Community of Practice, the MHCC Hospital Performance Evaluation Guide Advisory Committee, and the MHCC Committee on Healthcare-Associated Infections.



*MPSC's Executive Director launches the Maryland Hospital Hand Hygiene Collaborative with Lt. Governor Brown, Secretary Colmers, the Maryland Hospital Association, and partners with over 200 participants in attendance.*

## Publications & Communication

Raising awareness about MPSC's programs and patient safety issues continues to be a focus. In the past year, the Center:

- Launched the *Keeping Patients Safe* newsletter;
- Issued a series of reports and studies, including two published in healthcare journals;
- Distributed communication packets to healthcare providers;
- Offered a refreshed Website; and
- Has been highlighted in the local and national media.

**Enforcing medication use safety: benefits of learning from your peers**  
 V.A. Kazandjian,<sup>1</sup> S. Ogumbo,<sup>2</sup> K.G. Wilkes,<sup>3</sup> A.J. Vaita,<sup>4</sup> F. Pipesh<sup>5</sup>

**ABSTRACT**  
**Background:** Maryland hospitals have been improving the safety of medication use practices since 2000. A retrospective analysis of 25 hospitals was conducted for 2003–2007 to determine the changes in medication use practices, communication methods with hospitals, patient education and changes in medical records management.  
**Methods:** Thirty-five Maryland hospitals completed the Institute for Safe Medication Practices Medication Safety Self-Assessment for Hospitals, a voluntary initiative to improve the safety of medication use. A working group structure is applied to evaluate key element scores, core characteristics scores and overall self-assessment scores that were used to identify and recognize progress.  
**Findings:** The state-wide aggregate score significantly increased from 67.2% in 2003 to 87.2% in 2007 (p<0.001). The 25 hospitals scored highest in the following key areas in 2007: drug administration, storage and distribution (80.2%), drug safety, labeling and dispensing (80.1%), and environmental factors (78.2%). There were notable that hospitals scored lowest in the key element area related to possibility of patient harm (62.2%) and in the core characteristics pertaining to medication and response times (62.2%). A significant number of hospitals had achieved significant (p<0.05) changes in certain key elements since their characteristics. Two hospitals showed significant (p<0.05) increases in their scores.  
**Conclusions:** MDSCAT has directly assisted Maryland hospitals in reducing medication use safety. The strategies and tools of MDSCAT have been used in Maryland since 2000 and Virginia and North Carolina since 2006.

**Introduction:** The Maryland Hospital Association (MHA) has been a pioneer in the development and application of performance improvement strategies. Indeed, 25 years ago marked the start of the Maryland Quality Indicators Project (QIP Project),<sup>1</sup> which continues to be the leading measurement, educational and performance improvement initiative-based model in the USA and 12 countries worldwide. When the QIP Project was initiated, a distinction was made between "quality" and "performance" simply that "Quality is the medium of performance."<sup>2</sup> In other words, the definition used the placement of a value upon what is measured. In doing so, it did not value one when society contextualized, it was proposed that indicators would be, when they measure performance and allow the comparison of the statistics to measure performance and quality. A number of...

*Quality & Safety in Health Care, October 2009*

**PATIENT SAFETY ORGANIZATIONS: Building a Safer Healthcare System**  
*One state's journey to become the safest state in the nation.*

The surge of voluntary regional and national initiatives to improve patient safety demonstrates the momentum building to make the healthcare community. Recently, the Institute for Healthcare Improvement's (IHI) and 3-Mile Run Line Campaigns reached thousands of hospitals throughout the effort targeting patient safety. Regionally, states such as Maryland have established networks to encourage post-acute collaboration and learning. Now, the federal government has set the groundwork for a national network of organizations working to reduce harm to patients.

The 1998 Institute of Medicine (IOM) report *To Err is Human: Building a Safer Health System* prompted widespread concern among the healthcare community and the general public. It revealed that healthcare in the United States is not as safe as it could be, and that medical error results in as many as 98,000 hospital-related deaths each year. The report, which addressed a number of areas, called on providers to work together to create a safer healthcare system. One critical logic addressable by the IOM was the reporting and analysis of adverse events—many caused by medical care (AMHC)—and the need to capture data that would help to reduce the potential for patient harm.

By William Minogue, MD, Inga Adams-Pizarro, MHS, and Patty Montone Charvat

*Patient Safety & Quality Management, May/June 2009*

**Keeping Patients Safe**  
 MARYLAND PATIENT SAFETY CENTER

**Clean Hands Save Lives**  
 MPSC Leading Maryland Hospital Hand Hygiene Collaborative

The Maryland Hospital Hand Hygiene Collaborative, which was officially launched in early November by Lt. Governor Anthony Brown and Department of Health and Mental Hygiene (DHMH) Secretary John Calveran, is being led by the Maryland Patient Safety Center (MPSC) with the participation of Maryland hospitals. Based on the work and recommendations made by the Maryland Health Quality and Cost Council, the goal of this initiative is to prevent healthcare-associated infection (HAI) through a focus on hand hygiene.

The Collaborative built on the hand hygiene initiatives already underway in Maryland hospitals. Two key objectives of the Collaborative are standardizing the measurement of hand hygiene compliance within each hospital and driving improvement.

Using a modified Institute for Healthcare Improvement (IHI) Breakthrough Collaborative improvement methodology, all hospitals will be involved in learning sessions with their colleagues and national experts, and have access to successful strategies to improve hand hygiene compliance. The Joint Commission requires hospitals to comply with the Centers for Disease Control and Prevention (CDC) or the World Health Organization (WHO) hand hygiene guidelines, and hospitals who must set a plan in place with measurable goals for improving hand hygiene compliance. The Collaborative will strengthen hospitals' current efforts.

Support for the Maryland Hospital Hand Hygiene Collaborative is provided, in part, through a cooperative funding agreement to support surveillance and prevention of healthcare-associated infections that was received by the Maryland Department of Health and Mental Hygiene from the CDC under the American Recovery and Reinvestment Act. Partner organizations for this initiative include the Maryland Hospital Association, Delmarva Foundation for Medical Care, DHMH, the Maryland Health Care Commission, and the Johns Hopkins Center for Innovation in Quality Care.

For more information or to enroll in this initiative, go to [www.marylandpatientsafety.org/handcollaborative/hand\\_hygiene/index.html](http://www.marylandpatientsafety.org/handcollaborative/hand_hygiene/index.html)

*MPSC Keeping Patients Safe Newsletter, January 2010*

**Keeping Patients Safe**  
 Maryland Patient Safety Center Releases Two Reports  
 June 21, 2009

**Paul O'Neill addresses Maryland Healthcare Leaders**  
 Maryland Patient Safety Center Releases "Engaging Boards in Patient Safety"

*October 2009*

This week, the Maryland Patient Safety Center (MPSC) released two reports and a new website. The new website includes innovative solutions for Maryland. Based on the MPSC website includes healthcare facilities in Maryland as well as the 2009 Directory of Solutions. The 2009 Directory of Solutions is the first year that MPSC has done a year that it has been made a...

Paul O'Neill, former Treasury Secretary and Alcoa Chief Executive Officer (CEO), shared key leadership principles for safety during an October 19 leadership breakfast held by the Maryland Patient Safety Center (MPSC) and the Maryland Healthcare Education Institute (MHEI). Speaking to a room of approximately 60 healthcare leaders, including medical leaders, and hospital board members, O'Neill focused on three main principles that form the foundation for improving employee wellness and satisfaction, enhancing safety and care for patients, and strengthening profit and value to companies.

It is leadership's responsibility to ensure that every employee can honestly respond affirmatively the three key statements, said O'Neill.

1. I am treated with dignity and respect, without regard to gender, race, position, educational background, or any other discriminatory variable, by everybody, everyday

*Sample MPSC Issue Briefs on topics including leadership, safety culture, and medication safety*

## FY2011 Program Details

MPSC and its partners, including the Delmarva Foundation and the Maryland Hospital Association, design and carry out a series of innovative and influential programs that are helping meet the mission of making Maryland's healthcare the safest in the nation. MPSC will continue to add opportunities for long-term care and home health agency participation in MSPC programs.

*"You cannot talk patient safety unless you talk continuum of care."*

-Jon Shematek, MD  
CMO, CareFirst BlueCross  
BlueShield, MPSC Board Member

The following are the essential programs planned to be sustained in FY2011.

<b>MPSC Programming – FY2011</b>	
<b>Collaboratives &amp; Learning Networks</b>	
<ul style="list-style-type: none"> <li>• SAFE from FALLS</li> <li>• Perinatal Learning Network</li> <li>• Neonatal Learning Network</li> <li>• Maryland Hospital Hand Hygiene Collaborative</li> <li>• TeamSTEPPS™ Learning Network</li> </ul>	
<b>Educational Programs</b>	
<ul style="list-style-type: none"> <li>• Process Improvement Programs</li> <li>• Professional Development Programs</li> <li>• Patient Safety Tools Training</li> <li>• MPSC 7<sup>th</sup> Annual Conference</li> </ul>	
<b>Research Programs</b>	
<ul style="list-style-type: none"> <li>• Adverse Event Reporting Tool</li> <li>• MEDSAFE Survey &amp; Annual Conference</li> <li>• State of the State Measurement Plan</li> </ul>	
<b>Other Special Projects</b>	
<ul style="list-style-type: none"> <li>• MPSC Patient Safety Officers Forum</li> <li>• MPSC Annual Leadership Breakfast</li> <li>• Get on the Bandwagon for Patient Safety Initiative</li> </ul>	
<b>Core Administration</b>	
<ul style="list-style-type: none"> <li>• Core Staffing &amp; Board of Directors Support</li> <li>• Program Oversight &amp; Design</li> <li>• <i>Keeping Patients Safe</i> Fundraising Campaign</li> </ul>	

This document also includes a summary of the Boards on Board and Condition H programs that are concluding in FY2010.

**SAFE from FALLS**

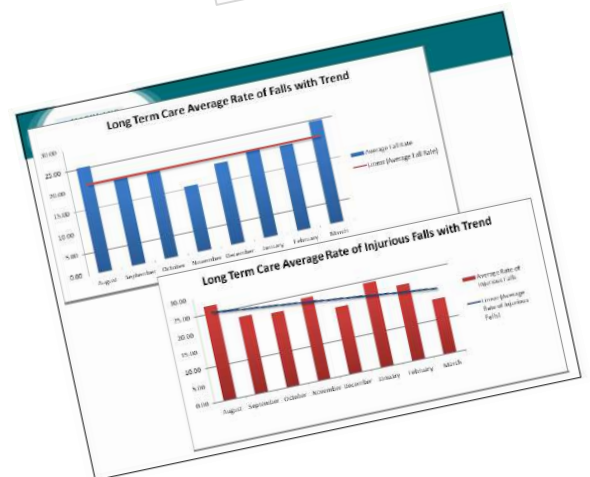
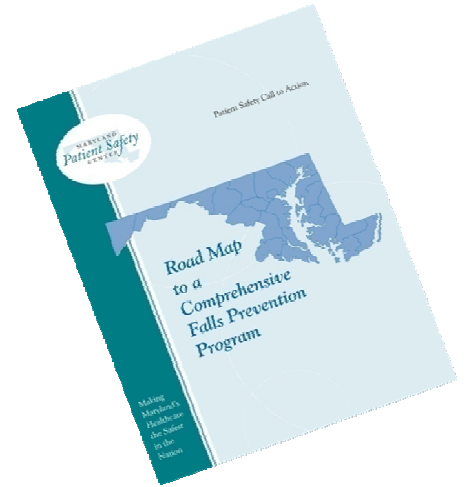
MPSC launched the statewide SAFE from FALLS program in 2009, opening the program to hospitals, nursing homes, and home health organizations. The launch was based on a pilot study initiated in October 2008. MPSC’s SAFE from FALLS initiative aims to reduce the prevalence of, and the severity of injury resulting from, falls in all settings, while contributing significantly to the regional and national knowledge base on this critical topic. To date, this program includes 28 hospitals, 42 LTC facilities and 13 home health agencies. FY2011 program plans are to:

- Expand participation to more organizations;
- Offer regular calls and webinars;
- Evaluate falls in outpatient areas as a focus study;
- Provide detailed reports and analysis to participants;
- Distribute a quarterly Falls newsletter; and
- Offer one face to face meeting.

Injuries from falls can lead to significant morbidity and mortality. Data submitted to the MPSC Adverse Event Reporting system reveals that falls are among the predominant patient safety issues for patients and facilities. In addition, the Maryland Office of Health Care Quality has found that patient falls make up the greatest proportion of reported adverse events that result in serious injury or death in hospitals. The Centers for Disease Control and Prevention (CDC) reports that nearly one-third of U.S. adults ages 65 and older fall each year (CDC, 2008).

Data from current year participants are being assessed, but to date there has been a declining trend in the rate of falls with injury among the pilot group (sample of pilot data from the long term care group appear below). This could have significant cost implications. A recent Business Case Analysis found that a 5% reduction in falls with injury alone would lead to a \$285,517 saving per month statewide. If we use the estimate of 1.5 falls per patient year, the savings would be \$1.5 million per year statewide.

With six months of data, acute care facilities participating in the statewide SAFE from FALLS rollout are reporting lower rates of falls with injury than rates reported among the pilot group. MPSC will continue to monitor the data over time to establish a trend and cost savings and as we track and recruit additional facilities.

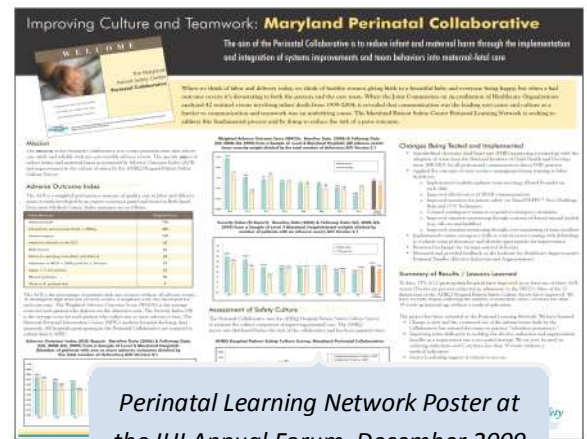


### Perinatal Learning Network

Collaboratives, one of our most powerful interventions, usually are 12-18 months in duration. Permanently improving complex systems takes much longer. In addition, participants in all MPSC Collaboratives have become close colleagues and have requested that we continue to support their efforts. Therefore MPSC extended the work of the Perinatal Collaborative by supporting a learning network phase. Funding has been generously extended by the Center for Maternal and Child Health, Department of Health & Mental Hygiene (DHMH) through June 2011 in the amount of \$250,000 to ensure support for ongoing participation, data collection, and implementation support from Delmarva.

Participants now represent 28 hospitals in Maryland and two in the District of Columbia, including Level I, Level II and Level III hospitals.

The aim of the Perinatal Learning Network is to reduce maternal and infant harm through the implementation and integration of systems improvements and team behaviors into maternal-fetal care. Harm will continue to be measured using the Adverse Outcomes Index (AOI). Maryland was the first state in the country applying the AOI to improvement activities. The baseline period for measurement was calendar year 2006. The follow-up period was October 2007 through September 2009. Baseline and post-intervention data have been collected using the AOI and the Hospital Patient Safety Culture Survey.



In year two of the Learning Network, there were no maternal or neonatal deaths reported in Level II or Level III facilities.

Notable improvements for Level I & II hospitals include:

- 100% decrease in neonatal deaths
- 54% decrease in uterine rupture
- 19% decrease in returns to L&D

For Level III hospitals, notable improvements include:

- 22% decrease in admissions to the ICU
- 23% decrease in admissions to the NICU for babies >2500 g with >24 hour stay

The Learning Network set a new focus in FY2010 on reducing elective deliveries before 39 weeks without medical indication, a practice associated with reduced risks and complications. In less than one year, participating facilities have reported a 17% reduction in elective inductions and 23% reduction in scheduled Cesarean Sections prior to 39 weeks gestational age. This ability to implement these changes is likely linked in part to improvement in patient safety culture, wherein over 70% of the hospitals improved staff perception of teamwork and communication and more than 60% improved the overall perception of safety. For FY2011, plans are to execute two team reunions, offer regular team conference calls, provide data reports and analysis to participants, and conduct a culture survey.

### Neonatal Learning Network

The successful MPSC Perinatal Collaborative unleashed a heightened recognition and new urgency from the neonatal community for a similar initiative aimed at addressing preventable harm among infants receiving care in Level II (special care) and level III (neonatal intensive care) nurseries. A generous grant from CareFirst® BlueCross® BlueShield® in the amount of \$635,000.00 was awarded to MPSC to launch and support the Neonatal Collaborative through June 2010. A second grant request totaling \$215,000 will support the continuation of the program in a learning network format in FY2011, implemented with Delmarva.

The program is energized by the strong leadership of local and national experts, and includes the participation of 28 nurseries in Maryland, the District of Columbia, and Northern Virginia. Combined, these facilities represent 75% of area hospitals providing specialty and intensive care to neonates in our region. The work of the Collaborative touches more than 32,000 infants born each year and affords participants the opportunity to significantly impact health outcomes, length of stay and inpatient costs.

The Learning Network will continue the aims of the Collaborative, which are to:

- Reduce healthcare-associated infection by 50% through the implementation of evidence-based prevention care practices
- Decrease neonatal mortality by 10%, chronic lung disease by 10%, and length of stay by 10% through standardized resuscitation and stabilization of the neonate in the first hour of life (Golden Hour)
- Improve teamwork and communication through the implementation of team behaviors, including the family, into neonatal care as measured by the Agency for Healthcare Research and Quality (AHRQ) Hospital Patient Safety Survey. Fifty percent (50%) of participating neonatal units will improve their perception of safety at one year.

The MPSC Neonatal Collaborative has an elaborate set of measures currently being tracked to evaluate success for both process and outcomes. As of five months after the initiation of the Collaborative, approximately 50% of the teams are routinely reporting. We expect to see consistent reporting by more than 80% of the teams by June 2010.

For FY2011, the program plans are to:

- Execute two team reunions;
- Offer regular team conference calls;
- Provide data reports and analysis to participants; and
- Conduct a patient safety culture survey for each participating facility.



**Maryland Hospital Hand Hygiene Collaborative**

Hand hygiene is a critical factor in preventing the spread of potentially devastating infections. The spread of viruses and bacteria, such as H1N1, MRSA, and other community and healthcare-associated infections (HAI) can be mitigated by intense, targeted, and community-oriented initiatives. The recent focus on the H1N1 presents a ripe opportunity to address hand hygiene as a critical public health and disaster preparedness issue.

The Maryland Hospital Hand Hygiene Collaborative was launched at a kick-off meeting on November 3, 2009 with broad participation from the healthcare community. Key aspects of the program include:

- Aim to have full participation by all Maryland hospitals. To date 96% have registered.
- Potential to dramatically improve care, reduce waste, increase awareness among providers, and lead to savings to the healthcare system.
- Mandate for this program is derived from the Maryland Governor’s Health Quality & Cost Council and the Maryland Health Care Commission’s Healthcare-Associated Infections Advisory Council.
- Kick-off meeting included high-profile speakers, among them, the Maryland Lieutenant Governor and Secretary of Health, drawing participants and building wide spread public awareness.
- Ongoing oversight and planning by a robust project team and the Governor’s Health Quality & Cost Council.

MPSC is working in partnership with the Maryland Hospital Association, the Delmarva Foundation for Medical Care, DHMH, the Maryland Health Care Commission (MHCC), and the Johns Hopkins Center for Innovation in Quality Care to carry out the Hand Hygiene initiative. Progress is reported back to the MHCC and the Governor’s Council.

**About the Maryland Hospital Hand Hygiene Collaborative**

*“This hand hygiene collaborative will protect staff and patients from infection...We know that no other single behavior or activity can **save lives and prevent healthcare-associated infections** better than comprehensive hand washing by healthcare providers.”*

-Anthony Brown  
Lieutenant Governor  
Maryland

*“I think it is a relatively **low-cost, high-yield** method of preventing the spread of illness within healthcare and within communities as well.”*

-Jeff Sternlicht, MD  
Chair, Emergency Medicine  
Greater Baltimore Medical  
Center



*Secretary Colmers, MPSC Executive Director Minogue, and Lt. Governor Brown at the Hand Hygiene Press Conference, November 2009*

Photo courtesy of the Governor’s Press Office



The overall aim is for all Hand Hygiene Collaborative participants to achieve a hand hygiene compliance rate of at least 90% for all units/participants. This measure will be assessed using trained unknown observers and will be reinforced by auditing the hand hygiene program in each participating facility on a quarterly basis. This statewide effort will share best practices in the collection of standardized hand hygiene data and implementation of strategies aimed at improving hand hygiene compliance, with an ultimate goal of reducing the number of HAIs in Maryland. Facilities track and report the following key metrics:

- Hand Hygiene Compliance rate (monthly):
  - Observation of hand hygiene upon exiting the patient treatment area
  - Collection of at least 30 observations per unit per month
  - Applying the standard observation protocol
- Process Measures focusing on internal facility steps and activities (quarterly):

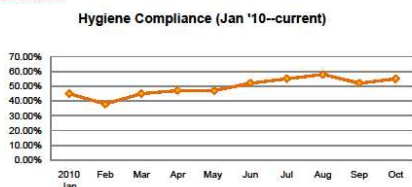
The Johns Hopkins Center for Innovation in Quality Healthcare has developed and provided the database for online or mobile device data submission of hand hygiene compliance data. The Center also provides the monthly reports that hospitals can use to track their progress, depicted in the screen shots below using sample data.

**HH Compliance Feedback Reports for Individual Hospitals**

**Hospital Performance**

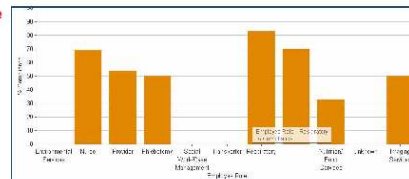


**Performance Overtime**

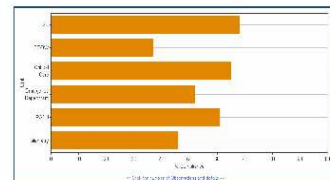


**HH Compliance Feedback Reports for Individual Hospitals**

**Performance by Employee Role**



**Performance by Unit**



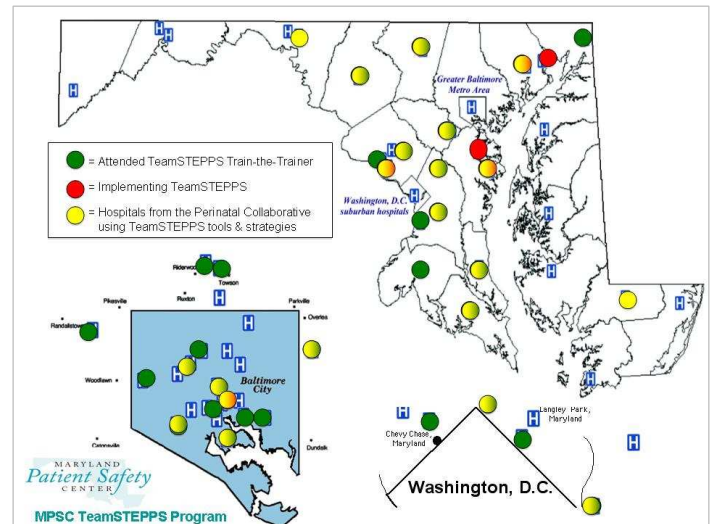
In addition, facilities will be able to submit quarterly updates on processes they have put in place via an online site offered by the Center for Performance Sciences. Collaborative activities will extend through February 2011, tentatively, and at that point the program will transition to a Learning Network approach to provide ongoing data collection activities and support.

Support for a portion of the Hand Hygiene budget has been committed by the Maryland DHMH through an American Recovery and Reinvestment Act of 2009 (ARRA) stimulus request. DHMH has committed \$100,000 toward the hand hygiene program via this funding vehicle.

### TeamSTEPPS™ Learning Network

Improving teamwork, especially in clinical teams, may be the single most important culture change that is needed to make a significant improvement in patient safety. MPSC has adopted TeamSTEPPS™ training, made available by AHRQ, as its recommended methodology for improving clinical teamwork and communication. There is substantial evidence that poor cooperation and communication is a primary cause of error in healthcare. After several disastrous crashes, the military and commercial airlines adopted a “crew resource management” concept to develop effective teams where communication is open and frequent. It has contributed to the airline industry having significant improvements in its safety record. TeamSTEPPS™ applies that concept to healthcare.

MPSC’s program, launched in 2008, takes users step-by-step through implementation, detailing the roadmap for creating change and shifting the organization toward a sustained culture of safety. There is great local interest in these innovative tools. The map at right depicts the spread and uptake of TeamSTEPPS™ concepts since MPSC initiated the program. MPSC will continue to offer its train the trainer program and support through a modified learning network during FY2011.



### Education Programs

Education is one of the primary strategies the MPSC uses to encourage the adoption of safer practices in Maryland hospitals and nursing homes. The Maryland Healthcare Education Institute (MHEI), an affiliate of the MHA, carries out a comprehensive series of educational offerings on behalf of the Center. The MPSC’s educational activities have been designed to achieve the following goals:

- Create awareness of the need for improved patient safety and of the cultural changes required for significant improvements.
- Ensure that healthcare leaders have the competencies essential for safety improvement.
- Disseminate patient safety solutions and best practices.
- Create a safety-oriented culture in organizations by focusing leadership on key issues and concepts
- Serve as a catalyst and convener for best practices and solutions in patient safety.

These programs have very high uptake among providers. Participation in the programs has included acute care hospitals (65%), healthcare systems (10%), specialty hospitals (8%), long-term-care facilities (7%), and other providers (9%). In fact the past two years have seen record breaking registrations for the MPSC Annual Conference, including more than 1400 registrants for 2010. FY2011 programs fall into several categories outlined as follows.

### Process Improvement Programs

The aim of the Process Improvement Programming is to give participants in-depth competencies in how to improve specific systems and processes so that processes can be made both more efficient and safer. There is no question that hospitals and all healthcare organizations are under significant pressure to provide safer care, improve clinical quality, and cut costs through more efficient operations. MPSC believes that this set of programs are especially suited to assist in meeting this objective. In fact, one facility reports savings of up to \$20,000 related to pharmacy inventory reduction, 33% reduction in turnaround time for medication orders, and annualized savings of up to \$2.2 million due to reduced cases of missing and reordered medications. Analysis from a second site that targeted emergency department efficiencies is currently underway.

MPSC will continue to offer a combination of Lean and Six Sigma methodologies, which provides a comprehensive set of strategies to address these issues. Lean's origin is in Japanese performance improvement techniques, especially the Toyota Production System. Six Sigma is an evolution of the Continuous Quality Improvement (CQI) tools and strategies, with a greater degree of statistical use. The key is to drive out waste and improve safety through Lean use, and continually refine performance through state of the art Six Sigma methods.

### Professional Development Programs

There are many topics in patient safety that need to be addressed in more depth, targeting the skills, information, and tools that professionals can apply immediately to their work. The Professional Development Series, which includes six course offerings, is designed to meet that need. Courses are designed for patient safety officers, other patient safety professionals, and department heads. The programs are structured as workshops with a limited audience so that significant interaction and practice can occur.

The programs provide tools to address important topics in patient safety, such as:

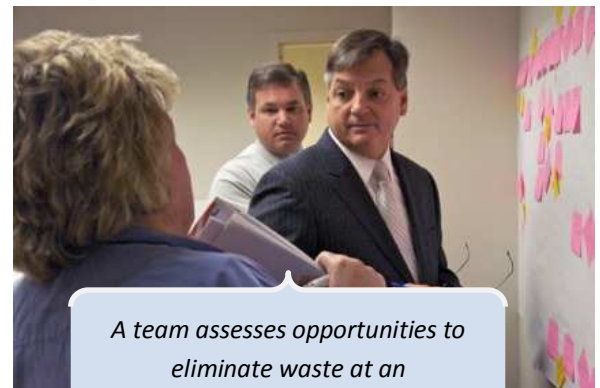
- Specific tools to address potential conflicts between accountability and just cultures.
- Reinforce skills for leaders to use in engaging patients and families.
- Advancing innovation & sustaining improvement.

These high-intensity programs are among the most popular that MPSC offers. MPSC has begun to apply a fee for the three and five day programs offered in this series to offset the program cost.

### What participants say about MPSC educational sessions

*"I know I will be able to contribute a great deal to my organization as a result of the skills I have obtained from this very worthwhile endeavor."*

-Participant  
MPSC Process Improvement Program



*A team assesses opportunities to eliminate waste at an MPSC Lean Kaizen event*

### Patient Safety Tools Training

Health care facilities spend considerable time improving processes and yet untoward events still happen. Why? Because often process changes are not directed at the latent conditions that cause people to make mistakes. In this series of eight one-day workshops, healthcare managers and professionals learn how to determine if the fundamental system deficiencies that precipitated an untoward event have been found, how to develop sustainable corrective actions to prevent similar incidents in the future, and how to build systems so that errors are prevented proactively. The programs offer specific tools and skills development that directly support other programs and initiatives of MPSC.

The aim of these popular courses is to enable widespread adoption of the basic tools of patient safety. The programs are each offered multiple times to reach a broad healthcare audience, ensuring that:

- Root Cause Analysis (RCA) is understood by a significant number of healthcare managers and professionals.
- Maryland Office of Health Care Quality (OHCQ) requirements for RCA are understood.
- Failure Mode & Effects Analysis (FMEA) is understood and applied as a methodology for proactively building safe systems.

### Annual Conference

The Annual Maryland Patient Safety Conference is MPSC's signature event of the year. It provides awareness, specific education, and best practice solutions to a broad-based audience that goes well beyond MPSC's usual participants. The conference is designed to move the patient safety agenda forward in the region.

The March 19, 2010 Conference was our sixth and included more than 1400 registrants, 21 sessions, and a spectacular set of speakers and moderators. It continued the theme of teamwork with a specific focus on patients and families as part of the healthcare team. The keynote speech by Susan Sheridan, Co-Founder of Consumers Advancing Patient Safety, was a moving talk about her experience with two devastating medical errors in her immediate family and the steps she has taken to end medical errors. In addition, approximately 700 people stayed for the Wrap Up, many of whom submitted

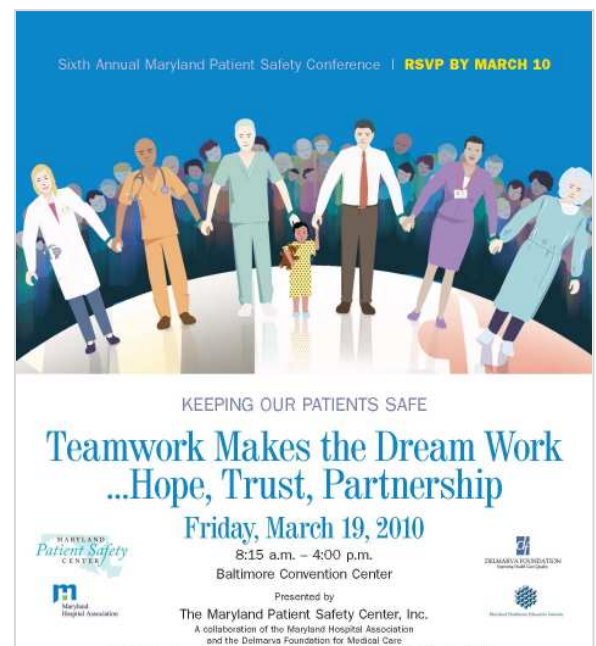
#### What participants say about the MPSC Annual Conference

*"The material was presented well and was **extremely pertinent** to healthcare and safety, of both our staff and our patients."*

- Conference Attendee  
MPSC Annual Conference

*"Terrific and **motivational**."*

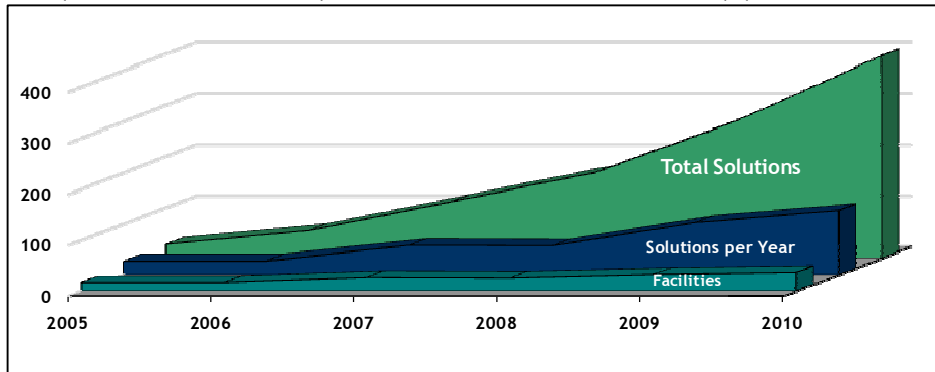
- Conference Attendee  
MPSC Annual Conference



to us the specific actions they were going to take as a result of the conference. One person from Carroll County Hospital said at the Wrap Up, “I wish I could have had all of my nurses here today because it was so exciting.” We will follow-up on their responses in the coming months.

Remarkably, each year MPSC receives more and more submissions to the Directory of Solutions, which each conference participant receives. There was more than a twofold increase in submissions from 2008 (56) to 2010 (126). This represents strong interest in the Solutions approach, shows a willingness to share, and, most importantly, demonstrates a focused and growing commitment to patient safety efforts among providers in the region.

**Patient Safety Solutions Submitted to the Maryland Patient Safety Center Annual Conference, by year**



**Research Programs**

The research arm of the MPSC adds a synthesizing function by evaluating new knowledge from the field and complementing it with findings from MPSC’s various activities. In particular, research activities have focused on the MEDSAFE program and analysis of data from the Adverse Event Reporting System, described previously.

**Adverse Event Reporting Tool**

MPSC’s Adverse Event Reporting (AER) Tool was designed to gather data on patient safety incidents, particularly near miss events that offer great opportunity for learning. The data are used to explore patterns and trends related to patient safety events and near misses that occur in healthcare facilities. The software is owned by the Center for Performance Sciences, an affiliate of MHA, which provides the flexibility to tailor and refine the program to meet the needs of the users and to react to trends in the healthcare community.

**Adverse Event Reporting Tool:**  
How do Hospitals Improve Safety Through Comparative Analysis?

Understanding and tracking safety events and near misses is at the root of improving patient safety

The Maryland Patient Safety Center (MPSC) offers Maryland healthcare providers access to a statewide, voluntary Adverse Event Reporting Tool (The AER Tool). The tool gathers data on patient safety incidents, including near-miss events. The data are used to explore patterns and trends related to patient safety events and near misses that occur in healthcare facilities. The system is owned and managed by the Center for Performance Sciences, an affiliate of the Maryland Hospital Association (MHA).

The AER Tool was built around evidence-based findings designed to report all incidents, particularly near-miss events that have the potential to occur repeatedly. The AER Tool is able to track and trend events based on high cost, high volume, high risk and/or whether it is an acknowledged problem-prone area. Additionally, as the system continues to be used, improvements are made based on recommendations made by the users themselves.

**What Your Organization can Achieve Using the AER Tool**

- Collect uniform data: Deploy a web-based, standardized approach to data collection across participating hospitals.
- Centralize data: Access real-time data that is centralized and secure for all incidents with a high degree of specificity.
- Increase awareness: Improve awareness across all hospitals as to the types of events reported.
- Identify opportunities: Identify areas of common need for improving safer practices and tailoring programs, and make recommendations about better process models to all facilities.
- Feedback: Provide positive reinforcement toward implementation of new or proven strategies for safer practices.
- Improve efficiency: Management tools are designed to save time in monitoring and researching adverse events in real-time.
- Contribute to advancing patient safety knowledge in the region.

**CPS** CENTER FOR PERFORMANCE SCIENCES 820 Drexel Road, Ellicott, Maryland 21075, Phone: 410-779-9940

MARYLAND Patient Safety CENTER

**AER Informational Brochure**

AER is a mechanism by which participants can report data to MPSC. The system assists health care entities to determine their own organizational strategic priorities for patient safety, focus organizational efforts toward improving processes, and promote safer patient care practices.

The plans for FY2011 include:

- Revision and updates to the tool consistent with national standards being developed by AHRQ and the Patient Safety Organization (PSO) network
- Incorporates an Expert Panel and, as appropriate, a User Group to provide oversight and input on the system
- Involves support from clinical and statistical experts to participate in analysis and report writing

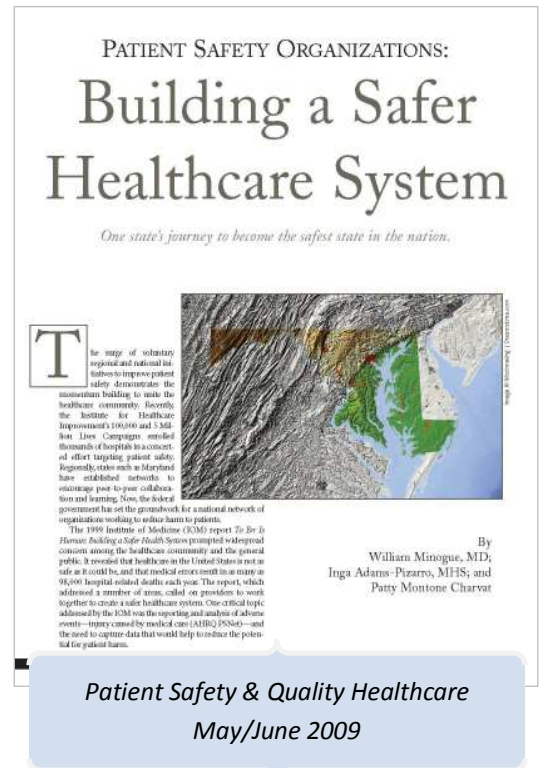
Three additional facilities adopted use of the tool in the last six months, and additional facilities are expressing interest in accessing this critical resource.

As a federally-listed PSOs, MPSC offers the most comprehensive set of programs supporting adverse event reporting of any similar organization in the country. The AERS is a complementary system to the mandatory reporting of adverse events resulting in death or serious disability to the Maryland Department of Health and Mental Hygiene as it captures voluntary reporting of information on adverse events and near misses. MPSC's approach as a PSO was highlighted in the publication Patient Safety & Quality Healthcare and at the National Patient Safety Foundation conference.

**MEDSAFE**

The MEDSAFE initiative is celebrating its 10<sup>th</sup> year of data collection to study medication safety. The survey has been administered since 1999 with the voluntary participation of all Maryland acute care hospitals. The program was transferred to MPSC, and continues to promote and study the implementation of safe medication practices in facilities. It both assesses better practices of medication use and is an educational initiative for sharing these practices among hospitals. MEDSAFE continues to be a very valuable service of the Center.

The survey has identified significant improvement in medication safety, as shown in the graphic on the following page, as well as gaps between actual and optimal performance. From 2005 to 2009, Maryland hospitals showed an increase of 9.2% in the overall median score for medication safety on the annual MEDSAFE survey, most notably in communication related to medications (+23%) and staff competency/education (+23%). A scientific paper about MEDSAFE was

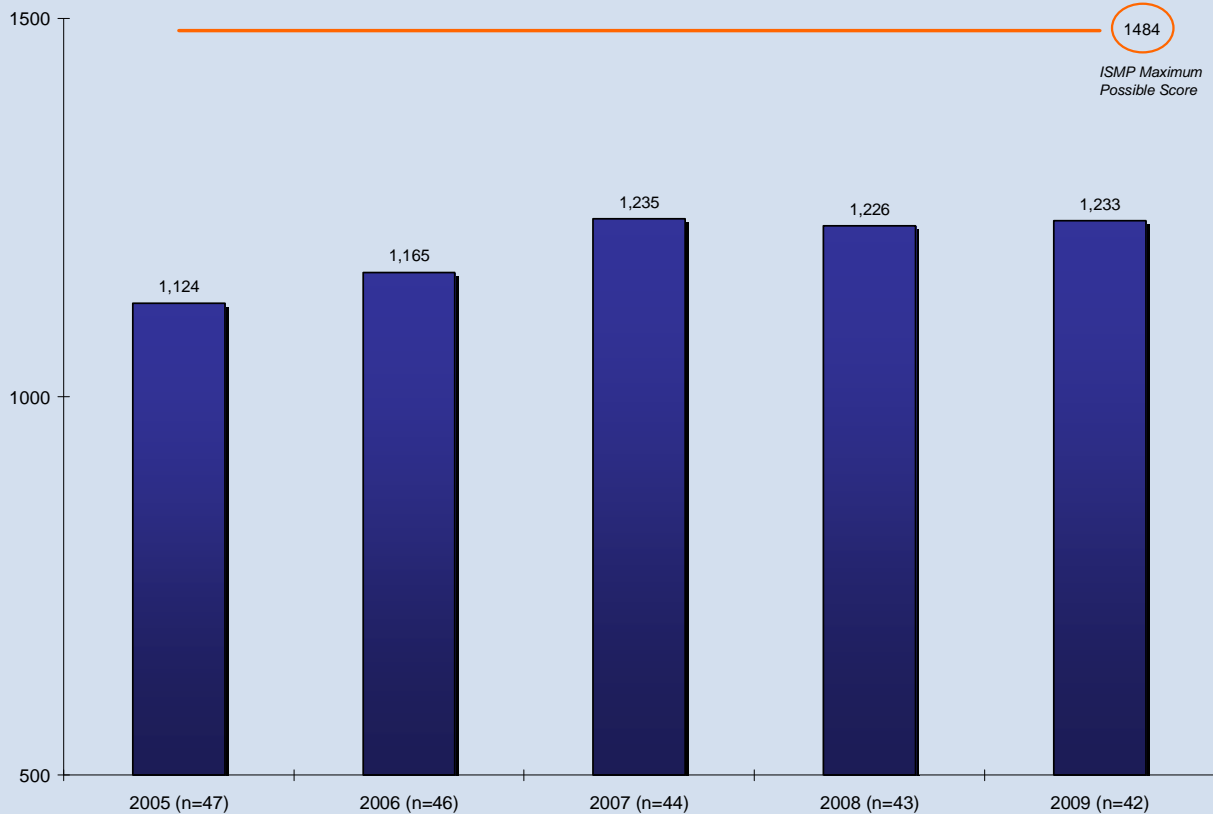


published in Fall 2009 the peer reviewed journal *Quality & Safety in Health Care*. The results are depicted in the figure below.

The program implementation team and the Maryland Healthcare Education Institute use the data to design an annual conference aimed at sharing best practices and emerging innovations in this area, attended by an average of 200 practitioners annually. Another conference is planned for September 2010 and the annual survey will occur in Spring 2011.

### MPSC Median Medication Safety Scores by Year: 2005 - 2009

- The aggregate median score increased substantially from 2005 to 2007 and has remained steady through 2009.
- The aggregate median score in 2005 was 76% of the ISMP maximum possible score, and 83% in 2009 (an increase of 9.2% in the overall median score).



### State of the State Measurement Plan

Among the strategic goals of MPSC is the systematic depiction of the state of safety in Maryland and advancing the cause of measurement. MPSC believes that this effort is critical to demonstrating the state of healthcare in Maryland and the impact of the Center. Toward this goal, a committee of MPSC Board members, customers, and representatives of Delmarva and MHA was formed to draw the blueprint for action to measure the status of patient safety in Maryland over time. MHA's Center for Performance Sciences provides support to this effort.

The measurement workgroup defines measurement approaches at three levels. The first is measuring the impact of programs sponsored by MPSC such as the Perinatal Collaborative, the Falls program, or the educational offerings such as the annual meeting. The second level addresses measures to provide comparative safety data within Maryland. Finally the workgroup is addressing ways of assessing progress against the vision of "Making Maryland healthcare the safest in the nation."

A measurement report template is planned to be completed in the current fiscal year ending June 2010, and MPSC will be pleased to provide that report to HSCRC staff when it is complete. MPSC recognizes that over time there will be opportunities to enhance and further develop the measurement report approach. For this reason, in FY2011, MPSC will enhance and continue to prepare the report based on the template developed in FY2010.

### Other Special Projects

MPSC engages in a series of other activities, hosts meetings, and partners with organizations to make resources and information available to the Maryland healthcare community. Among these activities are the following:

#### Condition H

More than 75 healthcare providers representing 22 hospitals attended the Condition H Regional Workshop, sponsored by MPSC in September 2009. Condition H (Help) is an extension of rapid response teams (RRTs). Initially, healthcare providers could activate an RRT, which would summon a special team (generally consisting of ICU personnel and others) to assess and treat patients outside the intensive care unit (ICU) who show signs of deterioration and/or may be at risk for cardiac arrest or death.

With the inspiration of Sorrell King, whose 18-month old daughter died as a result of a medical error, patients and families are now being empowered to call RRTs through Condition H programs at a number of hospitals around the country.

*"I know in my heart - 100% - that if I had been able to call a rapid response team, she would be alive today. No doubt."*

- Sorrel King  
Regarding her daughter, Josie King  
Co-Founder  
Josie King Foundation  
MPSC Board Member



Over a year ago, MPSC began its work on Condition H through a pilot project of early adopter hospitals funded by CareFirst® Blue-Cross® BlueShield® and organized by the Delmarva Foundation. Drawing on the lessons learned from the MPSC pilot project, as well as the work done by the University of Pittsburgh Medical Center, other providers, and experts in RRTs, the MPSC September workshop offered a wealth of knowledge and information about implementing Condition H in individual facilities.

*“Implementing Condition H is a real culture change in hospitals.”*

- Kathy Duncan, RN  
Institute for healthcare Improvement  
Faculty, Condition H Collaborative

A comprehensive toolkit and video about Condition H are in development and will be available to MPSC members in the Spring 2010.



*Maryland Hospitals Involving Patients and Families in Care Teams through MPSC’s Condition H Initiative*

### Get on the Bandwagon for Patient Safety

Evidence shows that standardization is a remarkably effective tool for improving the likelihood of full and accurate communication. With this in mind, the Maryland Hospital Association and MPSC are launching the **Get on the Bandwagon for Patient Safety** program to standardize the color of patient wristbands in healthcare settings throughout Maryland.

To alert caregivers to certain patient risks many facilities use color-coded patient wristbands. However, if hospitals and other healthcare providers use different colors for these alerts, caregivers working in more than one facility may have difficulty always responding in the appropriate manner. Standardizing the colors of the wristbands used in healthcare settings is the sensible approach to improving patient safety, and over 30 states are using these color-coded wristbands or plan to implement such a program, including all of the states surrounding Maryland. A national advisory from the American Hospital Association has underscored the importance of standardized wristband colors.

The Maryland **Get on the Bandwagon for Patient Safety** program is unique in that it is moving beyond the hospital and is engaging long-term care facilities and patients and families in this effort. The voluntary program offers standardized colors for patient wristbands in Maryland.

**Get on the Bandwagon**  
FOR PATIENT SAFETY

- Red: Allergy Alert
- Yellow: Fall Risk
- Green: Latex Allergy
- Purple: DNR Status
- Pink: Restricted Limb Use

Details about this initiative, including a toolkit of information for implementation, have been sent to hospitals and other healthcare providers. The toolkit and other information are available to providers on the MPSC website.

### MPSC Patient Safety Officers Forum

Created by MPSC Executive Director William Minogue, MD, FACP, and Vivian Miller, Patient Safety Specialist, Maryland Hospital Association, the Forum brings together hospital and nursing home patient safety officers (PSOs) and many others engaged in improving patient safety and the quality of healthcare in their institutions.

The PSO Forum, hosted every other month, offers updates, education, and information about what is happening in patient safety in the region, across the country, and around the world. “The Forum has been invaluable to introducing new initiatives from across the country,” said Tina Gionet, RN, MS, Patient Safety Officer from Sinai Hospital of Baltimore. “When we can share stories about successful initiatives being conducted at other sites it really helps our staff engage in meaningful discussions regarding patient safety issues.”

### Annual Leadership Breakfast

Paul O’Neill, former Treasury Secretary and Alcoa Chief Executive Officer, shared key leadership principles for safety during an October 19, 2009 leadership breakfast held by MPSC and MHEI. Speaking to a room of approximately 60 healthcare leaders, including CEOs, medical leaders, and hospital board members, O’Neill focused on three main principles that lay the foundation for improving employee wellness and satisfaction, enhancing safety and quality for patients, and strengthening profit and value to companies. MPSC distributed a summary of the talk as an “issue brief” for healthcare leaders.



*Paul O’Neill Addresses Healthcare Leaders at the MPSC Annual Leadership Breakfast*

### Boards on Board

A recent day-long, by-invitation-only roundtable sponsored by MPSC and MHEI addressed how to get Boards more engaged in patient safety. Participants included Presidents/CEOs and Board members from nine Maryland hospitals and health systems. James L. Reinertsen, MD, Senior Fellow at the Institute for Healthcare Improvement (IHI) and President of The Reinertsen Group, framed, guided, and facilitated the discussion.

MPSC/MHEI developed a “working paper” to synthesize the day’s discussions. It also contains 10 practical, “actionable” strategies for engaging hospital Boards in patient safety and seven questions healthcare Board members shouldn’t hesitate to ask their executive team.

### **MPSC Core Administration**

MPSC's core operations include shaping and implementing innovative programming, management of a major fundraising campaign, amplified efforts to formally enroll healthcare providers across the continuum of care in MPSC programs, and targeted measurement tracking. We believe that the six strategic focus areas provide the cornerstone for engagement in and success of MPSC's ongoing programs.

MPSC's Core Administration staff include a new incoming Executive Director, a Director of Operations and Development, and an Executive Assistant who manage and implement a number of key responsibilities intended to ensure oversight of the numerous programs and initiatives of the center. This includes management of relationships with internal and external stakeholders, supporting governance activities, fund development, communication activities, and others.

MPSC hopes to bring on an additional staff member in the second quarter of the fiscal year to fill a program manager/coordinator role. This will depend in part on early success with the fundraising program, described below.

MPSC's founding Executive Director, Dr. William Minogue, will retire on March 31, 2010. The press release announcing Dr. Minogue's retirement is in Attachment B. After a careful national search, the MPSC Board of Directors selected C. Patrick Chaulk, MD, MPH to join the Center as its new Executive Director & President. As Senior Associate for Health at the Annie E. Casey Foundation in Baltimore since 1994, Dr. Chaulk managed the foundation's grant portfolio in health and public health. He has a clinical background in pediatrics, providing primary care to children and adolescents in East Baltimore for eight years and has provided clinical services to clients of Baltimore City public health clinics. The press release announcing Dr. Chaulk's position is in Attachment C. Dr. Chaulk will join MPSC on April 1, 2010.

In addition to requiring that all programs implement and report on key metrics, MPSC will continue to support the Measurement Committee of the board, as well as an external evaluator, which is assisting in designing a system for demonstrating the State of the State in patient safety as well as a dashboard for monitoring MPSC's success.

MPSC's Core Administration staff manage and implement a number of key activities in support of the Center. These include:

- Oversight of the numerous programs and initiatives of the center, including holding bimonthly meetings of the Center's Operations Committee
- Management of relationships with internal and external stakeholders
- Convening the Board of Directors and Board Committees
- Oversight of fund development, finances, and human resources
- Implementation of communication activities
- Contribute to external committees and programs

MPSC will engage a select number of consultants to enhance and strengthen these efforts. Consultants will be engaged in the areas of:

- Ongoing development of the MPSC measurement strategy
- Communications consultant to support the newsletter, press releases, website, and other communication initiatives (continuation of support from previous years)
- A major fundraising campaign, guided by an external firm, to provide guidance on MPSC's fund development plan and help the Center meet a \$10 million goal

In addition to the planned staff adjustments, the Center's core administration budget reflects a new approach to management of the Patient Safety Officer's Forum and the Delmarva Core Administration activities. Both of these proposals and budgets reflect activities and responsibilities that functionally rest within MPSC core staff. The budgets for each have been added to the MPSC Core Administration budget, rather than as separate budgets as it has been handled in the past, so that the MPSC staff may assess the programs and work jointly with our partners to develop a guided implementation approach, including deliverables. Therefore, while the Core Administration budget is larger than previous year, it includes staffing commensurate with Center needs, a realignment of oversight of certain programs to Core Administration, and the addition of support for the fundraising initiative.

### **Fundraising Plan – Keeping Patients Safe Campaign**

MPSC is committed to financial sustainability for the Center. This sustainability will result in part from the quality and impact of the work conducted by the Center, and also from a strategic initiative to raise supporting dollars for the Center from a diversified set of sources.

In FY2010, MPSC and partners were successful in securing program-specific funding in the following amounts:

- \$100,000 in support of the Maryland Hospital Hand Hygiene Collaborative from the Maryland Department of Health & Human Services (DHMH) through an American Recovery and Reinvestment Act of 2009 (ARRA) stimulus request.
- \$250,000 from DHMH for continued support of the Maryland Perinatal Learning Network.
- \$215,000 from CareFirst BlueCross BlueShield in continued support of the Maryland Neonatal Collaborative as it transitions into a Learning Network.

MPSC began implementing a Strategic Fundraising Plan in FY2010. In December 2009, as a result of discussions with the Board of Directors and the Board Executive/Finance Committee, MPSC opted to suspend the activity underway in order to define a new, broader approach. It was clear that MPSC's programmatic and strategic growth would benefit from a fundraising approach that would be larger and more dynamic, but that to achieve MPSC's targets the Center would require additional support and expertise. To that end, MPSC initiated a search for a fundraising firm that could provide a team-based approach to initiate and backstop the campaign. Much of the work completed in early FY2010 will be transitioned to this new purpose. This campaign and approach was approved and endorsed by the MPSC Board of Directors at its March 8, 2010 meeting.

The new Campaign goal is \$10 Million. It is based on the organization's vision, mission, objectives, strategic plan, and funding requirements. MPSC will retain the campaign name, entitled the *Keeping Patients Safe Campaign*. The *Keeping Patients Safe Campaign* creates an identifiable umbrella for MPSC's funding efforts and programs.



MPSC will convene a Campaign Executive Committee and related subcommittees. Volunteers on the committees will lend support over time to secure the financial commitments that will make the fundraising campaign successful. MPSC staff and Board members will be active participants and will provide oversight of the campaign progress.

## Budget

MPSC's FY2011 budget is based on the proposals requested and received from MPSC's program partners, and reflected in the program descriptions provided in this document. The proposals were carefully reviewed and supported by the MPSC's Program Review Committee, a committee of the MPSC Board of Directors. The budget and program summary were approved by MPSC's Board of Directors.

The FY2011 revenue budget totals \$3,432,568, which includes the following revenue streams:

- Revenue based on anticipated restricted and unrestricted sources
- Revenue from new charges for select educational programs
- A requested 45% match of expenses from HSCRC. HSCRC matches a portion of the MPSC Expense budget. Last year, HSCRC approved a 45% match, and requested a percentage/absolute dollar reduction in subsequent years. Though we propose a consistent percentage of 45%, this represents a drop in absolute dollars of \$106,681.

The FY2011 expense budget totals \$3,432,430, which includes the following:

- Continued support for key MPSC programs and activities as described in this document
- Enhanced Core Administration budget to account for the new Executive Director and .75 FTE Program Coordinator, a fundraising firm, and realigned budget management for two proposals submitted but not requested (CPS Patient Safety Officers Forum Proposal and the Delmarva Administration Support Proposal - to be evaluated by the incoming Executive Director).

This proposed budget includes contingency income totaling \$188,300. MPSC will embark on an enhanced and more robust fundraising campaign starting in Spring 2010, which is intended to generate funds beyond the shortfall amount. However, MPSC will not depend in advance on that funding source to cover the shortfall. Instead, MPSC is putting a short set of expenses on hold pending additional funds. That way we are clear for MPSC, partners, and the Board which activities are approved and fully funded and which are impacted by the shortfall. These actions also acknowledge that MPSC faces a limited funding cycle, allows MPSC to maintain core programs and operations, and sets a clear plan to meet partner commitments.

Further monies raised as part of the fundraising goal are not incorporated into the MPSC FY2011 budget.

The MPSC Board of Directors approved the following FY2011 budget, pending acceptance by the HSCRC. A budget narrative included in Attachment D provides detail by line item.

**Maryland Patient Safety Center  
Proposed FY 11 Budget**

	<b>FY 10 Budget</b>	<b>FY 11 Budget</b>
<b>REVENUE</b>		
Cash Contributions from MHA/Delmarva	400,000	400,000
Cash Contributions from Hospitals	230,000	250,000
HSCRC Funding	1,651,275	1,544,594
Restricted Grants (Carefirst, DHMH, ARRA Stimulus)	848,250	514,674
Fundraising Campaign	458,475	
Contingency Income		188,300
Other Funding-Mixed Sources	75,000	535,000
Interest Income	6,500	
<b>Total Revenue</b>	<b>3,669,500</b>	<b>3,432,568</b>
<b>EXPENSES</b>		
Administration	637,800	986,820
Public Website	58,000	15,591
Patient Safety Education Programming	571,800	747,775
Adverse Event Reporting System	374,100	388,505
MEDSAFE Medication Safety Initiative	67,500	73,076
Team STEPPS Training/Learning Network		86,120
Measurement	111,050	59,915
Restricted Patient Safety Collaboratives	1,736,800	514,674
Unrestricted Patient Safety Collaboratives		267,365
Safe From Falls		292,589
<b>Total Expenses</b>	<b>3,669,500</b>	<b>3,432,430</b>
Net Income		138

## Attachments

### Attachment A: Summary of Strategic Agenda aims from the MPSC Strategic Plan

#### **Strategic Agenda #1. Measure MPSC success on vision**

**Goal:** The intent of Strategic Agenda #1 is to create state-wide accountability for safety within and across institutions, to track Maryland safety performance compared to other states, to demonstrate MPSC's impact through initiatives and programs, and to communicate that information through annual reports and meetings.

#### **Strategic Agenda #2. Position Patient & Family Voices to Influence Safety**

**Goal:** The intent of Strategic Agenda #2 is to engage patients and families in creating a safer healthcare system in Maryland. As consumers of healthcare, patients and families form the basis of the demand for quality healthcare services. MPSC's Patient and Family Voices strategy is designed to place patients and families as a compelling and effective driver of safety at the state and local institutional level.

#### **Strategic Agenda #3. Demonstrate economic impact & value of safety**

**Goal:** The intent of Strategy #3 is to demonstrate the value and economic impact of safety for patients and healthcare providers, as well as the value added by MPSC programs. MPSC recognizes that when an injury is avoided and quality is high, there are benefits, savings and efficiencies to the healthcare system and to patients. Strategy #3 also translates the call from legislators, regulators, and payers into a business case for the MPSC.

#### **Strategic Agenda #4. Enable partner institutions to create & spread excellence**

**Goal:** The intent of Strategic Agenda #4 is to identify safety excellence within institutions and to spread excellence across institutions and providers. MPSC is a recognized and valued convener in the Maryland healthcare community. As such, MPSC is able to bring individuals and organizations together to focus on common and critical issues that impact patient safety.

**Strategic Agenda #5. Support institutions in developing cultures of safety that spread and maintain safety excellence**

**Goal:** Strategy #5 will assist staff, Executives and Boards of healthcare institutions identify methods and approaches for creating cultures of safety. Leaders are integral to setting the tone for safety within their organizations and for moving from a culture of blame to one of safety. MPSC recognizes the need to partner with leaders to support them to create a “burning platform” for safety. To accomplish this, MPSC will work directly with Boards and executives of healthcare organizations.

**Strategic Agenda #6. Enable institutions to establish continuity of safe care across institutions**

**Goal:** The intent of Strategy #6 is to have institutions working together to make patient transitions safe. MPSC will enhance programming for long term and home care providers. Representatives from across the continuum of care have been engaged as members of the Board of Directors, program advisory groups, and other meetings and opportunities offered by MPSC. MPSC will continue to build on this foundation to bring focus to the quality and safety hazards that occur as patients interact with multiple providers.



## Attachment B: MPSC Announces Executive Director Retirement



For Further Information  
 Contact Patty Montone Charvat  
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### **Executive Director of Maryland Patient Safety Center Announces Retirement** *National search underway for successor to William Minogue, M.D.*

October 13, 2009—William Minogue, MD, FACP, Executive Director and President of the Maryland Patient Safety Center (MPSC), has announced his plan to retire in March 2010.

“Over the last six years it has been a tremendous privilege for me to serve as the steward of the vitally important Maryland Patient Safety Center,” said Dr. Minogue. “It has been rewarding to help guide this organization from a concept to a thriving Center of activity and energy committed to improving patient care.”

Dr. Minogue has been at the helm of the organization since it was established in 2004 as a joint venture between the Maryland Hospital Association (MHA) and the Delmarva Foundation. During his tenure as Executive Director, Dr. Minogue has overseen successful efforts to reduce complications among mothers and newborns, reduce health care infections, expand awareness and help contain MRSA, decrease injury from patient falls, and provide ongoing education to reduce medical errors and share patient safety best practices. Under his leadership, the Center’s comprehensive work to make Maryland health care the safest in the nation earned the national John M. Eisenberg Patient Safety Award in 2005.

“As a founding partner of the Maryland Patient Safety Center it has been rewarding to see the progress under Dr. Minogue’s leadership to make Maryland’s health care the safest in the nation. During his tenure, more than 11,000 health providers working in Maryland hospitals have been engaged in Patient Safety Center actions to create breakthrough improvement in health care quality,” said Carmela Coyle, MHA President & CEO. “He has effectively translated his commitment to safe patient care into action on behalf of all patients in Maryland.

“Innovation, concrete results, and strong vision are the contributions made by Bill Minogue to the patient safety movement in Maryland and beyond,” said Christian E. Jensen, MD, MPH, President and CEO,



Delmarva Foundation. “His collaborative spirit, commitment to excellence, and belief that together all providers and patients could make a difference has laid the foundation for a safer, more patient-centered health care environment in Maryland.”

Before joining the Maryland Patient Safety Center, Dr. Minogue served as the Senior Vice President of Medical Affairs and Interim President and CEO of Suburban Hospital Healthcare System, Bethesda, Maryland. He is board-certified in internal medicine and a Fellow in the American College of Physicians.

“It’s been a great pleasure to cap off my career working with so many people dedicated to delivering safer patient care,” said Dr. Minogue.

The Board of Directors of the Center has initiated a nationwide search for a new Executive Director and President. A copy of the position description is available at [www.marylandpatientsafety.org](http://www.marylandpatientsafety.org). Interested candidates can contact Meghan Altobello at [maltobello@mhaonline.org](mailto:maltobello@mhaonline.org).

**About the Maryland Patient Safety Center**

The Maryland Patient Safety Center, jointly supported by the Maryland Hospital Association and the Delmarva Foundation, brings together hospitals and health care providers to improve patient safety and health care quality for all Marylanders. The goal of the Patient Safety Center is to make Maryland’s health care the safest in the nation by focusing on the systems of care, reducing the occurrence of adverse events, and improving the culture of patient safety at Maryland health care facilities. For further information, visit [www.marylandpatientsafetycenter.org](http://www.marylandpatientsafetycenter.org)

## Attachment C: MPSC Announces New Executive Director



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### Chaulk Appointed Executive Director of Maryland Patient Safety Center

February 25, 2010 -- C. Patrick Chaulk, MD, MPH, FACP has been appointed the Executive Director of the Maryland Patient Safety Center (MPSC), effective late March 2010. He replaces William Minogue, MD, FACP, who is retiring after leading the Maryland Patient Safety Center since its 2004 inception.

"Dr. Chaulk brings broad knowledge and experience in health policy, patient safety and clinical care—and is familiar to the patient safety community, having served as a member of the MPSC Board of Directors for the past two years," said MPSC Chair Kathleen M. White, PhD, RN, CNAA, BC, Associate Professor and Director, Doctor of Nursing Practice Program, The Johns Hopkins University School of Nursing. "With his passion for patient safety and quality care, Dr. Chaulk, in partnership with the MPSC Board of Directors and team, will further strengthen the Center's national leadership in quality and patient safety innovation."

As Senior Associate for Health at the Annie E. Casey Foundation in Baltimore since 1994, Dr. Chaulk managed the foundation's grant portfolio in health and public health. He has a clinical background in pediatrics, providing primary care to children and adolescents in East Baltimore for eight years and has provided clinical services to clients of Baltimore City public health clinics.

"First, it was an honor to become a part of this unique organization as a member of the MPSC Board of Directors," said Dr. Chaulk. "Now, it is a privilege to be given the opportunity to help guide the Maryland Patient Safety Center on its continuing journey to make Maryland healthcare the safest in the nation."

A collaboration between The Maryland Hospital Association and Delmarva Foundation for Medical Care  
[www.marylandpatientsafety.org](http://www.marylandpatientsafety.org)

Dr. Chaulk has been teaching at The Johns Hospital School of Medicine and School of Public Health for 18 years. He is an Adjunct Associate Professor in the Department of Medicine in the Division of Infectious Disease and an Associate in the Department of Health Policy and Management at The Johns Hopkins Bloomberg School of Hygiene and Public Health.

Previously in his career, Dr. Chaulk has been Staff Director of the Governor's Commission on Health Care Policy and Financing for the Maryland Department of Health and Mental Hygiene; Health Planner for the Nebraska Department of Health; Legal Assistant for the General Counsel's Office in the U.S. Department of Commerce; and Congressional Staff to Congresswoman Virginia Smith in the late 1970s.

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**About the Maryland Patient Safety Center**

The Maryland Patient Safety Center, jointly supported by the Maryland Hospital Association and the Delmarva Foundation, brings together hospitals and health care providers to improve patient safety and health care quality for all Marylanders. The goal of the Patient Safety Center is to make Maryland's health care the safest in the nation by focusing on the systems of care, reducing the occurrence of adverse events, and improving the culture of patient safety at Maryland health care facilities. For further information, visit [www.marylandpatientsafetycenter.org](http://www.marylandpatientsafetycenter.org)

A collaboration between The Maryland Hospital Association and Delmarva Foundation for Medical Care  
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**Attachment D: Budget Narrative, MPSC FY2011 Budget****Maryland Patient Safety Center  
Overview of FY 2011 Budget**

The following summary provides an overview of the components included in MPSC's overall line item budget.

**Revenue:**

In FY 2011, Delmarva and MHA will each be contributing \$200,000 to support the activities of MPSC. In addition, the MPSC will ask Maryland hospitals to contribute an aggregate \$250,000. The MPSC is asking the HSCRC to continue its support of coordinated patient safety efforts in Maryland by contributing \$1,544,594 to support 45% of the overall MPSC FY 2011 budget. Although the percentage of funding requested is the same as FY 2010, this request represents a decrease of \$106,681 from FY 2010.

During the course of FY 2010, MPSC has struggled to find stable, long-term funding sources. As a result, MPSC has decided to implement a professional fund-raising campaign that is expected to generate \$10M in funding, which will strengthen MPSC's ability to provide a consistent programmatic agenda.

The MPSC and its partners have sought and obtained additional funding to maintain and expand the scope of the MPSC as follows:

- The Maryland Department of Health and Mental Hygiene (DHMH) will continue to partially fund the Perinatal Collaborative by providing revenue of \$250,000.
- American Recovery and Reinvestment Act stimulus funding of \$50,000 will partially support the Hand Hygiene initiative in this Fiscal Year.
- CareFirst continued support for the Neonatal collaborative in the amount of \$214,674.

Other sources of revenue include member fees from out-of-state facilities and income from vendors and sponsors at the Annual Conference. In addition, MPSC has implemented a policy that will charge participants for high-intensity process improvement educational sessions and small fee for attendance at the Annual Conference. In total, this revenue is anticipated to be \$460,000.

**Expense:**

In FY 2011, the MPSC is anticipating total expenses of \$3,432,430 to carry out the MPSC's agenda. Following is a detailed description for each budget line item.

**Administration (\$986,820)**

The core activities of MPSC Core Administration in FY2011 remain largely consistent with FY2010. In a few cases, funds were moved from other budget lines to the Core Administration budget because oversight of the budget is provided by Core Administration. In addition, funds were added for new salary costs and the hiring of a major fundraising firm. In FY2011, MPSC will focus on the following critical areas:

- Fund development
- Patient Safety Organization strategy & outreach
- Ensure quality programs and evaluation for sustainability
- Assess the cost benefit impact of key programs
- Publication of results in major journals and other dissemination activities
- Maintaining strategic relationships, planning for and promoting success and engaging in business development activities
- Strengthen relationships and partnerships in the local and national healthcare community
- Work with the Board Nominating Committee to assess Board membership needs, then identify and reach out to potential new Board members
- Convene the Patient Safety Officer's Forum, a bimonthly meeting of Patient Safety Officers
- Grow the MPSC customer base. Examples include individual hospitals, and, home health, long-term care facilities, assisted living facilities, community pharmacy chains, physician offices and ambulatory surgical centers.
- Identify new business opportunities (grants, solicitations, etc.)
- Identify awards and press opportunities for MPSC as well as for strategic partners
- Travel strategically to conferences and meetings as speakers and networkers
- Participate on advisory boards such as the Maryland Healthcare Commission's Healthcare Associated Infections Advisory Committee and Hospital Performance Evaluation Guide Advisory Committee

MPSC will engage a select number of external consultants to enhance and strengthen these efforts. Consultants will be engaged in the areas of:

- Ongoing development of the MPSC measurement strategy
- Communications consultant to support the newsletter, press releases, website, and other communication initiatives (continuation of support from previous years)
- A major fundraising firm to provide guidance on MPSC's fund development plan and help the Center meet a \$10 million goal

In addition to the planned staff adjustments, the Center's core administration budget reflects a new approach to management of the Patient Safety Officer's Forum and the Delmarva Core Administration activities. Both of these proposals and budgets reflect activities and responsibilities that functionally rest within MPSC core staff. The budgets for each have been added to the MPSC Core Administration budget, rather than as separate budgets as it has been handled in the past, so that the MPSC staff may assess the programs and work jointly with our partners to develop a guided implementation approach, including deliverables. Therefore, while the Core Administration budget is larger than previous year, it includes staffing commensurate with Center needs, a realignment of oversight of certain programs to Core Administration, and the addition of support for the fundraising initiative.

### **Public Website (\$15,591)**

MPSC's public website is a key communications tool for MPSC. In addition, it will play a critical role in the MPSC fundraising initiative and contributes to MPSC's strategic agenda to spread excellence. It also ensures an electronic avenue for design and distribution of MPSC information, tools, and resources.

### **Patient Safety Education Programming (\$747,775)**

Education programs will continue to focus on five major areas. 1) Patient safety tools training, including root cause analysis, and failure mode and effects analysis; 2) Management development, including department leader training, accountability matters, and creating safety partnerships with patients; 3) Process improvement, including LEAN workshops, Six Sigma Green Belt certification, and Six Sigma Black Belt certification; 4) Train the trainer, using the TeamSTEPPS framework; and, 5) Leadership issues. In addition, the MPSC will sponsor the annual patient safety conference.

MPSC and MHEI staff are working together on potential pricing approaches for educational programs. However, since many are so core to MPSC's mission, MPSC may charge a very minimal fee that would not discourage participation.

### **Adverse Event Information System and Data Analysis (\$388,505)**

This reflects ongoing project management support and oversight of the Adverse Event Reporting System. It reflects revision of the tool according to national standards being developed by AHRQ through the Patient Safety Organization network. It also incorporates the involvement of an Expert Panel and clinical and statistical experts to provide input on the system.

**MEDSAFE Medication Safety Initiative (\$73,076)**

This is a continuation of the 11<sup>th</sup> year of the survey and the 10<sup>th</sup> year of the MEDSAFE conference. This supports MPSC's Measurement Strategy within the MPSC Strategic Plan. It also includes ongoing participation from the Institute for Safe Medication Practices, a nationally and internationally-recognized expert in this area.

**TeamSTEPPS Training/Learning Network (\$86,120)**

From conversations with national and local experts, it is clear that many facilities have struggled with implementing TeamSTEPPS, whereas some have been very successful, including many in the Maryland Area. We believe that Maryland's success is in part because of how well TeamSTEPPS harmonizes with other MPSC programs.

MPSC believe that there is a strong need to support TeamSTEPPS in the region.

**Measurement (\$59,915)**

This supports the Measurement agenda of MPSC's Strategic Plan. MPSC recognizes that this effort is critical to demonstrating the state of safety in Maryland and the impact of the Center, including reporting back to the Legislature and other stakeholders. Report metrics and templates will be developed in the current FY2010. The work specified in this proposal will be to sustain and improve on that effort in FY2011.

**Patient Safety Collaborative Program (\$782,039)**

The Patient Safety Collaborative Programs focus on the implementation of evidence based practices and culture change in high hazard settings such as labor and delivery, Neonatal ICU's and a statewide Hand Hygiene initiative.

**Perinatal Learning Network (\$397,834):**

This reflects support and expansion of a keystone program of the Maryland Patient Safety Center launched in 2007. It also supports the Maryland Department of Health and Mental Hygiene's plan for reducing infant mortality in the state of Maryland.

**Neonatal Collaborative (\$212,674):**

This reflects transition to a Learning Network phase of the Neonatal Collaborative, launched in 2008, applying a model similar to that of the Perinatal Learning Network. It also ensures ongoing data collection of the key infection, clinical, and culture metrics.



Hand Hygiene Collaborative (\$169,531):

Participating organizations benefit by having access to:

- Standardized measures, tools, and data analysis;
- A data management system supplying organizational, provider, and unit level specific reports;
- A Web-based training program for unknown hand hygiene observers;
- Organizational and unit level audits to evaluate current hand hygiene efforts;
- Campaign branding materials; and
- A network of experts and best practices.

Primary implementation is being led by the MPSC, in partnership with Maryland Hospital Association and the Delmarva Foundation for Medical Care. The Johns Hopkins Center for Innovation in Quality Patient Care is providing data collection methods and analysis. The Maryland Health Care Commission's Hand Hygiene and Infection Prevention Subcommittee serves as the expert panel for this initiative. A Steering Committee provides program oversight.

**Safe From Falls (\$292,589)**

Falls continue to be identified as among the most frequent and highest-harm errors to occur in healthcare settings. There is great interest among the healthcare community to address patient falls. This represents the continuation and expansion of the SAFE from FALLS program to all hospitals and long-term care organizations in Maryland. It also builds on the program launched in FY2010 and the pilot initiated in FY 2009.

## Endnotes

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<sup>i</sup> “The Eleventh Annual HealthGrades Hospital Quality in America Study.” HealthGrades, Inc, October 2008.  
<http://www.healthgrades.com/media/DMS/pdf/HealthGradesEleventhAnnualHospitalQualityStudy2008.pdf>

<sup>ii</sup> “The Twelfth Annual HealthGrades Hospital Quality in America Study.” HealthGrades, Inc, October 2009.  
<http://www.healthgrades.com/media/DMS/pdf/HealthGradesTwelfthAnnualHospitalQualityStudy2009.pdf>

<sup>iii</sup> “HealthGrades Eighth Annual Hospital Quality and Clinical Excellence Study.” HealthGrades, Inc, January 2010.  
<http://www.healthgrades.com/media/DMS/pdf/HospitalQualityClinicalExcellenceStudy2010.pdf>

<sup>iv</sup> “The Eleventh Annual HealthGrades Hospital Quality in America Study.” HealthGrades, Inc, October 2008.  
<http://www.healthgrades.com/media/DMS/pdf/HealthGradesEleventhAnnualHospitalQualityStudy2008.pdf>

<sup>v</sup> “The Twelfth Annual HealthGrades Hospital Quality in America Study.” HealthGrades, Inc, October 2009.  
<http://www.healthgrades.com/media/DMS/pdf/HealthGradesTwelfthAnnualHospitalQualityStudy2009.pdf>

**Final Recommendation:**  
**HEALTH SERVICES COST REVIEW COMMISSION**  
**Nurse Support Program II**  
**FY 2011 COMPETITIVE INSTITUTIONAL GRANTS**

**May 5, 2010**

This final recommendation was approved by the Commission on  
May 5, 2010.

## **INTRODUCTION**

This paper presents the Evaluation Committee and HSCRC staff recommendations for the FY 2011 Nurse Support Program II (NSP II) Competitive Institutional Grants.

## **BACKGROUND**

At the May 4 2005 HSCRC public meeting, the Commission unanimously approved funding of 0.1% of regulated patient revenue annually over the next ten years for use in expanding the pool of bedside nurses in the State by increasing the number of nurse graduates. The catalyst for this program was the finding that in fiscal year 2004, nearly 1,900 eligible nursing students were denied admission to Maryland nursing schools due to insufficient nursing faculty. In accordance with the Board of Nursing (BON) guidelines, nursing faculty are required to possess a Master's degree in nursing. The primary goal of NSP II is to increase the number of bedside nurses in Maryland hospitals by expanding the capacity of Maryland nursing schools and, thereby, increasing the number of nurse graduates.

Following the approval of NSP II, the HSCRC assembled an advisory group of academicians, business leaders, and nurse executives. The advisory panel held a series of meetings with the Maryland Association of Nurse Executives and the deans and directors of the State's nursing schools. In response to the issues expressed by these two groups, the advisory panel crafted two distinct but complementary programs to address the multi-faceted issues surrounding the nursing faculty shortage: 1) Competitive Institutional Grants, and 2) Statewide Initiatives. The HSCRC also contracted with the Maryland Higher Education Commission (MHEC) to administer the NSP II grants because of its expertise in the administration of grants and scholarships.

In 2006, the Governor introduced legislation to create a nonlapsing fund, the Nurse Support Assistance Fund, so that funds collected through hospital rates under NSP II can be carried forward to cover awards in future years and could not be diverted to the State's general fund at the end of the fiscal year. The legislation also provided that a portion of the Competitive Institutional Grants and Statewide Initiatives be used to attract and retain minorities to nursing and nurse faculty careers.

The Competitive Institutional Grants are designed to increase the structural capacity of Maryland nursing schools through shared resources, innovative educational designs, and streamlining the process to produce additional nurse faculty.

The types of initiatives that qualify for Competitive Institutional Grants are as follows:

1. Initiatives to expand Maryland's nursing capacity through shared resources by developing the synergies between provider and educational institutions.
2. Initiatives to increase Maryland's nursing faculty by streamlining the attainment for Master of Science in Nursing (MSN) degrees to increase nursing faculty.
3. Initiatives to improve nursing student retention by providing tutorial support to decrease attrition and increase National Council Licensure Examination (NCLEX) pass rates.
4. Initiatives to expand the pipeline for nursing faculty by providing incentives for nurses with either an Associate Degree in Nursing (ADN) or a Bachelor of Science in Nursing (BSN) to pursue an MSN, thereby increasing the pool of qualified nursing faculty.
5. Initiatives to increase capacity statewide by providing support for innovative programs that have a statewide impact on the capacity to train nurses or nursing faculty.

The Competitive Institutional Grant process requires an Evaluation Committee to review, deliberate, and recommend programs for final approval by the HSCRC. The proposals based on the criteria set forth in the request for Applications (RFA), the comparative expected outcomes of each initiative, the geographic distribution across the State, and the priority attached to attracting and retaining minorities in nursing and nursing faculty careers. The Statewide Initiatives are evaluated less formally and are awarded based on the qualifications and credentials of each applicant.

### **First and Second Rounds of NSP II Competitive Grants**

During the first year, twenty-six proposals for the Competitive Institutional Grants were received. HSCRC staff, following an Evaluation Committee process, recommended seven programs, including 21 educational institutions and hospitals, for funding, which was approved by the Commission. MHEC staff conducted onsite visits to the organizations funded during the first year (FY 2007) of NSP II Competitive Institutional Grants and program directors summarized findings in an annual report<sup>1</sup>.

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<sup>1</sup> . Report is available on the HSCRC website ([www.hscrc.state.md.us](http://www.hscrc.state.md.us)) under HSCRC Initiatives Nurse Support Programs

For the FY 2008 NSP II Competitive Grants, twenty-three proposals were received. The Evaluation Committee comprised of nursing administrators and educators recommended by the industry, a former Commissioner, and MHEC and HSCRC staff, reviewed all of the proposals and unanimously agreed to recommend nine of the twenty-three proposals that were submitted for FY2008. These nine proposals included consortia representing 25 colleges and universities, health systems and hospitals. The programs addressed the multiple aspects of the nursing shortage by accelerating the number of ADN graduates, encouraging the pipeline of ADN to BSN students, and creating pathways to nursing faculty positions through accelerated MSN and doctoral programs.

### **Third Round and Fourth Round of NSP II Competitive Grants**

Four proposals were received for the FY 2009 NSP II Competitive Grant program. The Evaluation Committee recommended three of the four proposals. These three projects will bring a nursing program to a previously underserved county, will convert a doctoral nursing program to a hybrid distance learning format, and will bring graduate students into a certificate program in teaching nursing.

MHEC and the HSCRC staff took several steps to address the issues that may have contributed to the small number of proposals received last year for the NSP II Competitive Grant program. The deans and directors of the colleges and universities were surveyed to determine whether there were specific barriers, and many of their concerns were addressed. Additional technical assistance was provided last year to assist with proposal development. In addition, a survey was administered to solicit input on ways the program could be made more responsive and effective. Changes were made to the program as a result of this input, which led to many more proposal submissions for the fourth round.

For FY 2010, twenty-eight proposals were received. The review panel for this round consisted of eight reviewers, six of whom were returning evaluators. The Commission approved twenty-one of the twenty-eight proposals, which will result in an additional \$20M in NSPII expenditures over five years. These projects incorporate initiatives to increase capacity, improve retention, and add new technology for simulation and instruction. Two of the approved proposals will provide statewide training in simulation for faculty and laboratory staff.

## **Fifth Round of NSP II Competitive Grants**

Proposals for the fifth round of competitive funding for NSPII were due to the Maryland Higher Education Commission on March 1, 2010. Twelve proposals were received by that date. The proposals were mailed to the eight reviewers, all of whom were returning evaluators. This committee came together on March 26, 2010, and unanimously agreed to recommend eleven of the twelve proposals (attachment I). The proposals vary in their goals, with several that continue ongoing projects, several that support online education, two that lend support to new nursing programs, and two that will have Statewide ramifications in new faculty education and student retention. Twenty-four institutions in Maryland will be involved in the proposed three to five year grants.

### **RECOMMENDATIONS:**

1. Commission Staff recommends the eleven Competitive Institutional Grants listed in Attachment I be approved by the Commission for FY 2011 in the funding amounts stated.
2. Staff recommends that the 60- day comment rule be waived so that this recommendation may be considered for final approval during this May Commission meeting.

**NSPII FY11 PROPOSALS RECOMMENDED**

<b>NSP II</b>	<b>INSTITUTION</b>	<b>TITLE</b>	<b>PROJECT DIRECTOR</b>	<b>AFFILIATES</b>	<b>AMOUNT</b>	<b>DURATION</b>
NSP II-11-101	Allegany College	Creating an On-Line LPN to RN Program	Dennise Exstrom	none	\$ 846,140	5 years
NSP II-11-102	Anne Arundel Comm. College	New RN Delivery Model at AACC	Beth Anne Batturs	AAMC, BWMC, Doctors Comm. Hospital, Mercy Medical Center	\$ 861,369	5 years
NSP II-11-103	Comm. College of Baltimore Co	Maximizing Nursing Retention & Success	Dr. Estelle Young	Franklin Square, Towson University	\$ 1,186,118	4 years
NSP II-11-104	Frostburg State University	Improving Recruitment & Retention in Online RN to BSN Programs	Heather Gable	none	\$ 273,967	3 years
NSP II-11-105	Johns Hopkins University	Creating an On-Line Nurse Educator Certificate Option	Drs. Anne Belcher & Pamela Jeffries	none	\$ 458,870	3 years
NSP II-11-106	Johns Hopkins University	Increasing Bedside Nursing Capacity & Expertise: New Nurse Residency & Clinical Nurse Specialist Education	Elizabeth Jordan & Julie Stanik-Hutt	Bayview Med Ctr, Howard Co Hospital, Suburban Hospital, Johns Hopkins	\$ 1,227,470	5 years
NSP II-11-107	Montgomery College	NSP II Nursing Enrichment Program (NEP)	Barbara Nubile	none	\$ 403,182	3 years
NSP II-11-108	Morgan State University	Building Capacity and Diversity in Nursing Education: Launching a Doctoral Program in Nursing at an HBCU	Dr. Kathleen Galbraith	none	\$ 749,087	3 years
NSP II-11-109	Sojourner Douglass College	S-DC Model for Increasing Capacity & Student Success	Dr. Maija Anderson	none	\$ 1,520,046	5 years
NSP II-11-110	University of MD Baltimore	Meeting the Challenge: Statewide Initiatives for Nursing Faculty	Drs. Louise Jenkins & Carol O'Neil	none	\$ 108,000	1 year
NSP II-11-112	Washington Adventist University	Who Will Teach?	Dr. Gina Brown	Dimensions Health System, Doctors Comm. Hospital	\$ 998,196	5 years
	<b>TOTAL</b>				<b>\$ 8,632,445</b>	





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April 23, 2010

Mr. Oscar Ibarra  
Chief, Information Management and Program Administration  
Health Services Cost Review Commission  
4160 Patterson Avenue.  
Baltimore, Maryland 21215

Dear Mr. Ibarra

On behalf of MHA and its 67 members, we wish to express our support for approval of the Draft Recommendations for the Nurse Support Program II (NSP II) FY 2011 Competitive Institutional Grants.

Since its establishment in 2005, the NSP II program has made important contributions to addressing the nurse shortage by supporting faculty education and program development. Among its important initiatives are providing new options for RNs to complete MSN and doctoral degrees preparing them to teach and provide primary care. NSP II grants also have helped to increase enrollment and retention of first time nurse graduates.

Our schools and hospitals are beginning to experience the success of the program. New faculty have been educated and hired by schools around the state. New and existing faculty are being educated to use sophisticated patient simulation equipment that enables students to have opportunity to apply nursing knowledge and skill and make more efficient use of time spent in direct patient care "clinical." This in turn opens up more clinical time for additional students.

National interest in this unique program remains high. As you know, Dr. Janet Allen and I were recently approached by the National Council of State Boards of Nursing to write an article for their publication which targets Boards of Nursing across the country and we are working with Bob Murray and Steve Ports to develop it. In addition, NSP II Statewide Initiatives have provided tuition assistance and living expenses to a large number of students. Without the supplemental funds provided by NSP II, tuition assistance would surely have been less available in these difficult times.

Mr. Oscar Ibarra  
April 23, 2010

Page 2

The *Who Will Care?* (WWC) grant continues to build on NSP II success by providing complementary grants. WWC also provides technical assistance for grant writing, student retention strategies, and tracking grant outcomes. Taken together the two programs contribute importantly to meeting the growing statewide need for nurses anticipated over the next few years.

We look forward to working with you and the HSCRC commissioners and staff to assure continued full funding of this important initiative.

Sincerely,

A handwritten signature in cursive script that reads "Catherine Crowley". The signature is written in black ink and is positioned above the printed name.

Catherine Crowley