

Health Services Cost Review Commission

Final Recommendations on Handling Medicaid Day Limits and  
Uncompensated Care Policy and Regression  
Results for FY 2006

July 6, 2005

## **Introduction:**

The Commission's Uncompensated Care Policy, initially adopted in 1983, describes a two-part methodology for the determination of uncompensated care provisions. The first part is a statistical analysis (commonly referred to as "the regression") that determines a reasonable level of uncompensated care based on the broad characteristics of each hospital's actual uncompensated care experience and patient population. The second part is an algorithm that employs specific criteria to compare a hospital's actual uncompensated care experience, current uncompensated care provision in rates, and the reasonable (or "adjusted fitted" value) level of uncompensated care as determined by the statistical analysis. The outcome of this comparison is the uncompensated care provision to be prospectively built into rates. The rate change in any one year is limited to plus or minus 1.50%; this corridor is in place to protect hospitals from potentially large changes resulting from technical issues related to regression analysis. The new uncompensated care provisions will become effective on July 1, 2005 with the new charge per case targets.

Exhibit 1 in the Appendix contains data used in the regression model, Exhibit 2 in the Appendix provides policy results from the regression model and application of algorithm, and Exhibit 3 in the Appendix shows Uncompensated Care rate for FY 2006 by hospital and a brief discussion on methodology and application of algorithm is also included in the Appendix. Also included in the Appendix are the timetable for the proposed adjustments to UCC policy due to Medicaid day limits, and comment letters to Commission staff from Dr. Hal Cohen, representing CareFirst and Kaiser Permanente, and from the Maryland Hospital Association (MHA).

## **Staff Recommendations:**

In December 2003, the Commission approved the staff recommendation on the method for handling uncompensated care resulting from the imposition of day-limits in State Medicaid reimbursement to acute care hospitals. According to the approved recommendation, the following adjustments would be made to the UCC policy due to Medicaid day limits:

- For the April 2005 regression with FY04 data, subtract 80 percent of the day limit uncompensated care from reported UCC and run the regression as usual. In the application of the algorithm, use UCC in rates for FY04 prior to Medicaid day limit adjustment. In effect, the remaining 20 percent of the day limit UCC would be handled by the usual UCC policy.
- For the April 2006 regression with FY05 data (FY04 for December hospitals), subtract 80 percent of the day limit uncompensated care from reported UCC and run the regression as usual. In the application of the algorithm, use UCC in rates without day limits for prior year.

- For the April 2007 regression with FY06 data (FY05 for December hospitals), subtract 80 percent of the day limit uncompensated care from reported UCC and run the regression as usual. In the application of the algorithm, use UCC in rates without day limits for prior year.

At the time of the approval of the staff recommendation, the Medicaid day limits were to sunset by June 30, 2005 and staff anticipated that the April 2007 UCC regression and algorithm would be the last to reflect the day limit effects. However, as a cost containment measure, the Department of Health and Mental Hygiene decided to continue the imposition of day limits in State Medicaid reimbursement to acute care hospitals until June 30, 2006. Staff believes that this extension of the day limits negates some of the assumptions on which the approved staff recommendations were based.

In May 2005, staff proposed that the Commission rescind the above approved recommendations on the method for handling uncompensated care resulting from the imposition of day limits in State Medicaid reimbursement to acute care hospitals. Staff also proposed that alternative adjustments be made to the UCC policy for uncompensated care from Medicaid day limits.

Letters were received by Commission staff from Dr. Hal Cohen, representing CareFirst and Kaiser Permanente, and from the Maryland Hospital Association, commenting on the proposed adjustments. Staff conferred with Dr. Cohen and MHA representatives on three occasions to review and better understand their comments and recommendations.

Dr. Hal Cohen, on behalf of CareFirst and Kaiser Permanente, suggested an alternative method that would end separate consideration of day limits from overall uncompensated care. Because the system has overfunded uncompensated care for several years, the staff believes Dr. Cohen has a valid point. However, we did not recommend the proposed alternative for several reasons. First, a number of administrative difficulties arise under the CareFirst/Kaiser Permanente alternative. Second, the differences in overall system funding are small. This alternative funds only 0.12% less than the staff's proposal, leading us to conclude that the administrative burden is not justified. Furthermore, hospital budgets are set for the current fiscal year, and changes in policy – while small for the system – may be substantial for some hospitals.

The staff believes that Dr. Cohen has raised a number of valid points regarding the appropriate level of funding for system-wide uncompensated care. These issues deserve further discussion in a different forum. We expect that a broad discussion of funding for uncompensated care will be part of the next three-year rate deal for fiscal years 2007 through 2009.

In summary, staff is recommending that the Commission rescind the recommendations on the method for handling uncompensated care resulting from the imposition of day limits in State Medicaid reimbursement to acute care hospitals as approved in December 2003. Staff is also recommending that the following adjustments be made to the UCC policy for uncompensated care from Medicaid day limits:

- For fiscal year 2006 (using FY 2004 data for hospitals with fiscal years ending June 30, 2004 and CY 2003 data for hospitals with fiscal years ending December

31, 2003) subtract 50 percent of the day limits prospective UCC allowance provided in rates from the actual UCC amounts for hospitals with fiscal years ending June 30, 2004 (no adjustment needs to be made for hospitals with fiscal years ending December 31, 2003 because day limits were not in effect during the data period). Run the regression and algorithm as per the Commission's policy using UCC in rates for FY 2004 prior to Medicaid day limit adjustment. Add 100 percent of the day limits prospective UCC allowance to the policy results.

- That when data becomes available, the amounts provided prospectively for day limits uncompensated care shall be compared with the actual day limits uncompensated care experienced and the hospitals' Charge-Per-Case targets shall be adjusted appropriately for over or under payments.

The timetable for the proposed adjustments to UCC policy due to Medicaid day limits is included in the Appendix.

**Analysis of Data:**

A comparison of the data used to construct actual uncompensated care percentages for the regression analysis shows that total uncompensated care as a percentage of gross patient revenue decreased from 6.54% in FY 2003 to 6.37% in FY 2004. In recent years, the trend of uncompensated care as a percentage of gross patient revenue has been declining. The results of the regression analysis and the application of the algorithm are provided in Table 1.

<p align="center"><b>TABLE 1</b>  <b>Uncompensated Care Regression Model</b>  <b>Estimated Using Data for FY 2004 by Ordinary Least Squares</b>  <b>Dependent Variable: UCC = Uncompensated Care Expenses as Percent of Gross Patient Revenue</b></p>				
<p>R<sup>2</sup> = 0.3357            Sum of Squared Residuals = 0.00740            Regression F-statistic = 11.12</p>				
Variable	Coefficient	Standard Error	t-statistic	P-value
Constant	0.03134	0.01004	3.12	0.0032
POORSHR	0.11447	0.02937	3.90	0.0003
PNMERPD	0.04426	0.03963	1.12	0.2701
<p>Data Sources: Gross Patient Revenue and Uncompensated Care Expenses - HSCRC Annual Filing - RE Schedule Total, Medicaid, Self-pay and Charity, and Non-Medicare Admissions through ER Patient Days - HSCRC Discharge Abstract data</p>				

The explanatory variables are jointly significant, and the parameter estimates are of the expected sign. The variable PNMERPD is not statistically significant at the conventional level. However, this is not surprising given the adjustments made to the data. The standard deviation of the residuals is 1.78%. This number was used to compute adjustments to the fitted values. The input data used in the regression is presented for each hospital in Exhibit 1 in the Appendix.

Exhibit 2 in the Appendix shows the fitted, adjusted fitted, actual, and current uncompensated care rate for each hospital and the resulting change in each hospital's uncompensated care provision. The statewide amount of uncompensated care provided in rates without the impact of the Medicaid day limits was 6.70% while the actual uncompensated care experience of the hospitals subject to the Uncompensated Care Policy in FY 2004 was 6.11%<sup>1</sup>. The new regression analysis will result in an estimated 6.98% statewide uncompensated care in FY 2006, after the Medicaid day limit adjustment.

After adjusting the fitted value based on the size of the residual, no hospital had a change in its uncompensated care rate of more than plus or minus 1.50%. The distribution of changes in uncompensated care rates is provided in Table 2 below:

<b>TABLE 2</b>	
<b>Changes in UCC in Rates Under Current Policy</b>	
<b>Change</b>	<b>Number of Hospitals</b>
\$ 1.00	1
0.5 to 0.99	2
0.01 to 0.49	5
0.00	21
-0.49 to -0.01	11
-0.99 to -0.50	3
# -1.00	4

---

<sup>1</sup> It should be noted that this number will differ from the statewide uncompensated care number reported in the Disclosure Report because specialty hospitals, University of Maryland Hospital Cancer Center and MIEMSS are not included in the data used for the uncompensated care regression. It also excludes day limits uncompensated care.

## **APPENDIX**

**EXHIBIT 1**  
**Data Used in Regression for FY 2006**

Hospid	Hospital Name	Total Days	Medicaid Days	Non-Medicare Days through the ER	Self-Pay and Charity Days	UCC in Rates	UCC in Rates (Without MDL)	Medicaid Day Limit (MDL)	ROC Position	Regulated Profit	Gross Patient Revenue	Uncompensated Care (Without MDL)
210001	Washington County Hospital	71,213	7,077	15,966	3,416	5.85%	5.63%	0.22%	-4.89%	\$6,312,215	\$167,657,600	\$11,086,823
210002	Univ. of Maryland Medical System	139,337	47,833	48,746	6,380	10.54%	9.73%	0.81%	1.23%	\$42,617,446	\$593,407,000	\$34,372,636
210003	Prince Georges Hospital	83,983	32,241	26,102	5,898	15.95%	14.04%	1.91%	2.07%	\$6,718,454	\$211,137,700	\$26,506,827
210004	Holy Cross Hospital of Silver Spring	119,671	20,996	20,909	3,446	5.94%	5.51%	0.43%	1.12%	\$5,950,709	\$267,237,000	\$13,764,946
210005	Frederick Memorial Hospital	65,854	5,871	14,260	2,421	5.78%	5.58%	0.20%	1.03%	\$6,031,071	\$155,749,500	\$6,462,636
210006	Harford Memorial Hospital	22,109	2,391	6,821	599	6.86%	6.86%	0.53%	1.50%	\$2,140,995	\$58,368,700	\$5,852,100
210007	St. Josephs Hospital	96,007	6,667	13,555	1,283	3.06%	2.92%	0.14%	3.96%	\$14,669,589	\$273,064,400	\$5,871,671
210008	Mercy Medical Center, Inc.	68,508	20,799	13,930	4,901	9.11%	8.78%	0.33%	1.21%	\$12,194,465	\$241,280,800	\$21,195,252
210009	Johns Hopkins Hospital	265,886	74,843	64,544	2,440	8.14%	7.09%	1.05%	-2.13%	\$21,063,681	\$1,090,889,800	\$56,864,328
210010	Dorchester General Hospital	15,197	2,371	4,163	810	8.46%	7.78%	0.68%	-1.06%	(\$170,791)	\$35,416,000	\$3,424,286
210011	St. Agnes Hospital	85,854	13,310	21,326	7,011	6.81%	6.48%	0.33%	-0.17%	\$17,248,261	\$261,123,500	\$17,001,693
210012	Sinai Hospital	125,275	27,956	28,661	376	7.78%	7.23%	0.54%	1.16%	\$35,769,024	\$422,745,200	\$30,080,936
210013	Bon Secours Hospital	37,564	10,733	15,645	5,593	14.52%	13.53%	0.99%	0.90%	\$3,282,054	\$84,246,500	\$9,973,343
210015	Franklin Square Hospital	95,154	18,799	25,297	3,096	6.50%	6.24%	0.26%	0.15%	\$13,589,782	\$265,491,100	\$18,231,504
210016	Washington Adventist Hospital	89,425	17,055	22,875	2,867	7.22%	7.22%	0.48%	2.07%	\$10,781,034	\$211,623,242	\$14,115,034
210017	Garrett County Memorial Hospital	8,801	1,412	2,439	355	6.31%	6.30%	0.02%	-6.50%	(\$146,100)	\$27,000,800	\$1,249,340
210018	Montgomery General Hospital	42,206	4,077	12,648	3,204	5.90%	5.57%	0.34%	1.59%	\$313,285	\$94,804,400	\$5,586,829
210019	Peninsula Regional Medical Center	94,238	13,454	19,417	3,777	6.13%	5.92%	0.22%	-0.51%	\$7,164,951	\$244,030,100	\$12,800,451
210022	Suburban Hospital Association, Inc	59,845	3,965	17,669	1,554	5.66%	5.29%	0.37%	-1.39%	\$3,488,382	\$154,752,900	\$6,319,255
210023	Anne Arundel General Hospital	84,920	9,008	15,271	1,502	5.08%	4.91%	0.18%	-3.70%	\$27,566,890	\$255,636,900	\$11,053,188
210024	Union Memorial Hospital	79,420	14,542	20,936	2,759	7.14%	6.61%	0.53%	-0.42%	\$12,091,805	\$283,270,800	\$18,636,053
210025	The Memorial Hospital	39,443	4,569	6,887	917	4.56%	4.44%	0.13%	-1.67%	\$329,574	\$84,815,700	\$3,662,618
210027	Sacred Heart Hospital	38,074	3,004	8,098	1,562	5.30%	5.16%	0.14%	-5.01%	\$3,026,088	\$104,471,800	\$4,823,359
210028	St. Marys Hospital	23,361	3,343	6,824	871	5.46%	5.14%	0.32%	2.18%	\$2,434,669	\$72,385,400	\$3,953,606
210029	Johns Hopkins Bayview Med. Center	88,671	26,958	24,968	7,090	10.40%	9.58%	0.82%	-2.20%	\$3,326,515	\$333,347,200	\$30,901,610
210030	Kent & Queen Annes Hospital	15,174	1,494	1,877	509	6.12%	5.96%	0.16%	0.24%	\$958,761	\$44,983,400	\$3,183,513
210032	Union Hospital of Cecil County	31,443	5,518	9,376	1,927	7.27%	6.73%	0.54%	-2.67%	\$5,023,700	\$84,629,200	\$5,656,509
210033	Carroll County General Hospital	53,097	6,145	15,118	657	4.53%	4.10%	0.43%	-1.01%	\$3,968,573	\$117,609,800	\$5,360,005
210034	Harbor Hospital Center	50,929	12,992	13,529	1,628	7.98%	7.46%	0.52%	-3.26%	\$5,687,170	\$128,989,000	\$9,554,438
210035	Civista Medical Center	32,330	3,796	10,957	1,268	6.55%	6.33%	0.22%	0.07%	\$4,975,306	\$73,558,600	\$3,738,357
210037	Memorial Hospital at Easton	37,083	5,147	7,589	640	6.22%	6.04%	0.18%	-2.36%	(\$3,499,608)	\$92,855,500	\$5,312,473
210038	Maryland General Hospital	63,316	23,196	18,074	1,821	10.61%	9.57%	1.04%	-0.62%	\$4,856,335	\$143,676,100	\$11,111,956
210039	Calvert Memorial Hospital	28,125	3,434	7,998	1,140	6.54%	6.15%	0.39%	-5.91%	\$3,686,204	\$70,820,000	\$4,108,457
210040	Northwest Hospital Center, Inc.	52,747	6,956	13,766	750	5.76%	5.46%	0.30%	-0.26%	\$8,444,355	\$136,888,400	\$8,752,130
210043	North Arundel General Hospital	70,456	5,915	22,277	2,770	6.07%	5.51%	0.56%	2.39%	\$8,180,366	\$195,063,400	\$10,838,922
210044	Greater Baltimore Medical Center	94,319	3,950	16,991	800	2.20%	2.16%	0.04%	1.78%	\$12,768,688	\$276,070,000	\$7,259,686
210045	McCready Foundation, Inc.	2,105	116	389	116	8.70%	8.70%	0.00%	18.10%	(\$675,109)	\$11,932,400	\$912,046
210048	Howard County General Hospital	67,276	7,339	17,402	1,750	4.61%	4.43%	0.18%	-2.73%	\$2,624,494	\$153,545,800	\$6,057,152
210049	Upper Chesapeake Medical Center	42,583	4,432	11,468	240	5.55%	5.55%	0.10%	-1.17%	\$3,480,950	\$101,855,300	\$5,832,700
210051	Doctors Community Hospital	49,524	4,986	19,340	1,358	6.01%	5.60%	0.41%	-0.47%	\$2,520,200	\$125,678,000	\$7,918,717
210054	Southern Maryland Hospital	69,734	10,277	20,055	3,328	6.26%	6.26%	0.28%	0.58%	\$7,092,351	\$149,738,700	\$8,356,737
210055	Laurel Regional Hospital	37,523	5,436	11,640	1,912	8.03%	7.52%	0.51%	3.37%	(\$3,948,746)	\$76,426,300	\$6,870,235
210056	Good Samaritan Hospital	80,332	9,772	19,010	1,964	4.98%	4.49%	0.49%	0.37%	\$11,930,425	\$197,239,100	\$12,101,343
210057	Shady Grove Adventist Hospital	91,711	11,892	24,344	2,225	5.98%	5.98%	0.26%	3.23%	\$10,928,494	\$216,755,437	\$13,311,902
210058	James Lawrence Kernan Hospital	21,112	2,012	0	411	8.73%	7.12%	1.61%	5.14%	(\$1,095,675)	\$68,719,400	\$5,954,596
210060	Fort Washington Medical Center	11,201	457	4,248	522	7.20%	7.20%	0.22%	-0.09%	\$972,842	\$31,762,139	\$3,426,464
210061	Atlantic General Hospital	11,466	532	2,337	507	4.73%	4.71%	0.02%	2.05%	\$3,120,524	\$43,439,600	\$2,357,725
	STATE-WIDE	2,953,602	529,068	745,742	102,371	7.21%	6.70%	0.54%	0.00%	\$349,794,648	\$8,536,189,618	\$521,769,380

**EXHIBIT 2**

**Policy Results from the Regression, Application of Algorithm, and Adjustment for Medicaid Day Limit for FY 2006**

Hospid	Hospital Name	UCC in Rates	UCC in Rates (Without MDL)	ROC Position	Regulated Profit	Actual UCC (Without MDL)	Predicted UCC	Residual	Adjusted Residual	Adjusted Fitted	Preliminary Results	Preliminary Net Change	Policy Results	Change	Medicaid Day Limit Add-on	Policy Results Adjusted for Medicaid Day Limit Add-on
210001	Washington County Hospital	5.85%	5.63%	-4.89%	\$6,312,215	6.61%	5.81%	0.80%	0.80%	5.81%	5.81%	0.19%	5.81%	0.19%	0.22%	6.04%
210002	Univ. of Maryland Medical System	10.54%	9.73%	1.23%	\$42,617,446	5.79%	9.14%	-3.34%	-1.78%	7.58%	7.58%	-2.16%	8.23%	-1.50%	0.81%	9.04%
210003	Prince Georges Hospital	15.95%	14.04%	2.07%	\$6,718,454	12.55%	9.71%	2.85%	1.78%	10.77%	10.77%	-3.27%	12.54%	-1.50%	1.91%	14.45%
210004	Holy Cross Hospital of Silver Spring	5.94%	5.51%	1.12%	\$5,950,709	5.15%	6.24%	-1.09%	-0.99%	6.14%	5.51%	0.00%	5.51%	0.00%	0.43%	5.94%
210005	Frederick Memorial Hospital	5.78%	5.58%	1.03%	\$6,031,071	4.15%	5.53%	-1.38%	-1.14%	5.29%	5.29%	-0.30%	5.29%	-0.30%	0.20%	5.49%
210006	Harford Memorial Hospital	6.86%	6.86%	1.50%	\$2,140,995	10.03%	6.05%	3.98%	1.78%	8.24%	6.86%	0.00%	6.86%	0.00%	0.53%	7.39%
210007	St. Josephs Hospital	3.06%	2.92%	3.96%	\$14,669,589	2.15%	4.71%	-2.56%	-1.72%	3.87%	2.92%	0.00%	2.92%	0.00%	0.14%	3.06%
210008	Mercy Medical Center, Inc.	9.11%	8.78%	1.21%	\$12,194,465	8.78%	8.33%	0.46%	0.46%	8.33%	8.33%	-0.46%	8.33%	-0.46%	0.33%	8.66%
210009	Johns Hopkins Hospital	8.14%	7.09%	-2.13%	\$21,063,681	5.21%	7.54%	-2.32%	-1.61%	6.82%	6.82%	-0.27%	6.82%	-0.27%	1.05%	7.87%
210010	Dorchester General Hospital	8.46%	7.78%	-1.06%	(\$170,791)	9.67%	6.74%	2.93%	1.78%	7.89%	7.89%	0.11%	7.89%	0.11%	0.68%	8.57%
210011	St. Agnes Hospital	6.81%	6.48%	-0.17%	\$17,248,261	6.51%	6.94%	-0.43%	-0.43%	6.94%	6.51%	0.03%	6.51%	0.03%	0.33%	6.84%
210012	Sinai Hospital	7.78%	7.23%	1.16%	\$35,769,024	7.12%	6.74%	0.38%	0.38%	6.74%	6.74%	-0.50%	6.74%	-0.50%	0.54%	7.28%
210013	Bon Secours Hospital	14.52%	13.53%	0.90%	\$3,282,054	11.84%	9.95%	1.89%	1.39%	10.45%	10.45%	-3.08%	12.03%	-1.50%	0.99%	13.02%
210015	Franklin Square Hospital	6.50%	6.24%	0.15%	\$13,589,782	6.87%	6.94%	-0.08%	-0.08%	6.94%	6.24%	0.00%	6.24%	0.00%	0.26%	6.50%
210016	Washington Adventist Hospital	7.22%	7.22%	2.07%	\$10,781,034	6.67%	6.82%	-0.15%	-0.15%	6.82%	6.82%	-0.41%	6.82%	-0.41%	0.48%	7.30%
210017	Garrett County Memorial Hospital	6.31%	6.30%	-6.50%	(\$146,100)	4.63%	6.66%	-2.03%	-1.46%	6.09%	6.09%	-0.21%	6.09%	-0.21%	0.02%	6.10%
210018	Montgomery General Hospital	5.90%	5.90%	1.59%	\$313,285	5.89%	6.43%	-0.54%	-0.54%	6.43%	5.57%	0.00%	5.57%	0.00%	0.34%	5.90%
210019	Peninsula Regional Medical Center	6.13%	5.92%	-0.51%	\$7,164,951	5.25%	6.14%	-0.89%	-0.89%	6.14%	5.92%	0.00%	5.92%	0.00%	0.22%	6.13%
210022	Suburban Hospital Association, Inc	5.66%	5.29%	-1.39%	\$3,488,382	4.08%	5.50%	-1.41%	-1.15%	5.24%	5.24%	-0.06%	5.24%	-0.06%	0.37%	5.60%
210023	Anne Arundel General Hospital	5.08%	4.91%	-3.70%	\$27,566,890	4.32%	5.35%	-1.02%	-0.96%	5.28%	4.91%	0.00%	4.91%	0.00%	0.18%	5.08%
210024	Union Memorial Hospital	7.14%	6.61%	-0.42%	\$12,091,805	6.58%	6.79%	-0.22%	-0.22%	6.79%	6.61%	0.00%	6.61%	0.00%	0.53%	7.14%
210025	The Memorial Hospital	4.56%	4.44%	-1.67%	\$329,574	4.32%	5.50%	-1.18%	-1.04%	5.35%	4.44%	0.00%	4.44%	0.00%	0.13%	4.56%
210027	Sacred Heart Hospital	5.30%	5.16%	-5.01%	\$3,026,088	4.62%	5.45%	-0.83%	-0.83%	5.45%	5.16%	0.00%	5.16%	0.00%	0.14%	5.30%
210028	St. Marys Hospital	5.46%	5.14%	2.18%	\$2,434,669	5.46%	6.49%	-1.03%	-0.96%	6.42%	5.14%	0.00%	5.14%	0.00%	0.32%	5.46%
210029	Johns Hopkins Bayview Med. Center	10.40%	9.58%	-2.20%	\$3,326,515	9.27%	8.78%	0.49%	0.49%	8.78%	8.78%	-0.80%	8.78%	-0.80%	0.82%	9.60%
210030	Kent & Queen Annes Hospital	6.12%	5.96%	0.24%	\$958,761	7.08%	5.19%	1.88%	1.39%	5.69%	5.69%	-0.27%	5.69%	-0.27%	0.16%	5.85%
210032	Union Hospital of Cecil County	7.27%	6.73%	-2.67%	\$5,023,700	6.68%	7.16%	-0.48%	-0.48%	7.16%	6.73%	0.00%	6.73%	0.00%	0.54%	7.27%
210033	Carroll County General Hospital	4.53%	4.10%	-1.01%	\$3,968,573	4.56%	5.86%	-1.30%	-1.10%	5.65%	4.56%	0.46%	4.56%	0.46%	0.43%	4.99%
210034	Harbor Hospital Center	7.98%	7.46%	-3.26%	\$5,687,170	7.41%	7.60%	-0.19%	-0.19%	7.60%	7.46%	0.00%	7.46%	0.00%	0.52%	7.98%
210035	Civista Medical Center	6.55%	6.33%	0.07%	\$4,975,306	5.08%	6.43%	-1.34%	-1.12%	6.20%	6.20%	-0.13%	6.20%	-0.13%	0.22%	6.42%
210037	Memorial Hospital at Easton	6.22%	6.04%	-2.36%	(\$3,499,608)	5.72%	5.83%	-0.10%	-0.10%	5.83%	5.83%	-0.21%	5.83%	-0.21%	0.18%	6.01%
210038	Maryland General Hospital	10.61%	9.57%	-0.62%	\$4,856,335	7.73%	8.92%	-1.19%	-1.04%	8.77%	8.77%	-0.80%	8.77%	-0.80%	1.04%	9.81%
210039	Calvert Memorial Hospital	6.54%	6.15%	-5.91%	\$3,686,204	5.80%	6.25%	-0.45%	-0.45%	6.25%	6.15%	0.00%	6.15%	0.00%	0.39%	6.54%
210040	Northwest Hospital Center, Inc.	5.76%	5.46%	-0.26%	\$8,444,355	6.39%	5.96%	0.43%	0.43%	5.96%	5.96%	0.51%	5.96%	0.51%	0.30%	6.27%
210043	North Arundel General Hospital	6.07%	5.51%	2.39%	\$8,180,366	5.56%	5.94%	-0.39%	-0.39%	5.94%	5.51%	0.00%	5.51%	0.00%	0.56%	6.07%
210044	Greater Baltimore Medical Center	2.20%	2.16%	1.78%	\$12,768,688	2.63%	4.51%	-1.88%	-1.38%	4.01%	2.16%	0.00%	2.16%	0.00%	0.04%	2.20%
210045	McCreedy Foundation, Inc.	8.70%	8.70%	18.10%	(\$675,109)	7.64%	5.21%	2.43%	1.66%	5.98%	5.98%	-2.72%	7.20%	-1.50%	0.00%	7.20%
210048	Howard County General Hospital	4.61%	4.43%	-2.73%	\$2,624,494	3.94%	5.83%	-1.88%	-1.39%	5.33%	4.43%	0.00%	4.43%	0.00%	0.18%	4.61%
210049	Upper Chesapeake Medical Center	5.55%	5.55%	-1.17%	\$3,480,950	5.73%	5.58%	0.14%	0.14%	5.58%	5.58%	0.03%	5.58%	0.03%	0.10%	5.68%
210051	Doctors Community Hospital	6.01%	5.60%	-0.47%	\$2,520,200	6.30%	6.33%	-0.03%	-0.03%	6.33%	6.30%	0.70%	6.30%	0.70%	0.41%	6.71%
210054	Southern Maryland Hospital	6.26%	6.26%	0.58%	\$7,092,351	5.58%	6.64%	-1.06%	-0.98%	6.56%	6.26%	0.00%	6.26%	0.00%	0.28%	6.54%
210055	Laurel Regional Hospital	8.03%	7.52%	3.37%	(\$3,948,746)	8.99%	6.75%	2.24%	1.57%	7.42%	7.42%	-0.10%	7.42%	-0.10%	0.51%	7.93%
210056	Good Samaritan Hospital	4.98%	4.49%	0.37%	\$11,930,425	6.14%	5.85%	0.28%	0.28%	5.85%	4.49%	0.00%	4.49%	0.00%	0.49%	4.98%
210057	Shady Grove Adventist Hospital	5.98%	5.98%	3.23%	\$10,928,494	6.14%	6.07%	0.07%	0.07%	6.07%	5.98%	0.00%	5.98%	0.00%	0.26%	6.24%
210058	James Lawrence Kernan Hospital	8.73%	7.12%	5.14%	(\$1,095,675)	8.67%	4.45%	4.22%	1.78%	6.88%	6.88%	-0.24%	6.88%	-0.24%	1.61%	8.49%
210060	Fort Washington Medical Center	7.20%	7.20%	-0.09%	\$972,842	10.79%	5.81%	4.98%	1.78%	9.00%	9.00%	1.81%	8.70%	1.50%	0.22%	8.91%
210061	Atlantic General Hospital	4.73%	4.71%	2.05%	\$3,120,524	5.43%	5.07%	0.35%	0.35%	5.07%	4.71%	0.00%	4.71%	0.00%	0.02%	4.73%
	STATE-WIDE	7.21%	6.70%	0.00%	\$349,794,648	6.11%	6.82%	0.00%	0.00%	6.63%	6.33%	-0.37%	6.44%	-0.26%	0.54%	6.98%

## EXHIBIT 3

### Uncompensated Care Rate for FY 2006 by Hospital

Hospid	Hospital Name	UCC Rate for FY 2006
210001	Washington County Hospital	6.04%
210002	Univ. of Maryland Medical System	9.04%
210003	Prince Georges Hospital	14.45%
210004	Holy Cross Hospital of Silver Spring	5.94%
210005	Frederick Memorial Hospital	5.49%
210006	Harford Memorial Hospital	7.39%
210007	St. Josephs Hospital	3.06%
210008	Mercy Medical Center, Inc.	8.66%
210009	Johns Hopkins Hospital	7.87%
210010	Dorchester General Hospital	8.57%
210011	St. Agnes Hospital	6.84%
210012	Sinai Hospital	7.28%
210013	Bon Secours Hospital	13.02%
210015	Franklin Square Hospital	6.50%
210016	Washington Adventist Hospital	7.30%
210017	Garrett County Memorial Hospital	6.10%
210018	Montgomery General Hospital	5.90%
210019	Peninsula Regional Medical Center	6.13%
210022	Suburban Hospital Association, Inc	5.60%
210023	Anne Arundel General Hospital	5.08%
210024	Union Memorial Hospital	7.14%
210025	The Memorial Hospital	4.56%
210027	Sacred Heart Hospital	5.30%
210028	St. Marys Hospital	5.46%
210029	Johns Hopkins Bayview Med. Center	9.60%
210030	Kent & Queen Annes Hospital	5.85%
210032	Union Hospital of Cecil County	7.27%
210033	Carroll County General Hospital	4.99%
210034	Harbor Hospital Center	7.98%
210035	Civista Medical Center	6.42%
210037	Memorial Hospital at Easton	6.01%
210038	Maryland General Hospital	9.81%
210039	Calvert Memorial Hospital	6.54%
210040	Northwest Hospital Center, Inc.	6.27%
210043	North Arundel General Hospital	6.07%
210044	Greater Baltimore Medical Center	2.20%
210045	McCready Foundation, Inc.	7.20%
210048	Howard County General Hospital	4.61%
210049	Upper Cheseapeake Medical Center	5.68%
210051	Doctors Community Hospital	6.71%
210054	Southern Maryland Hospital	6.54%
210055	Laurel Regional Hospital	7.93%
210056	Good Samaritan Hospital	4.98%
210057	Shady Grove Adventist Hospital	6.24%
210058	James Lawrence Kernan Hospital	8.49%
210060	Fort Washington Medical Center	8.91%
210061	Atlantic General Hospital	4.73%
	STATE-WIDE	6.98%

## Description of Model:

Since the inception of the Uncompensated Care Policy, the HSCRC has developed an extensive list of variables that, at an intuitive level, are anticipated to contribute to the explanation of the variation in uncompensated care rates across the state. While the statistical models developed from year to year incorporated different variables from the constantly growing list, two variables consistently appeared in the models over time and contribute the most to explaining the variation in uncompensated care. The two variables are a measure of hospitals' Medicaid business and a measure of non-Medicare cases admitted through the emergency room. These variables were originally included in the model because they were expected to be related to uncompensated care and to have some explanatory power with respect to the behavior of uncompensated care.<sup>2</sup> In June 2002, the Commission adopted Staff recommendation to replace the Medicaid variable in the regression with a new variable. The new variable is self-pay +charity + Medicaid days as a share of total inpatient days.

The model estimated and used to determine reasonable levels of uncompensated care is:

$$UCC_i = \beta_0 + \beta_1 POORSHR_i + \beta_2 PNMERPD_i + \epsilon_i$$

where:

$UCC_i$  = uncompensated care percentage at hospital<sub>i</sub> =  $\text{Baddebt}_i + \text{Charity}_i / \text{Gross Patient revenue}_i$

$POORSHR_i$  = percent of Self-Pay, Charity and Medicaid Patient days in hospital<sub>i</sub>  
=  $(\text{Self-Pay} + \text{Charity} + \text{Medicaid Patient days}_i) / \text{Total Patient days}_i$ ;

and

$PNMERPD_i$  = percent of patient days from non-Medicare admissions through the ER  
in hospital<sub>i</sub> =  $\text{non-Medicare admissions through ER Patient days}_i / \text{Total Patient days}_i$ .

## Application of Algorithm:

Commission policy requires that the fitted values used in the algorithm to determine uncompensated care rates be adjusted based on the size of the residual. The fitted values are adjusted according to the following criteria:

---

<sup>2</sup> More specifically, while Medicaid patients are insured and therefore should not contribute a great deal to uncompensated care, they serve as a proxy for the poor and uninsured and ought to be able to help explain the behavior of uncompensated care. Non-Medicare patients admitted through the emergency room are expected to be related to uncompensated care because patients that appear at the emergency room tend to be uninsured or underinsured and therefore tend to generate uncompensated care.

1. If the residual is less than plus or minus 0.50 times the standard deviation, then no adjustment is made to the residual;
2. If the residual (plus or minus) is in the range of 0.50 to 1.50 times the standard deviation, then the residual is adjusted by 50% of the difference between the residual and 0.5 times the standard deviation; and
3. If the residual (plus or minus) is greater than 1.50 times the standard deviation, the residual is adjusted by 100% of the difference between the residual and the standard deviation.

These adjusted residuals are used in setting the level of uncompensated care in rates. The algorithm is completed as follows:

- For hospitals below the median Reasonableness of Charges (ROC) position or above the median but with negative regulated profits, a two-part process determines the level of uncompensated care in rates. First, actual uncompensated care is compared to the level of uncompensated care currently in rates, and the higher (or maximum) of the two is selected. Second, this maximum is compared to the adjusted fitted value derived from the regression as described above. The lower of these two numbers is selected.
- For hospitals above the median ROC position and with positive profits, the hospital receives the lower of the adjusted fitted value or the amount currently in rates.
- The change in the amount of uncompensated care built into rates is limited to 1.5 percentage points in either direction.

<b>Timetable for Adjustments to the UCC Policy due to Medicaid Day Limits</b>					
<b>Date of HSCRC Action</b>	<b>Data Period</b>		<b>Rate Period</b>	<b>Uncompensated Care in Rates</b>	
	<b>Year Ending June</b>	<b>Year Ending December</b>		<b>Hospitals with Fiscal Years Ending June</b>	<b>Hospitals with Fiscal Years Ending December</b>
July 1, 2005	2004	2003	7/1/05 - 6/30/06	Result of Regression and Algorithm after prior adjustment for 6 months of MDL from Actual UCC plus 80% of Day Limit	Result of Regression and Algorithm plus 80% of Day Limit
July 1, 2006	2005	2004	7/1/06 - 6/30/07	Result of Regression and Algorithm minus 80% of Day Limit	Result of Regression and Algorithm minus 80% of Day Limit
July 1, 2007	2006	2005	7/1/07 - 6/30/08	Result of Regression and Algorithm minus 80% of Day Limit	Result of Regression and Algorithm minus 80% of Day Limit
July 1, 2008	2007	2006	7/1/08 - 6/30/09	Result of Regression and Algorithm	Result of Regression and Algorithm after prior adjustment for 6 months of MDL from Actual UCC
July 1, 2009	2008	2007	7/1/09 - 6/30/10	Result of Regression and Algorithm	Result of Regression and Algorithm

This timetable assumes that the imposition of medicaid day limits will sunset June 30, 2006.