DRAFT: Report on Uncompensated Care Policy Recommendations

Health Services Cost Review Commission
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These draft recommendations are for Commission consideration at the May 2014 Public Commission Meeting. No action is required. Public comments should be sent to Dennis Phelps dennis.phelps@maryland.gov. For full consideration, comments must be received by June 2, 2013.

DRAFT: Report on Uncompensated Care Policy Recommendation

Overview

Since 1984, The HSCRC has recognized the cost of uncompensated care (charity care and bad debt) within Maryland's unique hospital rate setting system. Through this provision, patients who cannot pay for care are still able to access hospital services, and hospitals are credited for a reasonable level of charity care or bad debt provided to those patients.

Under the current HSCRC policy, uncompensated care is funded by a statewide pooling system in which regulated Maryland hospitals draw funds from the pool if they experience a greater-than-average level of uncompensated care and pay into the pool if they experience a less-than-average level of uncompensated care. This ensures that the cost of uncompensated care is shared equally across all of the hospitals within the system.

The HSCRC prospectively calculates the rate of uncompensated care at each regulated Maryland hospital by combining historical uncompensated care rates with predictions from a regression model.

The HSCRC must determine the total amount of uncompensated care that will be placed in hospital rates for FY 2015 and the amount of funding that will be made available for the uncompensated care pool. Additionally, HSCRC must review the methodology for distributing these funds among hospitals.

Between 2012 and 2013 the rate of uncompensated care in Maryland increased from 6.85 percent to 7.23 percent. A rate increase is necessary to provide adequate funding for this growth. However, the Medicaid expansion under the Affordable Care Act (ACA) will likely contribute to an overall decrease in uncompensated care as approximately 164,000 Maryland Residents have enrolled in Medicaid under the expansion as of March 31, 2014 and it is likely that a significant portion of this population contributed to uncompensated care utilization prior to their Medicaid enrollment.

This expansion of Medicaid has additional bearing as the HSCRC uses Medicaid enrollment as a predictive variable in the current uncompensated care regression model. Historically, HSCRC has used the level of Medicaid coverage to predict the likelihood of uncompensated care. However, as Medicaid coverage expands, it may no longer be a

good predictor of uncompensated care. As a result, the HSCRC must evaluate the regression model to ensure that the explanatory variables used in the model are appropriate for predicting uncompensated care rates at regulated Maryland hospitals given the changing characteristics of the uninsured populations.

This report discusses the factors influencing uncompensated care rates in Maryland and makes recommendations to both adjust the total funds available in the uncompensated care pool and to alter the regression model used to allocate those funds in light of the recent increase in uncompensated care and the Medicaid expansion. These policy changes are necessary to recognize an appropriate level of uncompensated care at hospitals in the State and share the cost of that care equally across all regulated Maryland hospitals.
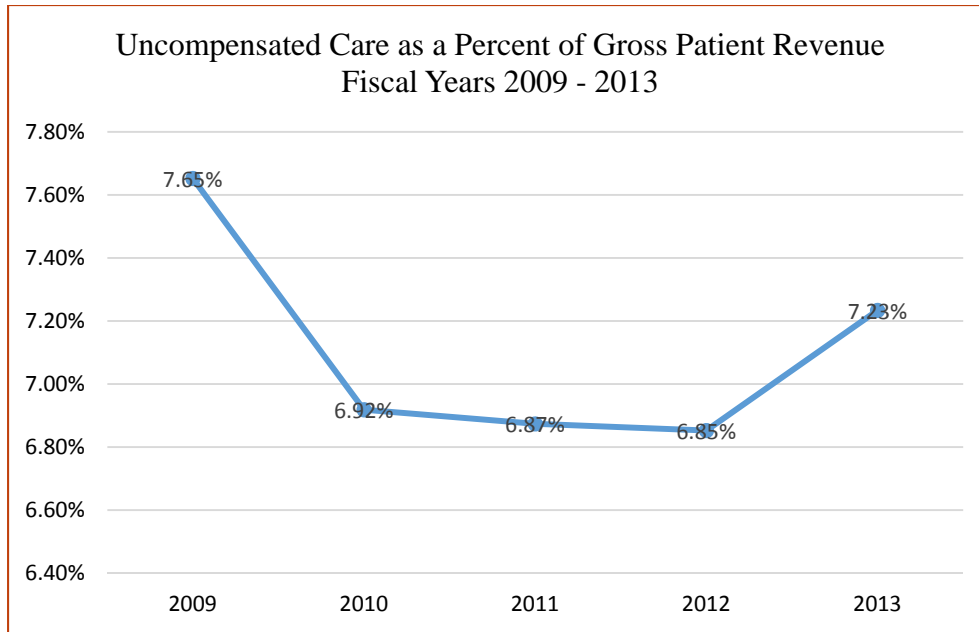
STAKEHOLDER INPUT

The draft staff report has been reviewed with the Payment Models Workgroup and staff has attempted to incorporate Workgroup comments in this staff report. As discussed later in this draft report, staff is continuing to evaluate data submitted by hospitals regarding payments received for PAC patients by hospitals. There may be additional comments on this issue and modifications to the draft report based on the outcome of this analysis.

BACKGROUND

Recent Trends in Uncompensated Care

The chart below shows the actual total uncompensated care rate for all regulated Maryland hospitals between FY 2009 and FY 2013. Uncompensated care levels dropped between FY 2009 and FY 2010, but remained relatively steady with only a slight decline from FY 2010 to FY 2012. Most recently between FY 2012 and FY 2013 there was a 0.38 percentage point increase in total uncompensated care rate for all regulated Maryland hospitals.

Uncompensated Care as a Percent of Gross Patient Revenue
Fiscal Years 2009 - 2013

Year	Value
2009	7.65%
2010	6.92%
2011	6.87%
2012	6.85%
2013	7.23%

This rise in the level of uncompensated care may be attributed to several factors. The increased prevalence of higher deductibles, coinsurances, and copays among commercial insurance plans may have contributed to increased uncompensated care. Also, the proportion of hospital services that are outpatient has increased, and the patient responsibility portion of outpatient bills is typically higher, resulting in higher levels of uncompensated care. Furthermore, the impact of undocumented immigrant populations on uncompensated care is not well understood and may be contributing to increases for particular hospitals.

Current Uncompensated Care Policy

The current uncompensated care policy was adopted by the Commission in September, 2010. The policy creates a statewide pool built into hospital rates. Hospitals either pay into or withdraw from the pool depending on each hospital's prospectively calculated rate of uncompensated care. Each year, the total amount of funds available in the pool is determined by the total percent of gross patient revenue due to uncompensated care experienced in regulated Maryland hospitals during the previous year. For example, if in 2013 the actual total cost of uncompensated care were 5 percent, then in 2014 the pool would prospectively be set at 5 percent of the 2014 gross patient revenue.

The prospective uncompensated care percentage for each hospital is computed by taking the average actual percent of uncompensated care experienced by the hospital over the past three years and combining that "actual" value with a predicted value of

uncompensated care determined by a regression model. The annual uncompensated care percentage for each hospital is weighted equally between the three-year average and the predicted regression value as shown in the formula below.

$$\frac{Average\ UCC\ Rate\ for\ Past\ 3\ Years + Regression\ Value}{2}$$
$$= Annual\ UCC\ Percentage$$

Once the annual uncompensated care percentages are calculated for each hospital, they are adjusted so that the pooling system will remain revenue neutral. Appendix I illustrates this calculation.

The regression model used to determine the FY 2014 predicted uncompensated care percentage for each hospital relied upon four explanatory variables:
- The proportion of a hospitals total charges from inpatient non-Medicare admissions through the emergency room
- The proportion of a hospitals total charges from inpatient Medicaid, self-pay, and charity cases
- The proportion of a hospitals total charges from outpatient non-Medicare emergency department charges
- The proportion of a hospitals total charges from outpatient Medicaid, self-pay, and charity visits

This model was applied to data from the three-year historical period used to generate the average actual uncompensated care percentage described above. Three hospitals, Levindale Hospital, the University of Maryland Rehabilitation & Orthopedic Institute (formerly Kernan Hospital), and the Shock Trauma Center are excluded from the regression calculation. Under the current model, the HSCRC set the annual uncompensated care percentages for these hospitals at their actual average uncompensated care percentage for the previous three years.

Indefinite Suspension of the Charity Care Multiplier

For FY 2014, HSCRC suspended the charity care multiplier it was using as part of the uncompensated care policy because HSCRC staff lacked confidence in the accuracy and consistency in the distinction between charity care and bad debts applied by hospitals.

Enrollment under the Affordable Care Act (ACA)

Expanded coverage under the ACA will reduce uncompensated care. A primary goal of the ACA was to expand coverage to uninsured or underinsured individuals. Counting both individuals who have gained Medicaid coverage and those who have selected a private health plan through Maryland's insurance exchange, 295,077 Marylanders enrolled in coverage as of March 31. This includes coverage of 232,075 Marylanders through Medicaid and 63,002 through private health plans.

HSCRC staff is focusing its efforts on new categories of Medicaid enrollees, comprised of approximately 164,000 individuals. The chart below depicts the newly covered categories of Medicaid enrollees, and their total enrollment as of March 31, 2014:

Summary of New Coverage Enrollment	
Coverage Group	**Total**
Former Primary Adult Care	95,615
Expansion Childless Adults	66,539
Expansion Parents	1,904
Grand Total	**164,058**

The largest category of expansion enrollees is the population formerly under Maryland's Primary Adult Care (PAC) Program. PAC was a health care program for low-income adults aged 19 and older who did not qualify for full Medicaid benefits, but fell below a specified maximum income. PAC offered limited health care coverage including the cost of primary care, family planning, prescriptions, mental health care and addiction services, and outpatient hospital emergency room services. However, PAC did not reimburse hospitals for inpatient or outpatient care beyond the emergency room. When PAC-enrolled individuals received hospital care, hospitals would generally not be reimbursed for the services provided, and the hospitals would treat the cost of these services as uncompensated care. Effective January 1, 2014, this category of enrollees was converted to full benefit coverage under Medicaid. Maryland hospitals will see resulting changes to uncompensated care now that former PAC enrollees have access to full packages of services, including hospital care.

Unlike the PAC enrollees who had limited benefits under Medicaid but were already enrolled, less is known about the other new categories of Medicaid enrollees, and it is likely that some of these individuals had some insurance coverage in the past. As a result, it will take more time to determine the impact of these new Medicaid enrollees on uncompensated care.

Similarly, some of the new private enrollees likely had previous coverage in the past. Additionally, these private enrollees must pay their first premium before obtaining coverage and the deductibles and coinsurances associated with these insurance plans may be high. It will be some time before the impact of these individuals on uncompensated care can be determined.

ANALYSIS

Determining Appropriate Level of Uncompensated Care Funding in Rates

The HSCRC must determine the percentage of uncompensated care to recognize in hospitals' rates to enable funding of the uncompensated care pool.

The HSCRC staff recommends a prospective yet conservative approach to determining the total funding for uncompensated care at the beginning of FY 2015 by considering two factors: 1) the increase in uncompensated care between FY 2012 and FY 2013; and 2) the expected decrease in uncompensated care based on expansion of Medicaid coverage to the PAC population.

In the future, HSCRC may need to propose further UCC adjustments to account for variations in UCC that are not captured by the PAC population. This may include a variation due to other new Medicaid or exchange enrollees, changes in undocumented immigrant populations, or increased prevalence of high deductible, high copay insurance plans. HSCRC staff will work with Chesapeake Regional Information System for our Patients (CRISP), State Medicaid officials, and hospitals to assess these trends in tandem. If uncompensated care continues to decline beyond the predicted levels and an adjustment is needed prior to the July 1, 2015 update, HSCRC may consider a mid-year reduction to rates to take into account actual and projected changes in uncompensated care.

Increase in Uncompensated Care between FY 2012 and FY 2013

As stated above, uncompensated care increased by 0.38 percentage points between FY 2012 and FY 2013. The HSCRC should take this increase into consideration when determining the final amount of funding to be allocated in hospital rates for uncompensated care.

Enrollment of the Primary Adult Care Population

HSCRC staff has focused initial efforts on quantifying the projected impact of expanded coverage for Maryland's PAC enrollees. Staff focused on this population because it is unlikely that many of these individuals had a form of coverage for hospital bills prior to Medicaid enrollment and HSCRC has collected data on this population's health care utilization for several years.

The HSCRC staff worked with State officials and CRISP to perform a PAC analysis in which Medicaid enrollment was linked to hospital inpatient and outpatient charges using the CRISP Master Patient Index to obtain the hospital utilization levels of PAC enrollees in the year prior to their enrollment in full Medicaid coverage. A more detailed report on the PAC analysis is available on the HSCRC website:

http://hscrc.maryland.gov/documents/md-maphs/wg-meet/pay/2014-03-20/UCC-and-PAC-analysis-3.16.14-final.docx

The PAC analysis concluded that in FY 2013 the PAC population made up an estimated 15 percent of all uncompensated care in Maryland, approximately 1.08 percent of total gross patient revenue. The table below details PAC enrollee hospital utilization in 2013.

Table: PAC Enrollees Who Received Hospital Care, FY 2013

PAC Enrollees Who Received Hospital Care in FY 2013	
Hospital Inpatient	
Inpatient Stays	14,008
Unique Patients	11,784
Charges for Inpatient Stays	$127.2 million
Hospital Outpatient	
Outpatient Visits	42,839
Unique Patients	19,110
Charges for Outpatient Visits	$37.2 million

Source: CRISP analysis of HSCRC case mix data (7/1/2012-6/30/2013) and Maryland Medicaid MMIS enrollment files (2011-2013) provided by the Hilltop Institute. March 2014.

Note: As PAC reimbursed for emergency department services, the analysis removed emergency department visits from the other outpatient services and totals provided above.

The HSCRC can use the FY 2013 hospital utilization data of the PAC population prior to enrollment to adjust for the total uncompensated care funding for FY 2015 because this population is now fully insured for hospital services.

The HSCRC staff recommends using the actual PAC charges, adjusted for hospital collections, converted to a percent to reduce the provision for UCC in hospitals' rates. HSCRC staff is reviewing the accuracy of the PAC data and hospitals are verifying any accounts where partial or full payment has been received. At this time, it appears that an average of 10% of PAC has been paid by some source. HSCRC staff is continuing to evaluate the data. This may reduce the related UCC adjustment by a similar percentage unless these items are replaced with other comparable PAC UCC savings relative to enrollees where HSCRC staff has not counted the full UCC incurred in FY 2013. HSCRC staff did not yet count savings for any individuals enrolled after July 1, 2013, even if those individuals were provided charity care during FY 2013. Likewise, enrollees first enrolled in the second half of FY 13 may be missing up to one-half year of encounter data that increased charity care during FY 13.

The estimate for the reduction in UCC without any offsets for collections is 1.08 percent. It should be noted that Medicaid receives a differential of 6 percent, and therefore approximately 94 percent of the reduction of the uncompensated care will be recognized in hospital rates due to a corresponding increase that will occur in the mark up relative to the increase in the differential that will result from the higher proportion of Medicaid revenues.

As a result of these two changes, the UCC in hospitals' rates would be set at 6.16 percent, pending final review and determination of the PAC collections impact:

In rates for FY 2014	6.86%
Increase for change in FY 2013	0.38%
Decrease for PAC	1.08%
Net.	6.16%

The HSCRC staff will need to continue to monitor the reductions in uncompensated care due to expansion of coverage and at the same time monitor the possible rise in uncompensated care due to increasing deductibles and coinsurances among commercial populations as well as other factors affecting collections. As a result, there may be

additional reductions in uncompensated care for FY 2016 and if significant, the HSCRC staff may propose applying additional reductions during FY 2015.

Determining the Distribution of Uncompensated Care Funds to Each Regulated Maryland Hospital

The HSCRC staff has evaluated the current regression model together with several new models. The staff recommends replacing the current model based on the conclusion of its analyses that are more fully described below.

As discussed in the background section of this report, the HSCRC has relied on a three-year average of actual uncompensated care rates and a predicted uncompensated care rate calculated using a regression to determine which hospitals withdraw funds from the uncompensated care pool and which hospitals pay into it.

The regression model currently used by the HSCRC must be reevaluated in light of the Medicaid Expansion and may no longer be the best model for predicting uncompensated care rates for regulated Maryland hospitals. HSCRC staff prepared several analyses to evaluate the current regression model and to consider new variables and models that might be applied.

Evaluation of the Current Uncompensated Care Regression

The current regression model relies on four explanatory variables to predict the rate of uncompensated care at each hospital:
1. The proportion of a hospital's total charges from inpatient non-Medicare admissions through the emergency room
2. The proportion of a hospital's total charges from inpatient Medicaid, self-pay, and charity cases
3. The proportion of a hospital's total charges from outpatient non-Medicare emergency department charges
4. The proportion of a hospital's total charges from outpatient Medicaid, self-pay, and charity visits

The current regression model was applied to FY 2011, FY 2012, and FY 2013 data in order to calculate the predicted uncompensated care rate for each hospital for FY 2015. Overall, the model had good explanatory results, but the explanatory variable "proportion of a hospital's total charges from inpatient non-Medicare admissions through the emergency room" was not statistically significant. Appendix II shows the results of the current regression.

The HSCRC staff analyzed more than forty possible variables and identified five statistically significant variables that produced a better model for predicting uncompensated care percentages.

Five Statistically Significant Variables Model
HSCRC staff created a Five Statistically Significant Variables Model using the following explanatory variables:
1. The proportion of a hospital's total charges from inpatient Medicaid admissions through the emergency room
2. The proportion of a hospital's total charges from inpatient commercial insurance cases
3. The proportion of a hospital's total charges from inpatient self-pay and charity cases
4. The proportion of hospital's total charges from outpatient self-pay and charity emergency department charges
5. The proportion of a hospital's total charges from inpatient self-pay and charity admission through the emergency room from the 80th percentile of Medicaid undocumented immigrant enrollment zip codes

Appendix III shows the results of the Five Statistically Significant Variable regression.

Similar to the current model that combines the regression with average actual values from the past three years, this regression is combined with actual values from the past two years. This was done so that the model would recognize the recent rise in uncompensated care in the State and to prepare for additional changes that will need to be made next year to adjust actual values for reductions resulting from PAC enrollment and other actions. Again, Levindale Hospital, the University of Maryland Rehabilitation & Orthopedic Institute (formerly Kernan Hospital) and the Shock Trauma Center are excluded from the regression calculation under this new model. And instead the annual uncompensated care percentages for these hospitals at their actual average uncompensated care percentage for the previous two years.

This model fit the observed data more closely than the current model, increasing the adjusted R-square value from 0.6705 under the current model to 0.7783 under the Five Statistically Significant Variables Model. Also the predicted uncompensated care rates from this model for FY 2013 more closely mirrored the actual rates of uncompensated care experienced by hospitals in FY 2013. There is some concern about separating Medicaid and self pay revenue sources, as done in this model due to concerns about possible classification differences in Medicaid pending. Consistency in this area should

improve with new instructions from HSCRC to facilitate more consistent classification in 2014 and beyond. In spite of this potential issue

The HSCRC included the fifth variable: the proportion of a hospitals total charges from inpatient self-pay and charity admission through the emergency room from the zip codes that represented the 80th percentile of Medicaid undocumented immigrant enrollment zip codes in order to begin to address the concerns regarding the impact of undocumented immigrants on uncompensated care levels. This observation is important because this population of patients will not gain coverage under the ACA. HSCRC staff was able to construct a variable using zip codes with temporary Medicaid enrollment for undocumented immigrants with pregnancy or emergency room coverage.

The Five Statistically Significant Variables Model should be used in place of the current regression model for predicting the uncompensated care rates for regulated Maryland Hospitals. This model fits the data more closely than the current model and all of the explanatory variables are statistically significant. For FY 2016 and beyond, additional analysis should be conducted on other possible explanatory variables that may improve the model further and capture the continuing drivers of uncompensated care taking into account the impact of the ACA.

Continuing Suspension of Charity Care Multiplier

HSCRC staff recommend the suspension of the charity care multiplier indefinitely. The data have not improved and furthermore the expansion of coverage under the ACA will likely reduce charity care. This policy can be reevaluated in two to three years after the expansion and implementation of ACA is complete.

Evaluation of Continuing Sources of Uncompensated Care

With expanded coverage under ACA, HSCRC will need to carefully evaluate continuing sources of uncompensated care. The Payment Models work group recommended collection of write off data from hospitals that can be combined with hospital encounter data to determine the extent to which increasing deductibles are contributing to increases in uncompensated care and to assess other causes and variables that could be used in future analyses.

Furthermore, as discussed above, HSCRC staff notes that these changes to the uncompensated care policy laid out in this report should only be applied for FY 2015 and that in FY 2016, staff will need to make additional adjustments to the data as a result of the Medicaid expansion and other factors affecting uncompensated care. Staff can begin

to prepare additional analysis using case mix data, Medicaid enrollment data, and write off data collected from hospitals to analyze continuing sources of uncompensated care.

RECOMMENDATIONS

The HSCRC staff recommend that:

1. The uncompensated care provision in rates be reduced from 6.86% to 6.16%, pending continuing review of PAC data for payments received that could moderate the reduction by approximately .10%;
2. Uncompensated care levels continue to be monitored for further potential reductions for FY 2016 or sooner, if warranted;
3. The regression formula be changed from the current model;
    a. To the Five Variable Model described in this report.
    b. The results of the Five Variable Model should be combined with two years of historical data to more closely reflect current trends in uncompensated care. This process will need to be modified next year as a result of the significant changes in bad debt levels.
    c. The PAC% of FY 2013 charges, once adjusted for any payments received, should be subtracted from the uncompensated care result for each hospital to derive its final percentage for determining its contribution or withdrawal from the uncompensated care pool. Appendix IV shows the proposed results, subject to any changes resulting from an analysis of collection activities.
    d. The regression model results be updated to reflect the more recent experience of hospitals with years ending after June 30, 2013 before finalization.
4. The Charity Care Adjustment be suspended indefinitely and not be reinstituted in FY 2015 rates;
5. Data be collected on write-offs to guide future development of uncompensated care regression models and uncompensated care policies;
6. Data be collected on outpatient denials, in addition to data already collected on inpatient denials, to understand the continuing trends in denials under the new All-Payer model; and
7. A new uncompensated care policy be developed for FY 2016 that reflects the patterns in uncompensated care experience that are observed in FY 2015 and projected for FY 2016.

Appendix I: Calculation to Achieve a Revenue Neutral Policy

The HSCRC calculates the annual UCC percentage for each hospital by combining the average actual UCC percentage for each hospital for the past three years with a predicted UCC percentage from the regression model. Then the HSCRC adjusts the annual UCC percentage for each hospital so that the total statewide UCC percentage is equal to the actual total statewide UCC percentage for 2013. This is done to achieve a revenue neutral system of pooling across all hospitals. This adjustment is done before any policy adjustments are made such as the PAC reduction.

Revenue neutral adjustment factor:

$$= \frac{Total\ actual\ 2013\ UCC\ \% - Total\ calculated\ UCC\%\ for\ 2015}{Total\ actual\ \ 2013\ UCC\%} + 1$$

Adjusted UCC percentage for each hospital:

$$= revenue\ neutral\ adjustment\ factor * 2015\ UCC\%\ calculated\ for\ hospital\ 1$$

Appendix II: Results of Current Regression Model for 2015 (Not Revenue Neutral)

	Results of the 2015 Uncompensated Care Regression Analysis - Current Methodology (Levindale, Kernan and Shock Trauma not Included)					
HOSPID	**Hospital Name**	**Fiscal Year 2013 Actual UCC**	**Fiscal Year 2013 Regression Predicted UCC**	**2011-2013 (Three Year Average)**	**50-50 UCC Blended Percent**	**Adjusted Blended Percent**	**Difference between Actual UCC and Adjusted UCC**
210002	Univ. of Maryland Medical Center	5.40%	8.86%	6.52%	7.69%	7.60%	2.21%
210045	McCready Foundation, Inc.	8.32%	10.01%	10.45%	10.23%	10.14%	1.82%
210034	Harbor Hospital Center	8.59%	11.41%	8.33%	9.87%	9.78%	1.19%
210010	Univ. of Maryland Shore Medical Center at Dorchester	6.99%	9.94%	6.50%	8.22%	8.13%	1.14%
210060	Fort Washington Medical Center	12.39%	14.28%	12.70%	13.49%	13.40%	1.00%
210035	Univ. of Maryland Charles Regional Medical Center	7.46%	9.63%	7.42%	8.53%	8.44%	0.98%
210015	Franklin Square Hospital	7.06%	8.92%	6.84%	7.88%	7.79%	0.73%
210048	Howard County General Hospital	5.99%	7.56%	6.05%	6.81%	6.72%	0.73%
210057	Shady Grove Adventist Hospital	6.66%	8.51%	6.33%	7.42%	7.33%	0.67%
210012	Sinai Hospital	5.41%	7.22%	5.14%	6.18%	6.09%	0.67%
210009	Johns Hopkins Hospital	4.27%	6.04%	3.94%	4.99%	4.90%	0.64%
210044	Greater Baltimore Medical Center	3.12%	4.51%	3.09%	3.80%	3.71%	0.59%
210033	Carroll County General Hospital	4.70%	5.84%	4.89%	5.36%	5.27%	0.58%
210039	Calvert Memorial Hospital	6.16%	7.72%	5.87%	6.80%	6.71%	0.55%
210001	Meritus Medical Center	7.20%	8.04%	7.50%	7.77%	7.68%	0.49%
210032	Union Hospital of Cecil County	8.69%	9.71%	8.39%	9.05%	8.96%	0.27%
210062	Southern Maryland Hospital	6.84%	7.71%	6.65%	7.18%	7.09%	0.25%
210049	Upper Chesepeake Medical Center	5.94%	6.16%	6.24%	6.20%	6.11%	0.16%
210005	Frederick Memorial Hospital	6.03%	6.18%	6.21%	6.20%	6.11%	0.08%
210037	Univ. of Maryland Shore Medical Center at Easton	5.86%	6.37%	5.54%	5.95%	5.86%	0.01%
210056	Good Samaritan Hospital	6.60%	7.20%	6.06%	6.63%	6.54%	-0.06%
210011	St. Agnes Hospital	7.96%	8.37%	7.18%	7.77%	7.68%	-0.27%
210018	Montgomery General Hospital	6.59%	6.48%	6.32%	6.40%	6.31%	-0.28%
210003	Prince Georges Hospital	15.51%	15.60%	14.98%	15.29%	15.20%	-0.30%
210022	Suburban Hospital Association,Inc	5.07%	4.72%	4.83%	4.78%	4.69%	-0.38%
210019	Peninsula Regional Medical Center	6.87%	6.01%	6.77%	6.39%	6.30%	-0.57%
210004	Holy Cross Hospital of Silver Spring	9.26%	8.41%	9.07%	8.74%	8.65%	-0.61%
210023	Anne Arundel General Hospital	5.21%	4.52%	4.80%	4.66%	4.57%	-0.64%
210061	Atlantic General Hospital	7.68%	7.10%	6.92%	7.01%	6.92%	-0.75%
210040	Northwest Hospital Center, Inc.	8.41%	7.92%	7.56%	7.74%	7.65%	-0.76%
210028	St. Marys Hospital	8.47%	8.79%	6.78%	7.79%	7.70%	-0.78%
210063	Univ. of Maryland St. Josephs Medical Center	5.13%	4.12%	4.64%	4.38%	4.29%	-0.84%
210027	Braddock Hospital	6.89%	6.04%	6.23%	6.14%	6.05%	-0.84%
210029	Johns Hopkins Bayview Med. Center	9.28%	8.31%	8.44%	8.37%	8.28%	-1.00%
210017	Garrett County Memorial Hospital	10.86%	9.35%	10.55%	9.95%	9.86%	-1.00%
210008	Mercy Medical Center, Inc.	8.29%	6.88%	7.69%	7.29%	7.20%	-1.09%
210006	Harford Memorial Hospital	11.64%	9.39%	11.89%	10.64%	10.55%	-1.09%
210051	Doctors Community Hospital	9.29%	7.93%	8.33%	8.13%	8.04%	-1.25%
210024	Union Memorial Hospital	8.13%	6.32%	7.17%	6.74%	6.65%	-1.48%
210043	Univ. of Maryland Baltimore Washington Medical Center	9.78%	7.65%	9.10%	8.37%	8.28%	-1.49%
210030	Univ. of Maryland Shore Medical Center at Chestertown	10.13%	7.22%	9.80%	8.51%	8.42%	-1.71%
210013	Bon Secours Hospital	19.09%	16.76%	16.96%	16.86%	16.77%	-2.32%
210038	Univ. of Maryland Medical Center Midtown Campus	15.22%	12.81%	13.16%	12.98%	12.90%	-2.33%
210016	Washington Adventist Hospital	13.27%	9.33%	12.61%	10.97%	10.88%	-2.38%
210055	Laurel Regional Hospital	14.23%	10.07%	13.62%	11.85%	11.76%	-2.47%

Results of the 2015 Uncompensated Care Regression Analysis - Current Methodology (Levindale, Kernan and Shock Trauma not Included)

Dependent Variable: Actual Uncompensated Care Percent

Number of Observations Read	135
Number of Observations Used	135

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	0.0874	0.01457	46.45	<.0001
Error	128	0.04014	0.000314		
Corrected Total	134	0.12754			
Root MSE	0.01771	**R-Square**	**0.6853**		
Dependent Mean	0.07906	**Adj R-Sq**	**0.6705**		
Coeff Var	22.3996				

Parameter Estimates

Variables	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	-0.000259	0.00654	-0.04	0.9685
The proportion of a hospital's total charges from inpatient non-Medicare admissions through the emergency room	1	0.06733	0.04091	1.65	0.1022
The proportion of a hospital's total charges from inpatient Medicaid, self-pay, and charity cases	1	0.19333	0.04454	4.34	<.0001
The proportion of a hospital's total charges from outpatient Medicaid, self-pay, and charity visits	1	0.24557	0.06884	3.57	0.0005
The proportion of a hospital's total charges from outpatient non-Medicare emergency department charges	1	0.20471	0.04532	4.52	<.0001
DUMMY1	1	-2.68E-05	0.00385	-0.01	0.9944
DUMMY2	1	-0.00378	0.00377	-1	0.3181

Appendix III: Results of Five Statistically Significant Variable Regression Model for 2015 (Not Revenue Neutral)

	Results of the 2015 Uncompensated Care Regression Analysis - Five Statistically Significant Variables (using Two Year Average UCC - Kernan and Shock Trauma not Included)				
HOSPID	Hospital Name	Fiscal Year 2013 Actual UCC	2012-2013 (Two Year Average)	Fiscal Year 2013 Regression Predicted UCC	*Adjusted Blended Percent	Difference between Actual UCC and Adjusted UCC
210010	Univ. of Maryland Shore Medical Center at Dorchester	6.99%	6.27%	10.07%	8.21%	1.22%
210045	McCready Foundation, Inc.	8.32%	8.55%	10.35%	9.49%	1.17%
210002	Univ. of Maryland Medical Center	5.40%	5.87%	7.06%	6.50%	1.11%
210056	Good Samaritan Hospital	6.60%	6.25%	8.25%	7.29%	0.68%
210044	Greater Baltimore Medical Center	3.12%	3.09%	4.40%	3.79%	0.67%
210062	Southern Maryland Hospital	6.84%	6.32%	8.58%	7.49%	0.65%
210015	Franklin Square Hospital	7.06%	7.12%	8.21%	7.70%	0.64%
210035	Univ. of Maryland Charles Regional Medical Center	7.46%	7.30%	8.81%	8.09%	0.63%
210057	Shady Grove Adventist Hospital	6.66%	6.66%	7.79%	7.26%	0.60%
210001	Meritus Medical Center	7.20%	7.40%	8.10%	7.79%	0.59%
210033	Carroll County General Hospital	4.70%	4.73%	5.63%	5.22%	0.52%
210037	Univ. of Maryland Shore Medical Center at Easton	5.86%	5.53%	7.15%	6.38%	0.52%
210034	Harbor Hospital Center	8.59%	8.28%	9.73%	9.05%	0.46%
210003	Prince Georges Hospital	15.51%	15.34%	16.46%	15.94%	0.43%
210012	Sinai Hospital	5.41%	5.29%	6.28%	5.82%	0.41%
210018	Montgomery General Hospital	6.59%	6.54%	7.34%	6.98%	0.39%
210039	Calvert Memorial Hospital	6.16%	5.93%	7.04%	6.52%	0.37%
210048	Howard County General Hospital	5.99%	6.15%	6.37%	6.30%	0.31%
210005	Frederick Memorial Hospital	6.03%	6.11%	6.43%	6.31%	0.28%
210022	Suburban Hospital Association,Inc	5.07%	4.79%	5.79%	5.32%	0.25%
210060	Fort Washington Medical Center	12.39%	12.39%	12.80%	12.64%	0.24%
210011	St. Agnes Hospital	7.96%	7.31%	8.77%	8.08%	0.12%
210061	Atlantic General Hospital	7.68%	7.00%	8.52%	7.80%	0.12%
210009	Johns Hopkins Hospital	4.27%	3.98%	4.57%	4.32%	0.05%
210040	Northwest Hospital Center, Inc.	8.41%	7.62%	9.20%	8.45%	0.03%
210019	Peninsula Regional Medical Center	6.87%	6.85%	6.46%	6.69%	-0.17%
210051	Doctors Community Hospital	9.29%	8.61%	9.41%	9.05%	-0.24%
210049	Upper Chesepeake Medical Center	5.94%	5.94%	5.31%	5.67%	-0.28%
210023	Anne Arundel General Hospital	5.21%	4.92%	4.63%	4.81%	-0.40%
210027	Braddock Hospital	6.89%	6.54%	6.35%	6.48%	-0.41%
210016	Washington Adventist Hospital	13.27%	13.27%	12.29%	12.82%	-0.45%
210032	Union Hospital of Cecil County	8.69%	8.29%	8.06%	8.21%	-0.47%
210004	Holy Cross Hospital of Silver Spring	9.26%	9.41%	8.05%	8.77%	-0.49%
210063	Univ. of Maryland St. Josephs Medical Center	5.13%	4.71%	4.46%	4.62%	-0.50%
210029	Johns Hopkins Bayview Med. Center	9.28%	9.17%	8.12%	8.69%	-0.60%
210024	Union Memorial Hospital	8.13%	7.61%	7.23%	7.46%	-0.67%
210017	Garrett County Memorial Hospital	10.86%	11.10%	8.87%	10.02%	-0.83%
210043	Univ. of Maryland Baltimore Washington Medical Center	9.78%	9.20%	8.25%	8.76%	-1.01%
210055	Laurel Regional Hospital	14.23%	14.11%	12.09%	13.13%	-1.10%
210028	St. Marys Hospital	8.47%	7.39%	7.28%	7.37%	-1.10%
210030	Univ. of Maryland Shore Medical Center at Chestertown	10.13%	9.84%	8.03%	8.97%	-1.17%
210006	Harford Memorial Hospital	11.64%	11.64%	9.20%	10.46%	-1.18%
210008	Mercy Medical Center, Inc.	8.29%	7.70%	5.66%	6.72%	-1.57%
210013	Bon Secours Hospital	19.09%	17.79%	17.08%	17.47%	-1.62%
210038	Univ. of Maryland Medical Center Midtown Campus	15.22%	13.76%	11.37%	12.60%	-2.62%

Note: The "Adjusted Blended Percent" will change when Levindale, Kernan and Shock Trauma are included in the overall calculation of the statewide UCC average

Results of the 2015 Uncompensated Care Regression Analysis - Five Statistically Significant Variables (Levindale, Kernan and Shock Trauma not Included)

Dependent Variable: Actual Uncompensated Care Percent					
Number of Observations Read	135				
Number of Observations Used	135				

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	0.10074	0.01439	68.21	<.0001
Error	127	0.0268	0.000211		
Corrected Total	134	0.12754			
Root MSE	0.01453	**R-Square**	**0.7899**		
Dependent Mean	0.07906	**Adj R-Sq**	**0.7783**		
Coeff Var	18.37332				

Parameter Estimates

Variables	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	0.04566	0.00565	8.09	<.0001
The proportion of a hospital's total charges from inpatient Medicaid admissions through the emergency room	1	0.2062	0.03632	5.68	<.0001
The proportion of a hospital's total charges from inpatient Commercial Insurance cases	1	-0.12409	0.03072	-4.04	<.0001
The proportion of a hospital's total charges from inpatient Self-pay, and Charity cases	1	0.60815	0.16433	3.7	0.0003
The proportion of a hospital's total charges from outpatient Self-pay and Charity emergency department charges	1	1.49244	0.17785	8.39	<.0001
The proportion of a hospital's total charges from inpatient Self-pay and Charity admissions through the emergency room from the top 80% Medicaid Undocumented Aliens Enrollment Zip Codes	1	0.36559	0.15087	2.42	0.0168
DUMMY1	1	-0.00183	0.00316	-0.58	0.563
DUMMY2	1	-0.00423	0.00308	-1.37	0.1719

Appendix IV: Proposed Uncompensated Care Policy Results from the Five Statistically Significant Variable Model Including the PAC Adjustment

	Proposed Policy Results from the Regression, Revenue Neutrality and PAC Adjustment for FY 2015								
Hospid	Hospital Name	Actual UCC for FY '13	Predicted UCC	FY '12- FY '13 UCC Average	50/ 50 Blended UCC Average	Revenue Neutrality Adjustment	Policy Results without PAC Adjustemnt	PAC Adjustemnt	Policy Results with PAC Adjustemnt
210001	Meritus Medical Center	7.20%	8.10%	7.40%	7.75%	1.006766	7.80%	1.66%	6.14%
210002	Univ. of Maryland Medical Center	5.40%	7.06%	5.87%	6.47%	1.006766	6.51%	1.85%	4.66%
210003	Prince Georges Hospital	15.51%	16.46%	15.34%	15.90%	1.006766	16.01%	1.09%	14.92%
210004	Holy Cross Hospital of Silver Spring	9.26%	8.05%	9.41%	8.73%	1.006766	8.79%	0.31%	8.48%
210005	Frederick Memorial Hospital	6.03%	6.43%	6.11%	6.27%	1.006766	6.32%	0.90%	5.41%
210006	Harford Memorial Hospital	11.64%	9.20%	11.64%	10.42%	1.006766	10.49%	1.50%	9.00%
210008	Mercy Medical Center, Inc.	8.29%	5.66%	7.70%	6.68%	1.006766	6.73%	1.34%	5.38%
210009	Johns Hopkins Hospital	4.27%	4.57%	3.98%	4.28%	1.006766	4.31%	0.78%	3.53%
210010	Univ. of Maryland Shore Medical Center at Dorchester	6.99%	10.07%	6.27%	8.17%	1.006766	8.23%	2.67%	5.56%
210011	St. Agnes Hospital	7.96%	8.77%	7.31%	8.04%	1.006766	8.09%	1.45%	6.65%
210012	Sinai Hospital	5.41%	6.28%	5.29%	5.78%	1.006766	5.82%	1.10%	4.72%
210013	Bon Secours Hospital	19.09%	17.08%	17.79%	17.44%	1.006766	17.55%	5.80%	11.75%
210015	Franklin Square Hospital	7.06%	8.21%	7.12%	7.67%	1.006766	7.72%	0.95%	6.77%
210016	Washington Adventist Hospital	13.27%	12.29%	13.27%	12.78%	1.006766	12.87%	0.55%	12.31%
210017	Garrett County Memorial Hospital	10.86%	8.87%	11.10%	9.99%	1.006766	10.05%	0.75%	9.31%
210018	Montgomery General Hospital	6.59%	7.34%	6.54%	6.94%	1.006766	6.99%	0.78%	6.21%
210019	Peninsula Regional Medical Center	6.87%	6.46%	6.85%	6.66%	1.006766	6.70%	1.30%	5.40%
210022	Suburban Hospital Association,Inc	5.07%	5.79%	4.79%	5.29%	1.006766	5.32%	0.28%	5.04%
210023	Anne Arundel General Hospital	5.21%	4.63%	4.92%	4.77%	1.006766	4.81%	0.54%	4.27%
210024	Union Memorial Hospital	8.13%	7.23%	7.61%	7.42%	1.006766	7.47%	1.45%	6.02%
210027	Braddock Hospital	6.89%	6.35%	6.54%	6.44%	1.006766	6.49%	1.06%	5.43%
210028	St. Marys Hospital	8.47%	7.28%	7.39%	7.34%	1.006766	7.38%	1.09%	6.30%
210029	Johns Hopkins Bayview Med. Center	9.28%	8.12%	9.17%	8.65%	1.006766	8.71%	1.73%	6.97%
210030	Univ. of Maryland Shore Medical Center at Chestertown	10.13%	8.03%	9.84%	8.93%	1.006766	8.99%	0.77%	8.22%
210032	Union Hospital of Cecil County	8.69%	8.06%	8.29%	8.18%	1.006766	8.23%	1.82%	6.41%
210033	Carroll County General Hospital	4.70%	5.63%	4.73%	5.18%	1.006766	5.22%	0.69%	4.52%
210034	Harbor Hospital Center	8.59%	9.73%	8.28%	9.01%	1.006766	9.07%	1.47%	7.60%
210035	Univ. of Maryland Charles Regional Medical Center	7.46%	8.81%	7.30%	8.05%	1.006766	8.11%	0.80%	7.30%
210037	Univ. of Maryland Shore Medical Center at Easton	5.86%	7.15%	5.53%	6.34%	1.006766	6.38%	0.83%	5.55%
210038	Univ. of Maryland Medical Center Midtown Campus	15.22%	11.37%	13.76%	12.57%	1.006766	12.65%	3.52%	9.13%
210039	Calvert Memorial Hospital	6.16%	7.04%	5.93%	6.48%	1.006766	6.53%	1.05%	5.48%
210040	Northwest Hospital Center, Inc.	8.41%	9.20%	7.62%	8.41%	1.006766	8.46%	0.93%	7.53%
210043	Univ. of Maryland Baltimore Washington Medical Center	9.78%	8.25%	9.20%	8.73%	1.006766	8.79%	1.02%	7.76%
210044	Greater Baltimore Medical Center	3.12%	4.40%	3.09%	3.75%	1.006766	3.77%	0.38%	3.40%
210045	McCready Foundation, Inc.	8.32%	10.35%	8.55%	9.45%	1.006766	9.51%	2.76%	6.75%
210048	Howard County General Hospital	5.99%	6.37%	6.15%	6.26%	1.006766	6.30%	0.61%	5.69%
210049	Upper Chesepeake Medical Center	5.94%	5.31%	5.94%	5.63%	1.006766	5.67%	0.61%	5.06%
210051	Doctors Community Hospital	9.29%	9.41%	8.61%	9.01%	1.006766	9.07%	0.61%	8.46%
210055	Laurel Regional Hospital	14.23%	12.09%	14.11%	13.10%	1.006766	13.18%	0.94%	12.24%
210056	Good Samaritan Hospital	6.60%	8.25%	6.25%	7.25%	1.006766	7.30%	0.90%	6.40%
210057	Shady Grove Adventist Hospital	6.66%	7.79%	6.66%	7.22%	1.006766	7.27%	0.57%	6.70%
210060	Fort Washington Medical Center	12.39%	12.80%	12.39%	12.60%	1.006766	12.68%	0.86%	11.83%
210061	Atlantic General Hospital	7.68%	8.52%	7.00%	7.76%	1.006766	7.81%	1.42%	6.39%
210062	Southern Maryland Hospital	6.84%	8.58%	6.32%	7.45%	1.006766	7.50%	0.94%	6.56%
210063	Univ. of Maryland St. Josephs Medical Center	5.13%	4.46%	4.71%	4.58%	1.006766	4.61%	0.72%	3.89%
210058	Univ. of Maryland Rehabilitation and Orthopaedic Institute	5.20%	5.77%	5.77%	5.77%	1.006766	5.80%	1.13%	4.67%
218992	Univ. of Maryland (MIEMSS)	22.32%	21.22%	21.22%	21.22%	1.006766	21.37%	0.25%	21.11%
212005	Levindale Geriatric Center and Hospital	1.82%	0.00%	1.82%	1.82%	1.006766	1.83%	0.00%	1.83%
	STATEWIDE	7.21%	0.00%	0.00%	7.16%	1.006766	7.21%	1.09%	6.12%