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# **MARYLAND'S ALL PAYER HEALTH CARE SYSTEM: A LIGHT AT THE END OF A TUNNEL**

## **ABSTRACT**

The state of Maryland, in collaboration with the Centers for Medicare and Medicaid, developed the first all-payer system model in the U.S. in 1971, and some 35 years later in response to financial pressures modernized this program. The focus of the modernized program was to improve overall per capita expenditure, quality of care, and the outcome of Marylanders' health. The financial status of Maryland hospitals was declining due to the rate setting of the Health Services Cost Review Commission while hospital admission rates and spending was increasing. In the original version Maryland did not have a quality measure for Medicare waiving. In the modernized program, Maryland's goal was to move 80% of hospitals in the state to Global Budget Review, defined as when 95% of Maryland hospitals' revenue was received under the state's global budget which is not defendant on volume (HSCRC, 2014).<sup>1</sup> In addition, Maryland hospitals have become more financially stable: in 2015, the per capita annual revenue of Maryland hospitals has grown from 1.47% in 2014 to 1.81%, and the average operation margin averaged 4.79%. This study showed positive change in moving its healthcare delivery model from volume-driven care to value-driven coordinated care. Maryland hospitals have changed their mindsets to achieve the Triple Aim of cost reduction, health improvement, and quality of care improvement for the state of Maryland.

## **INTRODUCTION**

In 2014, Maryland and Center for Medicare and Medicaid (CMS) jointly announced they would modernize the state's 40 year old all-payer system into a new all payer system focusing on overall per capita expenditure, quality of care, and outcomes of Marylanders' health. According to Reinhardt<sup>2</sup> (2011), an all-payer system is one in which all payers pay the same price for the same service: i.e., a third party establishes prices paid by all public, private, or individual payers, including hospital systems, physicians and other health care providers. Countries using an all-payer system, such as Germany, France, the Netherland, and Japan, have demonstrated substantial successes in offsetting providers' pricing escalation<sup>3</sup> (White, 2009) and although versions of all payer systems had been attempted in four states (Maryland, Massachusetts, New Jersey, and New York), by 2012 Maryland was the only state in the U.S. continuing to operate such a system (Murray, 2012).<sup>4</sup>

#### *Maryland's Original All Payer System*

Maryland's all-payer hospital reimbursement model shifted financial incentives to reward results instead of volume, with the goal of achieving healthier communities while simultaneously slowing spending growth. CMS waived its right to set Maryland hospital Medicare rates for five years in return for Maryland's commitment to keep hospital inpatient costs below the national average. The agreement covered Medicare hospital inpatient care and costs per visit only<sup>5</sup> (PCC, 2014) for all payers, governmental, commercial, and self-pay (HDHMH, 2013).<sup>6</sup> Despite covering all payers, because Maryland's system applied only to hospital rate setting, it is technically a "modified" or "limited" all payer system; this detail is virtually always ignored and Maryland's system is commonly referred to as an "all payer" system, a convention also used throughout this paper. The prices were determined by a government regulated agency, the Health Services Cost Review Commission (HSCRC), which established rates for each unit of

service for each hospital (MHA, 2015a).<sup>7</sup> The rate is set differently for each hospital, depending on criteria such as number of patients admitted with health insurance; e.g., for 2015, the price of a vaginal delivery in Adventist Health Care Shady Grove Medical Center in Maryland was set to \$5,466<sup>7</sup> (Maryland Health Care Commission, 2015a), while the price for the same service when delivered at Johns Hopkins Hospital was set at \$13, 137<sup>8</sup> (Maryland Health Care Commission, 2015b).

According to Murray (2009)<sup>9</sup>, Maryland's all payer system was developed by the Maryland legislature to allow State government to regulate and set prices of acute care hospital services across the state. Maryland and the United States had experienced increasing costs of hospital cares after the creation of Medicare and Medicaid: in the U.S., hospital care accounted for 5.1% of the Gross Domestic Product (GDP) and \$108 billion (measured in 2002 dollars) of health care spending in 1960, and these figures rose to 15 % of GDP and \$1.6 trillion in 2002<sup>10</sup> (Goldman and McGlynn, 2005) during this period, Maryland's hospitals providing services for the uninsured were facing insolvency (Murray, 2009).<sup>9</sup> In 1977, HSCRC successfully negotiated with CMS to participate in a modified all payer system which would cover only hospitals (CMS, 2015).<sup>11</sup>

An explicit condition given by CMS to allow Maryland to develop its initial all payer system was that the cumulative growth payment of Maryland's Medicare spending per discharge after 1981 had to be less than the U.S average (Colmers, 2014).<sup>12</sup> Consequently, Maryland's goals in the development of its original all payer system were to constrain hospital's cost inflation, to ensure hospitals' financial stability by providing predictable payment system, to preventing cost shifting, to increase access to health care for Maryland's citizens, and to increase the equity and fairness of hospital financing (Murray, 2009).<sup>9</sup> Unfortunately, modernization of

Maryland's original all payer system became necessary when many Maryland hospitals faced insolvency and its Medicare waver was in jeopardy.

### *Modernized All Payer System*

According to HSCRC (2014),<sup>1</sup> effective January 1, 2014, Maryland and CMS reached an agreement to modify its existing all payer model for hospital services payment. This revision was necessary because the hospital admission rate in Maryland had increased substantially, causing increases in overall hospital spending (Anderson and Herring, 2015).<sup>13</sup> MHA<sup>14</sup> (2015b) stated that with the modernized all payer system, the State of Maryland would focus on reducing costs, improving the health of the population of Maryland, and improving quality of care, the Institute for Healthcare Improvement's Triple Aim (IHI, 2016).<sup>15</sup>

In the modernized all payer model, HSCRC would still set prices for inpatient hospital services, but Maryland hospitals would be required to adopt a Global Budget Revenue (GBR) reimbursement within 3 years, starting from 2014 (PCC, 2014).<sup>5</sup> According to HSCRC<sup>16</sup> (2013), the GBR system was a revenue constraint as well as quality improvement method. Under the GBR system, each hospital would receive an approved regulated revenue each year and be required to operate within the budget. Also, in GBR the volume of care would not affect the revenue determination, which discouraged hospitals from increasing admissions in order to increase revenue. Furthermore, the GBR encouraged hospitals to be more effective to provide care for population, to decrease potential avoidable utilization (HSCRC, 2013).<sup>16</sup>

Along with GBR implementation, Maryland also agreed to improving quality of care by reducing potentially preventable conditions, including the 30 day hospital re-admission rate and the number of hospital-acquired conditions: one goal was for the 30 day hospital re-admission rate to be below the national average and another was for the hospital-acquired infection rate to

be reduced by 30% by 2018 (HSCRC, 2014a).<sup>17</sup> The other agreement was to save \$330 million in Medicare spending by the end of fiscal year 2018 (CMS, 2014).<sup>18</sup> In order to accomplish these financial goals, Maryland set a cap limit of 3.58% on annual total hospital cost growth in the first 3 years by 2017. Maryland and CMS agreed that if Maryland did not accomplish the targeted goals by fiscal year 2018, it would move back to old Medicare payment system (CMS, 2014).<sup>18</sup>

The purpose of the study was to examine the original and modernized versions of Maryland's all payer system, and determine possible efficiency and sustainability of the modernized all payer system.

## **RESULTS**

### *Original Version All Payer System Results*

#### *Achievements of Original All Payer System*

Major accomplishments of Maryland's original all payer model were: elimination of cost-shifting, lowered costs for all payers, limitation of the growth of hospital per admission cost, provision of stable and predictable income for hospitals, promotion of financial stability for efficient and effective hospitals and removal of the inequality in the burden of uncompensated care (Colmers and Sharfstein, 2013; MDHMH, 2013).<sup>19,20</sup> Because Maryland has eliminated cost shifting, hospital bills in Maryland were much lower than any other states; for example, average cost of hospital charges for a joint replacement for a Medicare patient in 2013 varied from \$88,238 in California to \$21,230 in Maryland (Cauchi and Valverde, 2013).<sup>21</sup> Also, Maryland's hospitals' markups of price over cost became the lowest in the nation: in 1980 the national average markup of hospital charges in the US was less than 25% and Maryland was slightly lower than national average; by 2009 national average of markup of hospital charges

have increased to over 200% while Maryland's markups remained essentially unchanged in 1980 (Murray, 2014).<sup>23</sup> Another way of looking at prices in Maryland hospitals is to examine the adjusted costs per hospital admission: when Maryland first developed its all payer system, its adjusted costs per hospital admissions was about 26 percent higher than the national average. Between 1977 and 2009, however, Maryland's hospitals had the lowest cumulative increase per admission of any state in the nation (2 percent compared with a 4.5 percent increase for the rest of the nation) ((Cauchi and Valverde, 2013).<sup>21</sup>

Between 1976 to 2009, Maryland's health care cost growth was the lowest in the U.S. (Foreman, 2014).<sup>24</sup> In 1976 the amount spent on patient care in Maryland hospitals was 25% higher than the national average and after the implementation of an all-payer system it began to decline; by 2009 it was 4% below the national average (MHA, 2013).<sup>20</sup> It is estimated that the savings Maryland achieved in health care costs between 1976 and 2007 exceeded \$40 billion (Pohl, 2012).<sup>25</sup>

#### Limitations of Original All Payer System

There were, however, "storm clouds on the horizon." Limitations of the original version of Maryland's all payer system included the continuing underlying incentives of fee-for-services per admission per case for hospitals, outdated measurement to evaluate efficiency of care, and a lack of incentives to improve population health and coordination of care (Colmers, 2015; Colmers and Sharfstein, 2013; National Health Policy Forum, 2014).<sup>26,19,27</sup>

There was a significant increase ( $p = 0.003$ ) in hospital admission rate in Maryland, from 0.8% between 1990 and 2000 to 2.4% between 2001 and 2008. (Kalman et al., 2014).<sup>28</sup> Largely due to this increase in hospital admission rate, from 2013-2014 the waiver test (which measured relative difference between national average and Maryland's Medicare inpatient spending)

decreased more than half, from 10.40% to 4.46%, and the prediction was that within a few years Maryland's Medicare inpatient spending and national average would be the same or higher (Colmers and Sharfstein, 2013; MDHMH, 2013; PCC, 2014).<sup>19,6,5</sup>

By 2013, the financial status of Maryland hospitals had been declining due to HSCRC's tight rate settings of services; in 2013 Maryland hospitals had only average of 0.8% aggregated operating margins, very close to the break-even point (MHA, 2013).<sup>20</sup> More alarming was the trend of the percentage of Maryland hospitals which were operation "in the red." The percentage of Maryland hospitals reporting losses was over 40% in 2012 and by 2013 had risen to 42% with 25 out of 60 hospitals in Maryland having negative operating margins.

In the original all payer system, Maryland and CMS did not set a quality measure for Medicare waiver testing and this situation resulted in declining quality of care as reflected by a high hospital re-admission rate. Subsequently, Maryland implemented new benchmarks for the quality of care in the all-payer system (Kastor and Adashi, 2011)<sup>29</sup>; e.g., a pay per performance program was introduced to improve the quality of care and it successfully reduced the hospital acquired conditions by 15% over a span of two years (Calikoglu, Murray and Feeney, 2012).<sup>30</sup>

#### *Modernized All Payer System: Early Results*

According to HSCRC<sup>31</sup> (2015), the per capita annual revenue growth of Maryland hospitals was 1.47% in 2014 and rose slightly to 1.81% in 2015. Also, Maryland set a goal to move 80% of hospitals to participate GBR, and in fact, all 46 hospitals in Maryland have already changed to GBR in the first year (HSCRC 2014).<sup>1</sup> Further, the data has showed positive results for hospitals under GBR: the operation margins rate of fiscal year 2015 averaged 4.79% compared to 2.93% the year before, a definite improvement. In addition, the report stated the

growth of Medicare spending per beneficiary was 1.50% (\$100 million estimate) below national growth projection in 2014 (HSCRC, 2015).<sup>31</sup>

Quality improvements have proved challenging. One goal was for hospitals to reduce their all-payer adjusted readmission rate by 6.76% between calendar year 2013 and calendar 2014, but only 15 of 46 Maryland hospitals met this goal. As a result, the overall all payer risk adjusted readmission rate decreased slightly between 2013 and 2014 (from 12% to 12.52%). Because achieving this readmission rate decrease has proved difficult, the amount of revenue at risk for hospital performance was quadrupled from 0.5% in 2016 to 2.0% in 2017 and hospitals that met this target received a one-time reward of up to 0.5% of their permanent inpatient revenue (HSCRC, 2015).<sup>31</sup>

In terms of population-based health, the direction is uncertain, as it will be based upon the early results which are still coming in. Berenson<sup>32</sup> (2015) envisions a combination of physician-based and hospital-based accountable care organizations and medical homes.

Recent data does suggest that Maryland's all-payer system is paying dividends. It was recently noted that in Maryland the cost of medical visit at just \$74, the lowest in the nation, while the state has the third-lowest insurance premium at \$241 per month. These results caused Maryland to be ranked second in the nation in terms of providing the best healthcare services delivering great health outcomes at low cost (Walker, 2016).<sup>33</sup> In fact, Maryland's healthcare costs in 2016 were ranked lowest in the nation by WalletHub, which also noted that the state had the third most physicians per capita (Bernardo, 2016).<sup>34</sup> Clearly Maryland appears to be leading the way in terms of providing healthcare for its citizens at reasonable cost.

## **DISCUSSION**

The purpose of the study was to examine the original and modernized Maryland all payer systems, and determine the efficiency and sustainability of the modernized all payer system. The literature review revealed achievements and limitations of original all payer system and also suggested why Maryland had to make a change to modernize its all payer system.

Accomplishments of the original all payer system were substantial: elimination of cost shifting, lowering of health care cost, dramatic reduction of markups, the provision of equal access and pay for all Marylanders regardless of health insurance while yielding Maryland hospitals relief from the burden of uncompensated care. Limitations of the original all payer system were also found: the system did not have strong measure to constrain overall cost of health care and there were no incentives or measurement for quality of care. Eventually the original all payer model became outdated and unable to achieve the Triple Aim goal of improving patient care, quality of care, and cost of care.

The modernized all payer system was developed to overcome weakness of the prior all payer system: Maryland added strategies to achieve the three goals following the Triple Aim, to improve population health, to provide quality care and improve patients' experience, and to control cost of health care. The findings of our study show the potential efficiency and sustainability of an all payer system under the new modernized version. Modernized Maryland's all payer model with GBR has aimed to control health care cost by limiting hospital per capita growth and encouraging and rewarding hospitals to be responsible in improving health status of population. The modernized all payer system has been moving its health care delivery model from volume-driven care to value-driven coordinated care. Maryland's biggest achievement was changing mindsets of hospitals. With Maryland's intervention, hospitals in Maryland have been

required to change their business model and to be more accountable to provide quality care and for cost containment.

Miller<sup>35</sup> (2009) argued that better health care systems should move away from volume-driven care to value-driven care and also should develop better payment systems which included benefits of both fee for service and capitation payment. The author also emphasized changing payment process was not enough, but providers needed to change in their mindsets, organizational structure, and business model to provide better care, as one reason the U.S. has failed to develop better health care system has been the difficulty to change mind sets and organizational structure. Maryland's hospitals and health care provides have been working on changing organizational structure, business model, and mind sets in order to achieve Triple Aim; thus the new model has shown potential efficiency. As for sustainability, only time will tell.

This study has some limitations. Since the modern version all payer system was started in just 2014, the number of financial, performance, and case reports regarding the modern version of an all payer system was limited. The search strategies used and the quality of the databases searched could affect the availability, quality, and numbers of articles found in this research. Further, researcher's and publication biases could also affect the results of the study.

## **CONCLUSIONS**

The original Maryland all payer system while initially successful, ultimately was not sustainable. The modernized Maryland all payer system appears to exhibit more efficiency and potential financial feasibility in achieving triple aim than the state's original all payer model. If the efficiency and effectiveness of the modernized Maryland all payer model can be demonstrated, more widespread implementation of this (or a similar) model may be appropriate, and, in fact, Interestingly, some individuals most familiar with Maryland's modified all payer

program appear to be unconcerned with its generalizability (Berenson, 2015)<sup>32</sup>, while others (Coyle, 2015; Slusky, 2014)<sup>36,37</sup> are more positive regarding their state’s adoption of at least part of the modified Maryland model. Massachusetts and Vermont are apparently considering the adoption of an all payer model (Zemel and Riley, 2016)<sup>38</sup>, with Vermont having applied to CMS for a waiver allowing it to implement its own all payer system (Dickson, 2016)<sup>39</sup>, a move which has been “in the works” for some time (Hsiao et al., 2011).<sup>40</sup> This waiver has recently been approved, with CMS granting Vermont \$9.5 million in startup funding for its statewide voluntary all-payer ACO model (CMS, 2016).<sup>41</sup>

The modernized model does require hospitals and business people to change their mindset to be responsible in providing health care all citizens, resolving social issues such as poverty and unequal access to health care to certain population, and achieving the triple aim.

## REFERENCES

Anderson, Gerald and Bradley Herring (2015), “The All Payer Rate Setting Model for Pricing Medical Services and Drugs,” AMA Journal of Ethics, 17 (8), 770-775.

Berenson, Robert A. (2015), “Maryland’s New All-Payer Hospital Demonstration: Interview with John Colmers, Donna Kinzer, and Josh Sharfstein,” Urban Institute. Retrieved April 20, 2016 from <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/2000517-Maryland's-New-All-Payer-Hospital-Demonstration.pdf>

Bernardo, Richie (2016), “2016’s States with the Best & Worst Health Care,” WalletHub, September 6, 2016. Retrieved October 28, 2016 from <https://wallethub.com/edu/states-with-best-health-care/23457/>

Cauchi, Richard and Holly Valverde (2013), “Uncovering Hospital Charges” State Legislatures Magazine, September. Retrieved April 21, 2016 <http://www.ncsl.org/research/health/uncovering-hospital-charges-sl-magazine.aspx>

Calikoglu, **Sule**, **Robert** Murray and **Dianne** Feeney (2012), “Hospital Pay-For-Performance Programs in Maryland Produced Strong Results, Including Reduced Hospital-Acquired Conditions,” Health Affairs, 31 (12), 2649-2658.

Center for Medicare and Medicaid Services [CMS] (2014), “Maryland All-Payer Model to Deliver Better Care and Lower Costs.” Retrieved September 3, 2015 from <https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-Sheets/2014-Fact-sheets-items/2014-01-10.html>

Center for Medicare and Medicaid Services [CMS] (2015), “Maryland All-Payer Model.” Retrieved September 3, 2015 from <http://innovation.cms.gov/initiatives/Maryland-All-Payer-Model/>

Center for Medicare and Medicaid Services [CMS] (2016), “Vermont All-Payer ACO Model,” Retrieved October 2, 2016 from <https://innovation.cms.gov/initiatives/vermont-all-payer-aco-model/>

Colmers, **John M.** and **Josuha** M. Sharfstein (2013), “Maryland’s Proposal to Modernize All-Payer Rate Setting: Enhancing Patient Experience, Controlling Costs, and Improving Health,” Testimony before the Finance Committee, Maryland State Senate. Retrieved October 7, 2015, from <http://dhmh.maryland.gov/pdf/Colmers-Sharfstein-Senate-testimony.pdf>

Colmers, **John** (2014), “Taking Payment Reform ‘Global’: How Maryland’s Hospital Rate Waiver Will Change Hospital Financial Incentives and Rewards through Global Budgeting,” Retrieved from <http://www.academyhealth.org/files/HCF0/Colmers%20RWJF%20-%20Academy%20Health%20-%20102414%20-%20FINAL.pdf>

Colmers, **John M.** (2015), “Taking Payment Reform “Global”: How Maryland’s Hospital Rate Waiver Will Change Hospital Financial Incentives and Rewards through Global Budgeting.” Retrieved September 30, 2015, from [http://www.academyhealth.org/files/HCF0/Colmers RWJF - Academy Health - 102414 - FINAL.pdf](http://www.academyhealth.org/files/HCF0/Colmers%20RWJF%20-%20Academy%20Health%20-%20102414%20-%20FINAL.pdf)

Coyle, **Carmela** (2014), “Maryland’s Triple Aim Roadmap,” HealthAffairs Blog. Retrieved April 20, 2016 from <http://healthaffairs.org/blog/2014/01/28/marylands-triple-aim-roadmap/>

Dickson, **Virgil** (2016), “Vermont Gets Preliminary OK to Move Toward All-Payer System,” Modern Healthcare, September 28, retrieved September 29 from [http://www.modernhealthcare.com/article/20160928/NEWS/160929874?utm\\_source=modernhealthcare&utm\\_medium=email&utm\\_content=20160928-NEWS-160929874&utm\\_campaign=am](http://www.modernhealthcare.com/article/20160928/NEWS/160929874?utm_source=modernhealthcare&utm_medium=email&utm_content=20160928-NEWS-160929874&utm_campaign=am)

**Foreman, Arin** (2014), “Overview of the HSCRC.” Retrieved April 22, 2016 from [http://hfmamd.org/downloads/WM\\_J\\_MOONEY\\_DEC\\_2014/2\\_\\_overview\\_of\\_the\\_hsrc.pdf](http://hfmamd.org/downloads/WM_J_MOONEY_DEC_2014/2__overview_of_the_hsrc.pdf)

Goldman, Dana and Elizabeth A McGlynn. (2005), “U.S. Health Care: Facts about Cost, Access, and Quality,” Rand Corporation. Retrieved April 20, 2016 from [http://www.rand.org/content/dam/rand/pubs/corporate\\_pubs/2005/RAND\\_CP484.1.pdf](http://www.rand.org/content/dam/rand/pubs/corporate_pubs/2005/RAND_CP484.1.pdf)

Health Services Cost Review Commission [HSCRC] (2013), “Agreement Between the Health Service Cost Review Commission and Hospital Regarding Global Budget Revenue and Non-Global Budget Revenue.” Retrieved April 20, 2016 from <http://www.hscrc.maryland.gov/documents/md-maphs/wg-meet/pay/2014-02-21/Global-Revenue-Budget-Template-Single-2-13.pdf>

Health Services Cost Review Commission [HSCRC] (2014), “New All Payer Model for Maryland Population-based and Patient-centered Payment and Care.” Retrieved September 5, 2015 from <http://publicpolicy.umbc.edu/files/2014/04/Hilltop-Conference-New-All-Payer-Model-11.28.14.pdf>

Health Services Cost Review Commission [HSCRC] (2014a), “Monitoring of Maryland’s All-Payer Model Biannual Report: Status Report.” Retrieved April 21, 2016 from <http://www.hscrc.state.md.us/documents/Legal-Legislative/Reports/HSCRC-Biannual-Report-on-All-Payer-Model-April-2015.pdf>

Health Services Cost Review Commission [HSCRC] (2015), “Monitoring of Maryland’s All-Payer Model Biannual Report.” Retrieved from <http://www.hscrc.state.md.us/documents/Legal-Legislative/Reports/HSCRC-Biannual-Report-on-All-Payer-Model-April-2015.pdf>

Hsiao, William C., Anna Gosline Knight, Steven Kappel and Nicolae Done (2011), “What Other States Can Learn from Vermont’s Bold Experiment: Embracing a Single-Payer Health Care Financing System, *Health Affairs*, 30 (7), 1232-1241.

Kastor, John A. and Ely I. Adashi (2011), “Maryland’s Hospital Cost Review Commission at 40,” *Journal of the American Medical Association*, 306 (11), 1137-1138.

Kalman, Noah S., Bradley G. Hammill, Robert B. Murray and Kevin A. Schulman(2014), “Removing a Constraint on Hospital Utilization: A Natural Experiment in Maryland,” *American Journal of Managed Care*, 20 (6), e191-e199.

Maryland Department of Health and Mental Hygiene [MDHMH] (2013), “Maryland’s Model Design.” Letter to Kathleen Sebelius, Secretary, U.S. Department of Health and Human Services. Retrieved April 21, 2016 from <http://dnhm.maryland.gov/pdf/maryland%20model%20design,%20waiver%20application,%20march%202013.pdf>

Maryland Health Care Commission (2015a), “Maryland Health Care Quality Reports: Keeping Marylanders Informed.” Retrieved April 21, 2016 from <https://www.marylandqmdc.org/public/TopDrgPricingForHospitals>

Maryland Health Care Commission (2015b), “Maryland Health Care Quality Reports: **Keeping Marylanders Informed.**” Retrieved **May 5, 2016** from <https://healthcarequality.mhcc.maryland.gov/public/TopDrgPricingForHospitals>

Maryland Hospital Association [MHA] (2013), “Financial Conditions of Maryland’s Hospitals.” Retrieved **April 22, 2016** from <http://www.mhaonline.org/docs/default-source/publications/financial-condition-of-maryland-39-s-hospitals---2013.pdf?sfvrsn=4>

Maryland Hospital Association [MHA] (2015a), “Maryland All Payer System.” Retrieved September 2, 2015 from <http://www.mhaonline.org/advocacy/regulatory/hscrc>

✓✓ Maryland Hospital Association [MHA] (2015b), “Maryland and the Triple Aim.” Retrieved September 2, 2015 from <http://www.mhaonline.org/transforming-health-care>

Miller, **Harold D.** (2009), “From Volume to Value: Better Ways to Pay for Health Care,” Health Affairs, 28 (5), 1418-1428.

Murray, **Robert** (2009), “Setting Hospital Rates to Control Costs and Boost Quality: The Maryland Experience,” Health Affairs, 28 (5), 1395-1405.

Murray, **Robert** (2012), “Point- Counterpoint: The Case for a Coordinated System of Provider Payments in the United States,” Journal of Health Politics, Policy & Law, 37(4), 679-695.

Murray, **Robert** (2014), “The Maryland All-Payer Hospital Rate Setting System: A Look Back – How Did We Get Here?” Retrieved October 30, 2015, from <http://www.hilltopinstitute.org/news/Murray-presentation-141205.pdf>.

National Health Policy Forum (2014), “Moving Toward Global Payment: Maryland’s New All-Payer Model.” Retrieved October 20, 2015 from [http://www.nhpf.org/library/forum-sessions/FS\\_05-30-14\\_MDAllPayer.pdf](http://www.nhpf.org/library/forum-sessions/FS_05-30-14_MDAllPayer.pdf)

Pohl, **Mary Beth** (2012), “Funding Graduate Medical Education in Maryland’s All Payer System,” Health Services Cost Review Commission [HSCRC]. Retrieved October 20, 2015 from <http://www.uwmedicine.org/education/documents/Pohl-Maryland-GME-Funding.pdf>

Primary Care Coalition [**PCC**] (2014), “Maryland All-Payer System for Hospital Payments,” Retrieved September 10, 2015 from [http://www.primarycarecoalition.org/wp-content/uploads/2014/12/All-PayerTransformationFactsheet\\_FINAL.pdf](http://www.primarycarecoalition.org/wp-content/uploads/2014/12/All-PayerTransformationFactsheet_FINAL.pdf)

Reinhardt, **Uwe E.** (2011), “The Many Different Prices Paid to Providers and the Flawed Theory of Cost Shifting: Is It Time for a More Rational All-Payer System?” Health Affairs, 30 (11), 2125-2133.

**Slusky, Richard** (2014), “Maryland’s All-Payer and Medicare Waiver: Requirements and the Potential Implication for Vermont House Ways and Means Committee.” Retrieved April 21,

2016 from <http://legislature.vermont.gov/assets/Documents/2014/WorkGroups/House%20Ways%20and%20Means/Health%20Care/Maryland%20All-Payer%20Model/W~Richard%20Slusky~Maryland%60s%20All-Payer%20and%20Medicare%20Waiver%20Requirements%20and%20the%20Potential%20Implication%20for%20Vermont~2-26-2014.pdf>

White, Joseph (2009), “Cost Control and Health Care Reform: The Case for All-Payer Regulation,” draft paper. Retrieved April 20, 2016 from [www.ourfuture.org/files/JWhiteAllPayerCostControl.pdf](http://www.ourfuture.org/files/JWhiteAllPayerCostControl.pdf)

Walker, Tracey (2016), “Top 10 States with the Best Healthcare,” Managed Healthcare Executive, October 5. Retrieved October 28, 2016 from <http://managedhealthcareexecutive.modernmedicine.com/managed-healthcare-executive/news/top-10-states-best-healthcare?page=0,2&cfcache=true>

Zemel, Sarabeth and Trish Riley (2016), “Addressing and Reducing Health Care Costs in States: Global Budgeting Initiatives in Maryland, Massachusetts, and Vermont,” National Academy for State Health Policy, January. Retrieved September 29, 2016 from <http://nashp.org/wp-content/uploads/2016/01/Global-Budgets1.pdf>