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Introduction

In recent years, much attention has been given to transforming the way in which the United States pays for health care. As policymakers seek to identify strategies to deliver higher-quality care at lower costs, payment reform efforts have largely centered on moving from a fee-for-service (FFS) health care system based on paying for volume to one based on paying for value. Hospital payments and changes to the payment models for hospitals have long been a topic for payers, both public and private, given that hospitals represent a significant proportion of total health care payments. The evolution of hospital payment structures has been characterized by a move from cost-based payment to prospective payment, whereby providers are paid the previous year's rate, adjusted for inflation, rather than a rate based on costs incurred. Furthermore, over time there has been an increase in the array of services included in the prospective unit of payment. The evolution over more than 40 years, has included per diem payment, per case payment [e.g., diagnosis-related group payments (DRGs)], and retrospectively reconciled episode-based payment. More recently, payment models including prospective episode-based payment, hospital global budgets and per member per month (PMPM) global capitation arrangements have gained attention.

An important feature of prospective payment is that it transfers financial risk to providers and makes them accountable for managing their costs more effectively. The magnitude of that risk transfer can be modified through the adoption of payment structures that bundle broader arrays of services. As payment structures become more bundled, they transfer greater amounts of financial risk to providers and increase incentives to control cost.

This issue brief provides an overview of hospital global budgeting, which represents a middle-ground approach between the narrow bundling of services and global capitation that transfers higher levels of financial risk to a hospital. Global budgets can provide strong financial incentives for cost control, including incentives for a hospital to collaborate and align incentives with non-hospital providers, and promote high-quality care. If structured appropriately, global budgets can also ensure some degree of financial stability for hospitals, particularly for facilities in rural areas.

An experiment with global budgeting in Maryland since 2014 has enabled the state to meet hospital savings goals and hit key quality benchmarks ahead of schedule.¹ This experiment and earlier global budget models implemented in upstate New York in the 1980s, show that hospital global budgets can be a promising tool for cost control and improved care.²

This brief examines global budget applications in the United States, through case studies from [Maryland](#) and two other states—[Pennsylvania](#) and [Vermont](#)—which are in earlier stages of experimentation.

Hospital Global Budgets: Addressing a Major Shortcoming of Fee-For-Service Payment

Although prospective payment provides stronger incentives to control cost, fixed-rate prospective payment systems have an unfortunate weakness. Under these payment structures hospitals are paid for each service they provide, and they are not paid unless they deliver that service, hence the name “fee-for-service.” However, the incremental rates paid for each new service are much higher than the marginal costs hospitals incur in producing that service.³ This difference between the marginal revenue received and marginal cost incurred for each new case or procedure provides hospitals with increased cash flow and operating margins. The result is the strong incentive to provide increasing volumes of hospital services. However, the use of hospital global budgets that bundle more services than in traditional FFS prospective

payment methods can effectively counter the volume-inducing financial incentives of fixed rate FFS payment models used by Medicare and most other payers. Table 1 illustrates the relationship between a hospital's basis of payment and the amount of financial risk borne by the hospital and thus the strength of the incentive it faces to control costs.

Table 1. Categories of Cost and Incentives for Cost Control with Different Bases of Hospital Payment

Structure of Payment	Unit Costs	Ancillaries Per Day	Length of Stay	Defined Pre- and Post-Hospitalization Services	Hospital Readmissions	All Services (PMPM)
Discounted (itemized) charges	✓					
Per-diem payments	✓	✓				
Per-diem payments (e.g. "DRGs")	✓	✓	✓			
Episodes of care	✓	✓	✓	✓		
Global budgets	✓	✓	✓	✓	✓	
Capitation (PMPM)	✓	✓	✓	✓	✓	✓

As Table 1 illustrates, global budgets provide incentives to: 1) reduce unit costs of services such as blood tests or imaging; 2) reduce the number of ancillary services per day; 3) reduce length of stay; 4) reduce pre- and post-hospitalization services; and 5) reduce admission and readmission rates.

In simple terms, a hospital global budget caps the amount of revenue a facility can receive during the course of a given year, regardless of the number of patients treated or the number of services provided to those patients. As with any other fixed budget, cost increases incurred by the hospital beyond the cap will result in operating losses. However, if the hospital is able to reduce operating costs, it can retain the surplus. Hospital global budgets were first tried with success in the Finger Lakes and Rochester regions of New York in the 1980s.⁴

The Maryland Health Services Cost Review Commission, the agency that administers the nation's only remaining all-payer hospital rate setting system, established fixed global budgets for 10 rural hospitals in the state in 2010. These pilot payment arrangements served as the basis for Maryland's renegotiated Medicare waiver that allowed for the extension of hospital global budgets to all 47 acute care hospitals effective January 1, 2014.⁵

Primary Policy Objectives Associated with the Implementation of Hospital Global Budgets

Global budgets are meant to give hospitals clear incentives to manage provision of care within a defined budget constraint, emphasizing the policy objective of cost containment. However, global budgets have other general characteristics and features that make them relatively easy to implement and attractive from a policy perspective.

In general, these payment arrangements:

- Are usually based on a hospital's historical all-payer revenue base, and thus easy to calculate.
- Are prospectively determined and are trended from one year to the next by a factor that covers inflation in the cost of inputs.
- Transfer manageable levels of financial risk from payers to hospitals, holding hospital managers (and other providers included under the global budget, such as hospital-employed physicians) accountable for the cost of services they can reasonably control.

- › Provide hospitals with a predictable revenue flow and thus give hospital management flexibility and autonomy.
- › Are well-suited for hospitals or groups of hospitals that are dominant in a particular region and have populations who are naturally mapped to their hospital—particularly rural facilities with easily identifiable “reference populations.”
- › Can support other budget-based efforts at cost reduction, such as accountable care organizations (ACOs), because ACOs and hospitals under global budgets face incentives to reduce unnecessary volumes and improve the efficiency of care delivery.
- › Can be enhanced by the use of supplemental pay-for-performance (P4P) incentive programs to make sure that providers don’t reduce access or short-change care in an effort to control costs.

Hospital global budgets also have some weaknesses, as described below. There are, however, design options to at least partially address these problems. Global budgets:

- › Are not easily implemented outside of an all-payer environment (although some demonstrations include voluntary participation agreements with commercial insurers).
- › With their strong incentives for cost reduction, can also encourage an under-provision of services and skimping on quality (P4P elements, however, can help maintain, or even improve, quality performance).
- › May induce hospitals to shift services to non-hospital providers in their area, resulting in higher overall expenditures because purchasers would be paying both for the fixed budget of the target hospital and for the care that has shifted (inclusion of certain non-hospital services, such as hospital-employed physician services, in the global budget, as is being done in Vermont, can help address this).
- › May potentially not be aligned with the financial incentives facing community physicians or other providers in the health system if these providers continue to be paid on a FFS basis (this can be mitigated by gain-sharing and other incentive changes for these providers).
- › May involve more financial risk than hospitals are willing to accept and manage (reinsurance with stop-loss provisions and other strategies can limit downside risk).
- › Are less responsive to expanded health care service needs of a given community (e.g., funding for service delivery expansions due to unexpected events such as a severe flu season or other epidemics) or the ability to fund new drugs or health care technologies, particularly those adopted by academic medical centers (this can be offset by giving hospitals an appeal mechanism to grant additional funding for unanticipated events or seek approval for new technologies).
- › May not stand the test of time if they are merely voluntary in nature (legislation may be required to mandate hospital and payer participation over the long term).
- › Are more difficult to implement in suburban and urban areas that contain hospitals with overlapping patient service areas, thus creating difficulty in matching a specific reference population to each global budget hospital (this issue can be overcome by establishing global budgets for groups of hospitals on a regional basis).

Operational Framework for Implementing Global Budgets

The basic operational framework for implementation of hospital global budgets should address the following considerations:

- › Services to be included in the global budget;
- › Covered patient populations;
- › Ways of ensuring the participation of third-party payers (either on a voluntary or on a mandatory basis through legislation);
- › Method of establishing base-year hospital budgets;
- › Updating of base-year budgets in subsequent performance years;
- › Identification of any adjustments to base budgets (such as annual adjustments for the changing demographics of the reference population and the addition of “seed funding” to jumpstart care management activities);
- › How the global budget system is administered and how compliance with budget caps is enforced;
- › Use of reinsurance and/or other risk mitigation provisions;
- › Mechanism to account for market share changes;
- › Possible use of incentive-based pay-for-performance quality programs to protect against access limitations to necessary hospital care;
- › Monitoring of hospital and overall system performance; and
- › Development and implementation of a contractual agreement between the global budget hospitals and the entity or entities administering the global budget system.

Implications of Hospital Global Budgets for Population Health

One significant overall policy advantage to global budgets is their potential to encourage hospital investments in population health initiatives. Global budgets can also support the efforts of ACOs and other primary care-based initiatives that are designed to promote the population health goals of the Centers for Medicare & Medicaid Services (CMS) “Triple Aim” of lower cost, better patient experience and improved health status.

First, global budgets encourage hospitals to implement strategies that improve the overall health of patients in their communities. A global budget hospital that invests in community-based initiatives that emphasize care coordination, expanded access to and follow-up by primary care providers, and early intervention for chronically ill patients, will tend to realize reduced costs (i.e., healthier people make less use of hospital care). Hospital global budgets can also encourage investments in resources that address social determinants of health and social supports, such as improved access to housing and food, if the hospital believes such investments will support both its social mission and financial interests. Yet under a fixed budget the hospital will still maintain its historical revenue. The resulting surpluses can be reinvested in further efforts to improve population health. This model of improved population health and continuous reinvestment in population health initiatives works best for hospitals that serve well-defined communities (or reference populations).⁶

Second, hospital global budgets can reverse the incentives of the current FFS payment system. Those volume incentives create hospital reluctance to support efforts of ACOs to reduce unnecessary care. As noted, hospitals with high fixed costs find volume reductions (which are a key to meaningful population-based cost control) unattractive from a financial perspective. Payment model researchers have observed that reductions in unnecessary hospitalizations, readmissions or shifting of care to less costly ambulatory settings represent lost hospital revenue and thus result in reduced profitability.^{7,8} The use of hospital global budgets replace the current FFS incentives that place hospitals at risk financially for volume reductions, with incentives that are consistent with the goals of the ACO program to reduce unnecessary hospital volumes and costs.

Another consideration with implications for the success of an ACO relates to the system an ACO has in place for allocating risk and distributing savings to the participating community-based providers [i.e., the regional hospitals, federally qualified health centers (FQHCs) and other providers participating in the ACO]. ACO distribution formulas that allocate risk and reward based on the specific performance of these regional entities create strong incentives at the local level to reduce unnecessary volumes, better coordinate care and lower costs. The establishment of hospital global budgets based on a hospital's historical costs creates a rational basis for holding hospitals and their employed physicians accountable for the cost and quality of the care they provide. Global budgets thus create a regional distribution system that rewards individual hospitals and their physicians commensurate with the savings they each are able to produce, creating very strong incentives locally to meet the goals of the broader ACO.

Conclusion

Relative to other hospital health care payment structures, global budget arrangements have great potential for controlling overall costs, including containing or reducing unnecessary hospital services. Overall, global budgets can create the conditions necessary to hold hospitals accountable for the cost of services they provide, operate under a stable and predictable amount of annual revenue, facilitate more rational allocation of hospital resources, and provide hospitals with increased financial flexibility to meet the diverse and unique health needs of the communities they serve.

Maryland All-Payer Global Budgets

Maryland has operated an all-payer hospital-rate setting system since 1977. This system was made possible by the granting of a waiver from national Medicare payment rules. It initially focused on payment per case, and controlled the growth in that metric over time. However, beginning in 2002, hospitals increased their patient volume, and the state was consistently in the top 10 nationally in expenditures per Medicare beneficiary. In response, starting in 2010, the state-rate setting agency, the Health Services Cost Review Commission (HSCRC), experimented with fixed global budgets for 10 rural hospitals under what was known as the Total Patient Revenue, or TPR, hospitals.⁹ During this period, the HSCRC also implemented a number of quality-based, pay-for-performance initiatives to ensure that Maryland hospitals maintained or improved their quality of care.

As the nation's only all-payer hospital payment system, Maryland provided CMS with a unique opportunity to demonstrate that a hospital payment system, with properly designed incentives, could meet the goals of CMS's "Triple Aim" of lower cost growth, better patient experience and better patient outcomes.

Building on its experience with its rural hospital global budgets, Maryland in 2014 negotiated a new Medicare All-Payer Model Agreement (the "Agreement") with CMS to limit hospital expenditure growth per capita, meet certain total cost of care (TCOC) growth limits, and improve hospital quality and patient satisfaction. Under the terms of the new Agreement, Maryland hospitals continued to be exempted from national Medicare Inpatient and Outpatient Prospective Payment rules (IPPS/OPPS). As of June 2014, all Maryland hospitals had adopted global budget payment structures [the 37 non-TPR global budgets are referred to as Global Budget Revenue (GBR) arrangements]. The experiment has the potential to demonstrate that hospital global budgets extended to all hospitals in the state generate cost savings and quality improvements, if it can overcome certain challenges it has encountered since 2014.¹⁰

Requirements of the Maryland Model Demonstration

Under the 2014 Agreement, Maryland is required to meet the following scale, financial and quality-related targets:

- › By calendar year (CY) 2017, convert at least 80 percent of hospital payments to "population-based payment" as defined by CMS (i.e., a fixed hospital global budget or payment that is directly tied to the projected services of a specific population).
- › Limit all-payer per capita inpatient and outpatient hospital cost growth to a previous 10-year growth in gross state product (GSP), 3.58 percent annually.
- › Generate \$330 million in savings in hospital costs over five years based on the difference in the Medicare per-beneficiary total hospital cost growth rate between Maryland and that of the nation.
- › Limit the annual growth rate in per-beneficiary total cost of care for Maryland Medicare beneficiaries to no greater than the national growth rate in at least one of any two consecutive years—and no greater than 1 percent above the national rate in any year.
- › Reduce its 30-day Medicare readmission rate to below the national average and its rate of all-payer hospital-acquired conditions by 30 percent.
- › Reduce the frequency of hospital-acquired conditions (HACs) for all-payers by greater than 30 percent over the five years of the Agreement.

If the state fails to meet these targets and limits, it may be required to develop a corrective plan. Per the terms of the Agreement, CMS has the ability to terminate the Agreement and transition Maryland's hospitals to Medicare's inpatient and outpatient prospective payment systems, should the state fail to meet one of the required conditions. Maryland was recently granted approval to extend its Agreement with CMS for another five years (CY 2019–CY 2023). However, if Maryland fails to meet the waiver tests governing that extension or should CMS otherwise decide to terminate the Agreement, Maryland would be required to transition back to IPPS/OPPS and lose the higher payment rates that

Maryland hospitals now receive from governmental payers. This factor has always been a strong motivating force behind the support by hospitals, commercial insurers, self-funded plans and the state for continuation of Maryland's rate-setting system.¹¹

Hospital Global Budget Development and Mechanics

By July of 2014, the HSCRC converted the remaining 37 hospitals to a GBR system, with budgets based on each facility's revenues from a base period (CY 2013). These budgets were adjusted to reflect inflation, changes in service area demographics, market shifts and quality performance, along with the addition of "seed revenue" of approximately 1.05 percent of hospital base revenue to fund new care management infrastructure.¹²

Hospitals continue to be paid HSCRC-approved unit rates. However, the new system established a global cap on each hospital's annual revenues. Hospitals can incrementally adjust rates up or down during the year, as volumes vary, to stay on course with the global budget.¹³ However, each hospital is ultimately held to its annual approved budget cap with any over- or under-charges relative to its cap taken out, or restored, in the following year's budget.

Performance Results through Calendar Year 2016

In the first three years of the new Agreement (CY 2014–CY 2016), the state has experienced generally favorable results particularly on its key hospital-related financial and quality targets as shown in Table 2 below.

Table 2. Maryland Performance versus its Agreement Targets CY 2014–CY 2016

Required Performance Categories	Maryland Targets	Results through CY 2016 (Year 3 of the Waiver) ¹⁴
Percent Hospital Revenue "Population-Based"	More than 80% of hospital revenue under population-based payment by year five.	All Maryland hospitals operating under global budgets in CY 2016.
All-Payer Hospital Revenue Growth per Maryland Resident	All-payer per capita hospital expenditure growth ceiling of 3.58% per year.	Annual all-payer hospital spending growth per capita is averaging 1.53% per year, well below the CMS annual target of 3.58%.
Medicare Savings in Hospital Expenditures (versus National Trend)	Generate Medicare hospital savings of at least \$330 million over the five years CY 2014–CY 2018.	Maryland has generated \$586 million in cumulative savings CY 2014–CY 2016 exceeding the five-year savings target of \$330 million.
Medicare TCOC Requirements (i.e., growth in total Medicare Part A and Part B expenditures per FFS Beneficiary)	Limit Maryland TCOC per Medicare beneficiary growth to no greater than 1.0% above the U.S. growth rate any one year and not to exceed the U.S. TCOC growth rate in two consecutive years.	Maryland has not exceeded these TCOC limitations. However, Maryland Medicare TCOC growth per beneficiary was in excess of the U.S. TCOC growth in CY 2015. ¹⁵ Still, Maryland has generated cumulative TCOC savings for Medicare since CY 2014.
Reductions in Hospital-Acquired Conditions	Reduce the frequency of hospital-acquired conditions for all payers by greater than 30% over the five years of the Agreement.	Maryland has realized 44% reduction in hospital-acquired conditions through CY 2016. ¹⁶
Readmission Rate Reductions (prior to the demonstration Maryland was found to have the highest Medicare readmission rate of any state) ¹⁷	Reduce Medicare readmission rates to be at or below the U.S. average by year 5.	Maryland Medicare readmission rate in CY 2016 is 15.65% versus the U.S. rate of 15.40%, a 79% reduction in Maryland's gap above the nation. Maryland appears to be on target to meet its goal.

In other quality-related areas, Maryland's performance has experienced mixed results in its performance on national clinical and patient safety measures and its patient satisfaction ratings. Patient satisfaction scores, already below national levels, have eroded slightly compared to the nation since the new Agreement was implemented in CY 2014.¹⁸

The preliminary evaluations of the Agreement provide mixed evidence regarding the power of global budget incentives to induce hospitals to generate substantial reductions in unnecessary cost and volume. A recent report from RTI International compared Maryland performance to a control group of similar hospitals in other states over the period CY

2014–CY 2016. While this study did not show new cost savings for privately insured patients, it did substantiate the cost savings on Medicare hospital expenditures, in large part driven by reductions in Medicare admissions.¹⁹ However, a recent study in the *Journal of the American Medical Association* did not find evidence of any reduction in utilization for all global budget hospitals relative to a control group of hospitals in other states, during the first two years (CY 2014–CY 2015) of the Agreement.²⁰ A second article recently published in *Health Affairs* also did not find evidence of changes in hospital use (admissions, observation stays, and emergency department visits) or price-standardized hospital spending by the initial TPR global budget hospitals CY 2011 to CY 2013, relative to an in-state control group of Medicare beneficiaries.²¹ The authors of these last two studies acknowledge that it may take time for hospitals to gain experience to respond to the incentives of global budgets.

These mixed results could be a function of several factors: 1) the results of such evaluations appear to be strongly influenced by the choice of a particular control group used in the comparisons; 2) Maryland hospitals may have faced challenges in responding to the strong incentives under global budgets to cut use and cost, perhaps in part because physicians in the state face financial incentives under FFS payment arrangements that run counter to hospital incentives under global budgets; and 3) during the first three years of the Agreement overall hospital operating profitability improved from 1.23 percent in fiscal year (FY) 2013 to nearly 3.5 percent in FY 2016, while profits on rate-regulated services improved from 5.5 percent in FY 2013 to 8.7 percent in FY 2016 (which may have reduced the pressure for hospital managers to aggressively cut costs in order to maintain or improve financial solvency under their fixed global budgets).²²

The Total Cost of Care All-Payer Model Proposal

In December 2016, the state submitted a plan to CMS to extend the Agreement to cover all Part A and Part B (both hospital and non-hospital) services in Maryland in what is referred to as the Total Cost of Care All-Payer Model. The state's plan for the Total Cost of Care All-Payer Model lays out a number of proposed strategies to expand hospital care coordination activities. In particular, the state is looking to extend chronic care management and prevention to all FFS Medicare beneficiaries in an effort to control the growth in total Part A and Part B Medicare spending per beneficiary.

Under the Total Cost of Care All-Payer Model, Maryland proposed to generate approximately \$1 billion in savings on TCOC growth rates nationally and commit to developing and meeting performance targets for a series of population health metrics.²³ On May 14, 2018 CMS announced approval of the state's proposal to cover CY 2019 to CY 2023, with an option for another five-year extension after CY 2023 if performance metrics are met.

Preliminary Assessment and Future Challenges

Despite the mixed evaluation results thus far, it does appear that Maryland is meeting all of its performance requirements through CY 2016. The growth in hospital all-payer expenditures per capita were also likely at or below actual Maryland GSP growth from CY 2014–CY 2016, which in itself is an accomplishment. Results in the first three years also show that hospitals under fixed global budgets can grow at Medicare hospital payment growth rates and remain solvent without cost shifts to the private sector, and the replacement of FFS incentives by global budget incentives may have contributed to significant improvements in surpluses generated by a number of the state's hospital-based Medicare Shared Savings Program ACOs in CY 2015 and CY 2016.²⁴

However, the mixed evaluations show that it is not yet clear whether Maryland hospitals made effective use of the infrastructure infusions provided by the HSCRC. This additional funding in the approved budgets was intended to jumpstart hospital care management and utilization reduction initiatives. There is evidence, however, that Maryland hospitals made use of improved regulated profits to finance growing losses on physician practices (either through direct physician subsidies or increased employment-based contracts).²⁵ If the state did experience comparative reductions in hospital cost and utilization, there is a question as to whether these reductions were offset by increases in non-hospital services.

Finally, to be successful in the Total Cost of Care All-Payer Model, Maryland will need to address certain challenges encountered in the system during the first four years:

- > **Misalignment of hospital and physician incentives.** Hospitals stand to gain under global budgets when hospital utilization is reduced; however, physicians, who are operating under FFS incentives, experience reduced incomes when this occurs. As noted, these conflicts could be impeding hospitals' attempts to reduce unnecessary utilization. Work to develop care redesign programs that align the incentives of physicians and the model are ongoing.
- > **Increasing complexity.** Industry representatives have raised concern over the increasing complexity of HSCRC methodologies over time, particularly the HSCRC's mechanism for adjusting for significant shifts in patient volume from one global budget hospital to another. Such growing complexity of methods could obscure incentives leading to less than desired hospital performance.
- > **Investment in community-based care management by hospitals with overlapping service areas.** Unlike the rural TPR hospitals, which serve more readily identifiable reference populations, GBR hospitals in urban and suburban settings operate in overlapping service areas where it is more difficult to identify the populations for which they are responsible. This dynamic may have stunted urban and suburban hospital efforts to invest in community programs to reduce unnecessary hospital utilization and control non-hospital expenditures, because these hospitals may fear investments in these programs will benefit competing hospitals equally or more than their own facility.
- > **The shift to non-hospital spending.** Although Maryland's growth in Medicare TCOC per beneficiary was below the U.S. growth in CY 2014 and CY 2016, the state exceeded this U.S. Medicare TCOC growth metric in CY 2015 and appears to be growing faster than Medicare TCOC once again in CY 2017.²⁶ Still, in total, Maryland generated \$461 million in TCOC savings through CY 2016.²⁷ CMS may be worried that increases in non-hospital expenditures will exceed any savings for Medicare hospital expenditures in the state. Accordingly, the Total Cost of Care All-Payer Model must address this key policy issue in the future.

Pennsylvania All-Payer Global Budgets

The Pennsylvania Rural Health Model (the “Model”) was first announced by the Center for Medicare & Medicaid Innovation (CMMI) in January 2017. It currently has a planned implementation date of January 1, 2019. The expectation is that at least six rural hospitals will operate under global budgets in the first performance year (PY 1) with governmental and commercial payer participation to pay proportionate shares of each hospital’s fixed budget.

According to the Hospital and Healthsystem Association of Pennsylvania, rural hospitals across the state are experiencing significant financial distress.²⁸ One in three rural facilities in the state are running negative total margins and in many cases, rural hospitals have had to curtail services or even close facilities. Declining patient volumes and declining revenues, in what remains a largely FFS reimbursement model for these hospitals, has been cited as a primary cause of this worsening financial performance.²⁹ Pennsylvania is looking to stabilize these hospitals, motivated by performance of rural hospitals in Maryland in recent years. Although not explicitly referenced in the development of the Pennsylvania Model, the concept of global budgets for rural hospitals is also supported by the experience of eight hospitals in the Finger Lakes region of upstate New York, which successfully operated under global budgets in the 1980s. In both the Maryland and New York experiments, participating hospitals contained revenue and expense growth over time and eliminated chronic financial deficits.^{30,31}

Rural hospitals that participated in the Maryland and Finger Lakes global budget models benefited from their relative geographic isolation and the fact that they served patient populations that were readily mapped to each hospital. The ability to readily identify a global budget hospital’s reference population is an important factor in the success of these models.³²

The Model is open to voluntary participation by both critical access and acute care hospitals in rural Pennsylvania. While the participation of the Medicare Fee-for-Service program is mandated under the terms of the agreement with CMMI, commercial plans, Medicaid managed care organizations (MCOs) and Medicare Advantage (MA) plans participation is voluntary. However, Pennsylvania is committing to attain broad participation in the Model among payers and rural hospitals to help transform the care that rural hospitals provide and improve the quality of care for as many rural Pennsylvanians as possible.

CMS believes the Model will further CMS’ goals of improving the health of beneficiaries in rural areas, maintaining access to health care for rural populations, and determining the effect of an alternative payment model on rural providers, who have generally had lower rates of participation in alternative payment models.

If the success of these global budget systems could be extended to rural hospitals in Pennsylvania, it might provide cost containment for payers, a more viable financial model for rural hospitals and a pathway for the overall delivery of cost-effective and high-quality rural health care in the commonwealth of Pennsylvania.

Model Overview

There are two key operational components of the Model for each participating hospital.

First, hospitals that participate in the Model are to be paid a fixed global budget based on historical net patient revenue³³ (NPR) for inpatient- and hospital-based outpatient facilities only.³⁴ Once the budget is established for some historical period (either one base year or an average of three base years), it will be trended forward by hospital cost inflation, a factor accounting for demographic changes of residents in its service area, and adjustments for any additions or eliminations of service lines. Each participating payer will pay that hospital based on the payer’s respective portion of this global budget on a monthly basis. This payment approach is expected to provide each hospital with a predictable revenue stream, which should stabilize financial performance and incentivize investment in initiatives to improve care delivery.

Second, the Model will require the development and approval of hospital transformation plans by participating hospitals. These plans must specify how the hospital expects to redesign the care it provides by investing in quality and preventive care and tailoring services to the needs of the local community. Each hospital must seek input from local stakeholders, physicians and other care providers. Each transformation plan must be reviewed and approved by the Pennsylvania Department of Health (the “Department”) and by CMS. The objective of this operational component is to promote care delivery transformation activities that will help rural hospitals make meaningful improvements in the quality of the overall care delivered in the community.

Medicare’s participation in the Model is mandated by a waiver agreement, negotiated between the Department and CMMI. CMMI and the Department expect the Model to operate on a multi-payer basis with most Medicaid MCOs and large commercial payers agreeing to participate.

The Model is intended to cover the period from CY 2017 through CY 2024 (PY 0 through PY 6). Given the commonwealth’s recent request for a delayed start date, the initial performance year (PY 0) is essentially two years in length (from January 2017 through December 2018). During this period, the Department is assisting hospitals with the development of transformation plans, working through any governance and operational issues, addressing any questions or concerns by prospective payers and providers, and ultimately ensuring participation by hospitals and the Medicaid MCOs, MA plans and commercial payers. The first performance year (PY 1) is then slated to begin January 1, 2019.

Model Targets

Under the Model, Pennsylvania has agreed to meet targets in three areas.

Scale Targets: There are 67 rural hospitals that meet the criteria for participation. Pennsylvania committed to at least six hospitals participating during CY 2019 (PY 1); at least 18 total during CY 2020 (PY 2); and at least 30 total during each of the years CY 2021–CY 2024 (PY 3–PY 6). Pennsylvania will also encourage participation by commercial payers and Medicaid MCOs. Pennsylvania has committed to having each participating rural hospital’s global budget represent at least 75 percent of that hospital’s eligible NPR by CY 2019 and at least 90 percent for each of performance years CY 2020–CY 2024.

Financial Targets: Pennsylvania has committed to achieving at least \$35 million in Medicare hospital savings over the course of the Model period. In addition, the growth rate of rural Pennsylvania total Medicare FFS Part A and Part B expenditures per beneficiary must not exceed the growth rate of Medicare expenditures per beneficiary nationally. Across all participating payers, Pennsylvania has committed to an all-payer financial target of growth in per-resident hospital expenditures (for participating hospitals) of no more than 3.38 percent per year, equal to the compound annual growth rate for Pennsylvania’s gross state product from 1997 to 2015.

Population Health Outcomes, Access and Quality Targets: Although the specific outcome, access and quality targets have not yet been finalized, Pennsylvania commits to achieving targets related to population health outcomes and access under this Model, and may tie financial incentives for participating rural hospitals to Pennsylvania’s performance on increasing access to primary and specialty care, reducing rural health disparities, and decreasing deaths from substance use.

Rural Health Redesign Center

Although the Department is charged with the initial responsibility for organizing, implementing and administering the Model, the Department plans to introduce legislation to establish a Rural Health Redesign Center (RHRC). The RHRC is intended to be structured as an independent agency governed by a board of directors with administrative oversight authority and responsibility over the Model. Initial funding of the RHRC will come from CMS grants. Over time, the RHRC is intended to provide technical and policy expertise and also serve as a resource for other states interested in implementing a similar global budget model for rural hospitals.

Assessment

Pennsylvania's implementation of global budgets that cover readily identifiable and discrete reference populations will allow hospitals to target their cost control and care improvement activities. Hospitals that successfully generate savings from these activities can make use of these savings to shore up financial condition and reinvest resources back into activities to improve community health status, hopefully resulting in further cost savings for the hospital. The commonwealth must be careful to monitor the financial risk that each rural hospital assumes under the Model, however. Although hospital global budgets will be structured to allow hospitals to receive additional payments in the event of unforeseen increases in patient demand (e.g., such as a particularly severe flu season), small facilities with limited financial resources may be vulnerable to fluctuations in patient morbidity or unusual health-related events, which could generate unmanageable cost swings under a fixed budget.

Given the voluntary nature of the Model (i.e., other than Medicare, payer and hospital participation in the Model is not mandated) the commonwealth may also face challenges reaching and/or continuing to meet some of the scale targets for participation of rural hospitals (particularly the critical access hospitals, which currently enjoy the stability of cost-based reimbursement by Medicare and Medicaid), MCOs, commercial patients, and particularly patients insured through self-plans.³⁵

Vermont Accountable Care Organization Global Hospital Budgets

When Vermont's attempt to establish a single-payer model did not move forward in 2014, the state decided to focus its energies on a broad and ambitious reform of its health care payment and delivery system. The state had previously created the Green Mountain Care Board (GMCB), an independent regulatory agency charged with responsibility to review hospital operating budgets and broad authority to pursue experimental payment arrangements to control the growth in health care costs and maintain or improve health care quality.³⁶ By 2015, the development of an All-Payer ACO Model emerged as the state's primary health reform strategy.

Under the state's new federal waiver agreement with CMS (approved in January 2017), the OneCare Vermont ACO, which was founded by University of Vermont Medical Center and Dartmouth Hitchcock in 2012, assumes risk, within pre-established corridors, TCOC expenditures for aligned Medicare, Medicaid and BlueCross BlueShield of Vermont (BCBSVT) members who access their insurance through the state exchange.³⁷ OneCare's overall ACO budget for any PY is based on prospectively established PMPM amounts for governmental beneficiaries and commercially insured enrollees attributed to ACO-participating primary care providers (PCPs).³⁸

Vermont hospitals are the key risk-bearing entities in this payment arrangement because they operate within the ACO under TCOC targets (with risk corridor protections) and are thereby financially responsible for controlling the growth in the TCOC for all locally attributed beneficiaries. The risk these hospitals assume is limited by risk corridors specific to each participating payer. The model also accounts for care rendered by non-hospital providers and by other hospitals in the state. Thus, OneCare has developed a way of accounting for shifts in the delivery of care over time (i.e., so-called market shifts).

OneCare is also charged with organizing the provider network, developing and coordinating the key population health management initiatives, providing analytics and information support for participating providers, managing the payments and cash flows, developing and settling the risk arrangements with participating providers, and assuming the overall risk for performance. OneCare does not negotiate with or contract with payers on behalf of its network for FFS rates. These contracts continue to be held directly by governmental and private payers with the participating providers.

The All-Payer ACO Model is meant to incentivize the health care system in Vermont to move aggressively toward value-based care reimbursement in an effort to decrease spending trends and improve outcomes. Other goals include providing predictable payment for hospitals and eventually transitioning from a claims-based, FFS, volume-driven payment and delivery system to a model that uses population-based payment for most health care services.

Requirements of the Vermont All-Payer ACO Model Agreement

After a pilot test year in CY 2017 for the Medicaid population, the Vermont All-Payer ACO Model Agreement (the "Agreement") was implemented with all three payers on January 1, 2018. The Agreement utilizes a version of Medicare's Next Generation ACO Model and is scheduled to operate through December 2022, provided the state meets scale, financial and quality targets. In addition to being subject to the quality of care provisions of the Next Generation ACO Model, OneCare is establishing a value-based incentive fund that will provide additional incentives for quality improvement. Quality-related goals include reducing deaths from suicide and drug overdose and decreasing the rates of chronic disease.

In describing the Agreement, CMMI notes that it "builds on the Maryland All-Payer Model, and will expand the global budget approach to include both hospital and non-hospital expenditures" (i.e., TCOC). If the state performs successfully, it will have the option to renew the Agreement.

OneCare has estimated 2018 maximum downside risk to be approximately \$21.5 million based on its projected enrollment of 122,590 lives (compared to a state population of 630,000 lives) and a total GMCB approved ACO budget of \$620 million. The Agreement specifies performance targets for scale (i.e., the number of participating beneficiaries, as shown in Table 3), financial performance and quality, including population health outcomes.

Table 3. ACO Resident/Beneficiary Scale Targets

Percent (%)	By end of CY18	By end of CY19	By end of CY20	By end of CY21	By end of CY22
Vermont All-Payer Residents	36%	50%	58%	62%	70%
Medicare Beneficiaries	60%	75%	79%	83%	90%

On costs, the state is required to limit annual TCOC per capita health care annual spending growth to 3.5 percent on an all-payer basis and hold Medicare TCOC spending growth for Vermont FFS Medicare beneficiaries to a level at least 0.1 percentage points to 0.2 percentage points below the national rate. Finally, Vermont is required to meet patient outcome and quality of care targets in four priority areas: substance use disorder, suicides, chronic conditions and access to care. Failure to meet any of these targets will trigger a CMS “warning notice” requiring the state to submit a “Corrective Action Plan.” Failure to comply could result in termination of the demonstration.

Delegated Risk Model for Well-Defined Reference Populations

Vermont is characterized by a number of relatively isolated, small-to-medium-sized communities. The residents in each of these communities, identified by CMS as health service areas (HSAs), naturally receive a majority of their health care from the sole-community hospital, and hospital-affiliated providers. Under OneCare’s payer contracts, residents of each HSA are attributed to the ACO based on their health insurance and primary care clinician affiliation. The attributed HSA population thus constitutes a readily identifiable reference population for each participating hospital. Costs associated with these lives across the three payer categories are aggregated to establish a total cost of care global budget for each HSA. As the largest entity in each HSA, the local hospital (also known as a “home hospital”) is the natural entity to assume the risk for controlling this budget. The ability of the local hospitals to assume this budgetary responsibility is enhanced by the fact that most physicians in the state (approximately 65%) are hospital-employed.³⁹

As noted earlier, OneCare has recreated the risk corridors that it faces in its payer agreements overall at the home hospital level, so that each participating hospital’s risk/reward potential is limited to the same risk corridors (by payer) as negotiated for the ACO (i.e., +/- 5% with an 80/20 risk share with Medicare within that corridor, +/- 3% with 100% risk sharing with Medicaid, and +/- 6% with 50/50 risk sharing with BCBSVT).

OneCare receives fixed monthly prospective payments from participating payers for all services to be delivered to patients attributed to PCPs in each HSA. OneCare pays each home hospital a fixed prospective monthly amount per attributed life associated with historical hospital and hospital-based physician spending for these HSA residents, in the hospital’s HSA. There is no reconciliation of hospital performance for these expenditures. If the hospital’s costs are below the total of these fixed payments for the year, it will generate a surplus. If its costs are above the total payment amounts, it will generate a deficit. Simultaneously, OneCare will monitor the spending on care provided to the hospital’s HSA residents for non-hospital providers in the HSA, care rendered at other Vermont hospitals and care by out-of-state providers. If a home hospital’s actual costs for these non-hospital and out-of-area hospital services come in under its budgeted spending levels during a year, OneCare will send a home hospital the amount of savings, up to the risk corridor limits. Similarly, if the hospital exceeds its budgeted spending levels, it has to remit a check to OneCare, again up to limits set by the risk corridors.⁴⁰ Under this approach, the home hospitals are individually assuming risk for the care they deliver and collectively assuming risk for the TCOC for services provided to their HSA residents across all participating payers. The settlement process is expected to occur in the late summer of each PY, allowing sufficient time for claims run-out.

The allocation of TCOC risk to the participating HSA home hospitals in this fashion creates a regional risk allocation mechanism that avoids the need for OneCare itself to initially build and hold financial reserves. In addition to the risk corridors in the Agreement, the ACO will experience a degree of risk mitigation from individual stop-loss provision included by Medicare under its general ACO arrangements.⁴¹ OneCare is also exploring the possibility of purchasing additional re-insurance; however, this reinsurance may not be affordable. ACO managers hope that favorable

performance in the early years will allow the OneCare network to accumulate reserves that could provide a “back-stop” to any future losses.

Role of Centers for Medicare & Medicaid Services and the Green Mountain Care Board

As noted, the GMCB is the regulatory body with responsibility for the review of hospital operating budgets and the implementation of payment reform strategies in the state. Recently, Vermont passed legislation that extended the GMCB’s regulatory oversight authority to include review and approval of OneCare’s annual operating budget, the approval of contracts between OneCare and each individual payer and an evaluation of the actuarial soundness of the proposed risk allocation and payment methodologies.⁴² Beyond these monitoring and review responsibilities, the GMCB will also be involved with CMS in the trending of PMPM payment rates from Medicare, Medicaid and BCBSVT to the ACO overtime and general administration of the waiver.

Overall Assessment

The Vermont Model is unique in its risk allocation approach, which is based on hospital global budgets for well-defined reference populations and contains a mechanism to track and adjust for any market shifts of patients from hospital to hospital. The allocation of risk to HSA home hospitals on a regional basis creates strong incentives at the local level to reduce cost and coordinate care. The risk for hospital and hospital-based physician services is wholly manageable for these entities because they face fixed payment levels (budgets) that reflect their historical cost experience. Thus, the model is a hybrid approach that creates both a regional distribution system that rewards hospitals and their employed physicians for savings they are able to produce while at the same time allowing for some sharing of overall TCOC risk.

Likely challenges include securing participation of sufficient commercial beneficiaries (particularly beneficiaries in self-insured accounts) to meet scale targets and the lack of significant up-front care management infrastructure funding.⁴³ Finally, the voluntary nature of the entire model (i.e., the state can terminate the model at any time without repercussion) and the sharing of overall TCOC performance by all home hospitals could create additional challenges for Vermont. Collective responsibility for TCOC performance creates a “contingent incentive” whereby each hospital’s ultimate results are contingent on the performance of other hospitals or the entire ACO. The use of contingent incentives could dilute incentives at the individual hospital level.⁴⁴

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State Health and Value Strategies (SHVS) assists states in their efforts to transform health and health care by providing targeted technical assistance to state officials and agencies. The program is a grantee of the Robert Wood Johnson Foundation, led by staff at Princeton University's Woodrow Wilson School of Public and International Affairs. The program connects states with experts and peers to undertake health care transformation initiatives. By engaging state officials, the program provides lessons learned, highlights successful strategies and brings together states with experts in the field. Learn more at www.shvs.org.

ABOUT GLOBAL HEALTH PAYMENT, LLC

This brief was prepared by Robert Murray, president of Global Health Payment, LLC. Global Health Payment is a health care consulting firm with experience in the development and implementation of alternative prospective payment systems, including hospital global budgets and physician shared savings programs. Previously, Mr. Murray served as the executive director of Maryland's hospital rate setting agency, the Health Services Cost Review Commission from 1994 to 2011. For more information on Global Health Payment, please email RMurray@GlobalHealthPayment.com.

Endnotes

1. Haber S, Beil H, Amico P, Morrison M, Akhmerova V, Beadles C et al. *Evaluation of the Maryland All-Payer Model – Third Annual Report*. Prepared for the Centers for Medicare & Medicaid Services, Center for Medicare & Medicaid Innovation by RTI International; 2018. <https://downloads.cms.gov/files/cmimi/md-all-payer-thirdannrpt.pdf>. Accessed May 23, 2018.
2. Friedman B, Wong HS. Impacts of Hospital Budget Limits in Rochester, New York. *Health Care Financing Review*. 1995; Volume 16(No. 4).
3. Based on experience of several state-based rate setting systems, including Maryland, the cost structure of most acute care hospitals are generally thought to be approximately 50% fixed and 50% variable with volume. Fixed rate FFS payment structures deliver 100% marginal revenue for each new service produced. The difference between the 100% marginal revenue earned for providing a new service and the 50% marginal cost incurred, results in incremental cash flow and improved operating margins for hospitals as volume increases. Thus, once fixed costs have been covered, each new service adds to a hospital's cash flow and operating margin.
4. The Rochester Hospital Experimental Payment Program (HEPP), which applied to nine Rochester-area hospitals, was a successful all-payer (having received a waiver from Medicare) demonstration operating in the early to mid-1980s. In addition to reducing the rate of growth of hospital costs per capita, hospital financial condition was maintained without any erosion in hospital access and quality of care. There were several reasons for the discontinuation of the demonstration. The principle reason was introduction of DRG payment through the national Inpatient Prospective Payment System (IPPS) by Medicare. Rochester hospitals determined that the initial phase of IPPS provided far more generous payments than the payments they were receiving under the HEPP. This discrepancy eroded support for the demonstration and eventually caused hospitals to abandon the HEPP for the IPPS in 1987. Hospitals in the Finger Lakes also abandoned their demonstration around this time.
5. Murray R, Berenson RA. *Hospital Rate Setting Revisited; Dumb Price Fixing or a Smart Solution to Provider Pricing Power and Delivery Reform?* Urban Institute; 2015. <https://www.urban.org/sites/default/files/publication/73841/2000516-Hospital-Rate-Setting-Revisited.pdf>. Accessed May 23, 2018.
6. Hospitals operating in urban and suburban areas that serve overlapping patient populations will have less incentive to make such investments because the financial benefits that result (through lower hospital use and cost) will accrue to the hospital making the investment, as well as to other competing hospitals in the service area. Western Maryland Health System, one of the original global budget hospitals in Maryland, operates in a geographically isolated part of the state and serves a well-defined reference population. Accordingly, it was encouraged to invest heavily in community-based initiatives to improve population health. See Porter E. "Lessons in Maryland for Costs at Hospitals," *New York Times*, August 27, 2013.
7. Mostashari F, Sanghavi D, McClellan M. Health Reform and Physician-Led Accountable Care: the Paradox of Primary Care Physician Leadership. *JAMA*. 2014; Vol.211(18):1885-1886.
8. The conflict in incentives faced by hospital-led ACOs may have contributed to the lackluster performance of participants in the Physician Group Practice demonstration and the more recent CMMI Pioneer ACO Program. Most of these ACOs were organized around large hospitals or academic medical centers.
9. The original rural global budget hospital models are referred in Maryland and in the literature as the Total Patient Revenue (TPR) hospitals.
10. The TPR and GBR global budget models are virtually identical in that they both establish a fixed level of revenue a participating hospital could receive in a given year.
11. This is a key factor that differentiates Maryland from most other previous hospital rate setting systems and the two current all-payer Vermont and Pennsylvania demonstrations. In a recent evaluation, RTI International estimated that Medicare inpatient payment levels were 33%-41% higher and outpatient payment levels were 55%-62% higher than Medicare payments in a control group of hospitals in other states. Correspondingly, RTI found that Maryland private payer payment levels were 11%-15% lower than those of the control group. The fear of the loss of these enhanced governmental payments under the state's waiver has been a galvanizing force for support of the waiver and the rate setting system.
12. The infusion of additional "seed funding" of approximately 1.05% of base hospital revenue remains in these hospitals' rate base and compounds each and every year.
13. Hospitals may increase or decrease rates up to 5% without HSCRC approval. Beyond that hospitals need commission approval but may not exceed 10%.
14. Per HSCRC staff via email communication March 19, 2018.
15. As announced by the HSCRC chairman at the April public meeting of the HSCRC, Maryland exceeded the United States in TCOC per FFS beneficiary in CY 2015 and CY 2017. If Maryland grows faster than U.S. TCOC growth per beneficiary in CY 2018 (a second consecutive year), it would violate the TCOC growth limitation of not growing faster than the U.S. TCOC in two consecutive years.
16. The HSCRC has acknowledged that some of this dramatic improvement may have been as a result of changes in hospital documentation and coding activities.
17. Jencks SF, Williams MV, Coleman EA. Rehospitalizations among Patients in the Medicare Fee-for-Service Program. *New England Journal of Medicine*. 2009;360:1418-1428.
18. Per the HSCRC December 2017 staff report on its Quality Based Reimbursement (QBR) metrics covering the period CY 2016.
19. Haber S, Beil H, Amico P, Morrison M, Akhmerova V, Beadles C et al. *Evaluation of the Maryland All-Payer Model – Third Annual Report*. Prepared for the Centers for Medicare & Medicaid Services, Center for Medicare & Medicaid Innovation by RTI International; 2018. <https://downloads.cms.gov/files/cmimi/md-all-payer-thirdannrpt.pdf>. Accessed May 23, 2018.
20. Roberts ET, McWilliams JM, Hatfield, Gerovich S, Chernew ME, Gilstrap LG, et al. Changes in Health Care Use Associated With the Introduction of Hospital Global Budgets in Maryland. *JAMA Internal Medicine*. 2018;178(2):260-268.
21. Roberts ET, Hatfield LA, McWilliams JM, Chernew ME, Done N, Gerovich S, et al. Changes in Hospital Utilization Three Years into Maryland's Global Budget Program for Rural Hospitals. *Health Affairs*. 2018; 37(No.4):644-653.

22. An original policy rationale for implementation of the TPR global budgets was that under fixed budgets the reduction of unnecessary hospital cost and volume would be an important source of a hospital's financial sustainability over time. The HSCRC recognized that under fixed budgets, any improvement in operating efficiency or elimination of unnecessary admissions or readmissions would accrue to the financial benefit of the TPR hospital. However, the infusion of relatively large amounts of infrastructure funding for the TPR hospitals and later for all Maryland hospitals, along with other factors, may have contributed to the substantial improvement in hospital profitability, which in turn, may have reduced the pressure on these hospitals to reduce unnecessary cost and service use.
23. Medicare hospital and non-hospital Part A and Part B expenditures (i.e., Medicare Total Cost of Care) in Maryland is approximately \$10 billion per year or about \$50 million over five years. The required savings of \$1 billion equals 2.0% overall (\$10 billion/\$50 billion) or an average of 0.4% per year.
24. See: <https://data.cms.gov/Special-Programs-Initiatives-Medicare-Shared-Savin/2016-Shared-Savings-Program-SSP-Accountable-Care-O/3jk5-q6dr> and <https://data.cms.gov/Special-Programs-Initiatives-Medicare-Shared-Savin/Medicare-Shared-Savings-Program-Accountable-Care-O/x8va-z7cu/data>. As noted in the Global Budget Overview, hospitals with high fixed costs operating under FFS platforms resist the efforts of shared savings ACO programs to reduce use, while hospitals under fixed global budgets have incentives that are more aligned with those of ACOs.
25. See the HSCRC annual Disclosure of Hospital Financial and Statistical Data FY14–FY16 available at: www.hscrc.state.md.us/Pages/pdr-annual-reports.aspx.
26. Announced by the HSCRC chairman during the April 2018 public meeting of the commission.
27. Information provided by the HSCRC staff April 30, 2018.
28. Hospital Association of Pennsylvania Press Release, January 12, 2017. www.haponline.org/Newsroom/News/ID/2172/Pennsylvania-Rural-Health-Model-Announced.
29. Murphy KM, Hughes LS, Conway P. A Path to Sustain Rural Hospitals. *JAMA*. 2018;319(12):1193-1194.
30. Farnand LJ, Jacobs P, Dickson WM. An Evaluation of a Program to Regulate Rural Hospital Costs: The Finger Lakes Hospital Experimental Payment Program. *Inquiry*. 1986;No 23:200-208.
31. Haber S, Beil H, Amico P, Morrison M, Akhmerova V, Beadles C et al. *Evaluation of the Maryland All-Payer Model – Third Annual Report*. Prepared for the Centers for Medicare & Medicaid Services, Center for Medicare and Medicaid Innovation by RTI International; 2018. <https://downloads.cms.gov/files/cmml/md-all-payer-thirdannrpt.pdf>. Accessed May 23, 2018. See the Global Budget Overview for a discussion of the importance of the ability to identify a global budget hospital's "reference population."
32. See the Global Budget Overview for a discussion of the importance of the ability to identify a global budget hospital's "reference population."
33. Net Patient Revenue (NPR) represents amounts that a hospital actually collects from governmental payers, commercial payers and self-pay patients for the provision of covered inpatient and outpatient facility-based services.
34. As the Model evolves, hospitals may have the opportunity to add additional provider revenues to the global budget, such as revenues generated by hospital-employed physicians.
35. Although critical access hospitals have some degree of financial stability from the cost-based payment methods utilized by Medicare and Medicaid, these hospitals generally have diminished negotiating leverage with larger commercial payers. Thus, participation in a demonstration that guarantees these hospitals a fixed overall budget from all major payers could provide additional overall financial predictability and stability. Maryland hospitals that operated under fixed global budgets had the opportunity to convert to critical access hospital status and declined because they valued the aligned incentives across all-payers and financial stability that global budget provide.
36. Subsequent to 2011, the GMCB also assumed responsibility for health insurer rate review and for ACO regulation.
37. The Agreement with CMMI actually anticipated and accommodates multiple ACOs. However, currently only OneCare Vermont exists for this purpose and meets the state's ACO certification requirements for this model.
38. Nurse Practitioners and Physician Assistants can also participate as attributing providers.
39. Interview with Kevin Stone, Chairman of the Board of OneCare Vermont, February 15, 2018. This statistic has been corroborated by conversations with other state officials.
40. A home hospital's budget for non-hospital and out-of-area hospital spending for its HSA residents is based on historical spending levels trended forward to a performance year.
41. Individual beneficiary expenditures are capped by Medicare at the 99th percentile of expenditures.
42. See Act 113 <https://legislature.vermont.gov/assets/Documents/2016/Docs/ACTS/ACT113/ACT113%20As%20Enacted.pdf>.
43. Based on interviews with OneCare officials, Vermont was offered approximately \$210 million in transitional funding by CMS over the term of the All-Payer Model Agreement if the state agreed to provide some proportion of matching funds. Thus far, the Vermont legislature has not met CMS' fund matching requirements necessary for CMS to authorize the infusion of most of these funds. In the absence of initial transformation and infrastructure development support, hospitals must provide this up-front funding on their own, which will diminish their overall upside savings potential.
44. One hospital representative interviewed raised the concern about a circumstance where "winning" hospitals might be required to cover the losses of poor performing hospitals. This type of contingent/collective incentive generally works to dilute the financial incentives of individual participants because the potential for gain is influenced by circumstances beyond their control.