1. Executive Summary

Hospital spending represents roughly one-third of national health care spending and for some hospitals, spending is growing at an unsustainable rate. Conversely, some hospitals are at risk of closure due to dropping patient volume, physician shortages, and other factors. Global budgets are an appealing strategy for both types of hospitals. Under a fee-for-service payment model, hospitals are incentivized to increase service volume because it results in greater revenue. A global budget, however, is a fixed prospective payment that is based on historical utilization and is adjusted annually based on changing demographics, market share, and service mix. The fixed budget motivates hospitals to control utilization because if they exceed their allotted budget, they incur a deficit. For financially distressed hospitals, global budgets provide a steady, predictable revenue source for financially distressed hospitals that provide necessary access to care. In both scenarios, hospitals can reinvest savings into community-based initiatives that prioritize care coordination and address social determinants of health to improve population health.

As of 2021, select hospitals in four states have been or are still paid through a global budget arrangement: New York (1980 – 1988), Maryland (2010 – present), Vermont (2017 – present) and Pennsylvania (2019 – present). Maryland has had the most experience with global budgets to date. Maryland has uniquely operated an all-payer hospital-rate setting system run by its Health Services Cost Review Commission since 1977, meaning Medicare, Medicaid and commercial insurers all pay the same rate for the same service. It implemented hospital global budgets for ten rural hospitals in 2010 and expanded the model to include 37 additional hospitals as part of its 2014 Medicare All-Payer Model Agreement with the Center for Medicare and Medicaid Services (CMS). Under this agreement Maryland committed to converting at least 80 percent of hospital payments to a global budget. Between 2014 and 2018, Maryland’s model reduced hospital spending for Medicare and commercial payers, reduced total expenditures for Medicare, reduced admissions for Medicare and commercial payers, and reduced emergency department visits for Medicaid and commercial payers.

Vermont’s All-Payer Accountable Care Organization (ACO) Model aims to create alignment across payers through risk-based payments with one, statewide ACO, OneCare Vermont. OneCare assumes risk for all expenditures and population health responsibilities for its patient population. The ACO has worked with public and private payers so that some, but not all, hospitals are paid through hospital global budgets. The Model was associated with decreased hospital-based utilization and expenditures for Medicare in its second year. It’s important to
note that some hospitals in rural areas have been reluctant to participate in the model due to the financial risk involved.

Pennsylvania’s Rural Health Model is focused specifically on critical access hospitals and other acute care hospitals in rural areas. It committed to having 30 hospitals participate in the model for each year between 2021 and 2024 and to having at least 90 percent of each participating hospital’s net patient revenue come from hospital global budgets for each year between 2020 and 2024. Pennsylvania has had challenges meeting its targets, partially due to the COVID-19 pandemic, but its Rural Health Model shows promise. A variety of hospital types, including critical access, system-owned, and independent hospitals, have elected to participate in the model.

Maryland’s, Vermont’s and New York’s experience has shown that hospital global budgets can constrain cost growth. They can also lead to improved quality, equity and utilization based on what other complementary features are built into the payment model. They can fundamentally change how hospitals provide care due to a reliable revenue source that is not dependent on volume of services. Hospital global budgets give hospitals the autonomy to decide how to best improve care for their population. Further, global budgets can provide a steady stream of income for hospitals facing financial hardship, notably rural hospitals.

However, there are several challenges associated with implementing hospital global budgets that could result in unintended outcomes. First, hospital global budgets may not lead to systemic change if there is limited payer and/or provider participation. Global budgets must also be designed in a way that minimizes risk and technical challenges associated with implementation for hospitals and/or payers who may be reluctant to participate otherwise. Second, if global budgets are not designed properly, they could lead to stinting on needed care, shifting of care to settings not captured under the global budget, and/or reinforcement of undesired structures that perpetuate inequities in access to and/or quality of care. Finally, hospital global budgets could also sustain some hospitals that should close or be repurposed, which is more likely to occur in geographic areas with excess bed capacity.

Hospital global budgets can be a viable solution for funding New Mexico’s hospitals. New Mexico must first clearly identify what it wishes to achieve with a hospital global budget model. In more heavily populated regions, like Albuquerque, Santa Fe, and Las Cruces that have multiple hospitals, global budgets can be an effective tool to reduce unnecessary hospital spending and utilization. In rural areas, hospital global budgets can provide a sustainable funding source for hospitals in financial distress that provide a vital service for communities.

Should New Mexico choose to adopt global budgets as a payment mechanism for hospitals, it can look to Maryland, Vermont, and Pennsylvania for guidance on how to develop its methodology for urban and rural hospitals. This includes identifying which hospitals and populations to include, how to ensure the adequacy of budgets, how to distribute payments and monitor performance, and more. These state experience have shown that support from hospitals, non-hospital providers, commercial payers, and state government combined with a robust methodology for developing budgets and a strong, health information technology infrastructure and population health initiatives are key to model success.
2. Background and Reasons for Pursuing Hospital Global Budgets

Hospitals have been facing increasing attention in recent years for being one of the largest and fastest growing contributors to health care spending growth. Hospitals represented 31 percent of national health care spending, or $1.2 trillion, in 2019. Hospital spending is expected to grow by six percent on average over the next ten years. This is largely a byproduct of rapidly growing prices in the market. Inpatient hospital prices, for example, grew 42 percent from 2007-2014. Hospital consolidation over the last two decades has allowed major hospital systems to demand higher prices from insurers. On the other hand, dropping patient volume, workforce shortages, and other factors has made it harder for certain hospitals, notably rural hospitals, to survive, eventually leading to hospital closures. The COVID-19 pandemic exacerbated this latter trend.

One way to simultaneously slow spending growth and provide a lifeline to struggling hospitals is the application of hospital global budgets. Under current hospital payment models, hospitals are incentivized to deliver more services, especially higher margin services, and generate more revenue. Hospital global budgets are an alternative payment model where budgets for a set of defined services are determined prospectively based on anticipated utilization during a specific time period. This arrangement removes the incentive to drive up service volume that is embedded within existing payment models. It transfers financial risk from payers to hospitals, who are now responsible for maintaining costs, so they do not exceed the defined budget.

This payment model which transfers financial accountability to hospitals can, ironically, provide a financial lifeline to hospitals. Hospital global budgets provide a reliable revenue source under which hospitals can operate, allowing hospitals to be innovative in how they care for patients. They do not expand utilization of existing services, as budgets are typically set based on historical utilization. Because hospitals are guaranteed a fixed revenue, hospital global budget may allow hospitals to repurpose existing resources and/or reinvest savings for new, needed community-based services that prioritize care coordination and social determinants of health, which improve population health. Hospital global budgets are particularly alluring for rural hospitals that typically face a shrinking number of patients who have increasingly complex care needs.

Hospital global budgets can also be appealing to payers because even if global budgets result in effectively a higher payment rate per admission, there is an incentive for hospitals to reduce preventable admissions, thus producing net savings. In addition, there is ability to prospectively budget the rate at which hospital spending will grow. Of course, hospitals with market power can drive up the budget at an unaffordable rate.

3. Overview of States that Implemented Hospital Global Budgets

a. **New York** experimented with hospital global budgets in Rochester from 1980 to 1988 through the Finger Lakes Hospital Experimental Payment (FLHEP) program. Seven Rochester hospitals and one hospital outside city limits volunteered to participate. The State also operated an all-payer hospital-rate setting system during this time. This model ended when the State moved to the all-payer Diagnosis Related Groups (DRG) payment system and therefore the Health Care Financing Administration, the precursor to the Centers for Medicare and Medicaid Services (CMS), terminated New York’s Medicare waiver.\(^{16,17}\)

The results from the FLHEP program were promising. Hospitals participating in the program had reduced growth in hospital operating revenues and expenses when compared to other New York State hospitals. Hospitals also realized improvements in their net margins. Of note, hospitals may have experienced more success if compared to other hospitals nationally versus hospitals in New York State that were already subject to rate control at the time.\(^{18}\)

b. **Maryland** has operated an all-payer hospital-rate setting system run by its Health Services Cost Review Commission (HSCRC) since 1977. This means that Medicare, Medicaid and commercial insurers all pay the same rate for the same service. Maryland first implemented hospital global budgets for ten rural hospitals in 2010 because it found that Maryland had one of the largest expenditures per Medicare member in the country. It expanded the global budget model to include 37 additional hospitals as part of its 2014 Medicare All-Payer Model Agreement with CMS. Under this Agreement, Maryland committed to converting at least 80 percent of hospital payments to a global budget.\(^{19}\) Maryland’s waiver exempted the state from Medicare’s inpatient and outpatient prospective payment systems continued its all-payer rate-setting agreement.\(^{20}\) Maryland modified its All-Payer Agreement in July 2017 to include the Care Redesign Program. This program aimed to provide hospitals with additional funding to partner with community-based providers to support care management, population health, and other activities designed to improve quality of care and reduce spending for Medicare beneficiaries.\(^{21}\)

Between 2014 and 2018, Maryland’s All-Payer Model reduced Medicare hospital admissions by seven percent, hospital spending by four percent (nearly $800 million) and overall Medicare Part A and B spending (inclusive of hospital spending) by two percent (nearly $1 billion).\(^{22}\) Medicare hospital savings were attributed to slowed growth in emergency department (ED) and other hospital expenditures. Overall Medicare Part A and B savings were also attributed to lower spending on professional services in hospital and post-acute care settings because of decreased inpatient admissions. Maryland also realized reduced hospital expenditures for commercial beneficiaries, reduced ED visits and inpatient admissions for commercial beneficiaries and reduced admissions and ED visits for Medicaid beneficiaries. Importantly, the Model was associated with reduced expenditures without shifting costs to other settings. The All-Payer Model was not associated with reduced inpatient hospital expenditures for Medicare beneficiaries, total expenditures or ED
visits for commercial beneficiaries or unplanned readmissions across markets. It also was not associated with improved coordination with community providers post-discharge.23

The successor to Maryland’s All-Payer Model was the Total Cost of Care (TCOC) Model, which began in January 2019 and goes until at least 2023. The TCOC Model still includes hospital global budgets and the incentives from the Care Redesign Program. It newly adds more accountability metrics for hospitals. Specifically, Medicare payments to hospitals are now adjusted up or down by one percent based on the hospital’s TCOC performance, and not just based on total hospital performance. The Model also introduced new cost and quality metrics for the State and added the Primary Care Program, which supports delivery of advanced primary care.24

c. Vermont agreed to an All-Payer ACO Model through a federal waiver approved by CMS in 2017. Under the agreement, CMS, the state Medicaid program and the state’s leading commercial insurer contract with one, statewide ACO (OneCare Vermont or “OneCare”). The ACO includes 15 hospitals and was created as a partnership between the University of Vermont Medical Center and Dartmouth-Hitchcock Medical Center. The goal of the All-Payer ACO Model was to create alignment across payers through risk-based payments that are tied to cost and quality metrics. Vermont agreed to limiting all-payer TCOC growth to 3.5 percent and Medicare TCOC growth to 0.2 percent below the national Medicare growth rate. It also committed to providing care for 70 percent of all-payer residents and 90 percent of Medicare beneficiaries through the All-Payer ACO Model by 2022.

OneCare assumes risk for TCOC expenditures as well as population health responsibilities for all beneficiaries that are participating in the Model. Hospitals, which receive a portion of their payments through global budgets, are the primary risk-bearing entity and take on a portion of the risk for the TCOC of beneficiaries attributed to the hospital. Larger hospitals assume greater risk than smaller hospitals. All participating hospitals also pay dues to OneCare, which are used to support population health activities. The Green Mountain Care Board (GMCB), an independent regulatory agency, oversees OneCare.25

The All-Payer Model was associated with decreased hospital-based utilization in year two for Medicare beneficiaries attributed to the Model as well Medicare beneficiaries in the state overall. This was likely a main contributor to reduced Medicare expenditures for attributed and non-attributed beneficiaries. Most hospitals in Vermont are working with at least one payer in the State’s All-Payer ACO Model. Smaller, independent hospitals, notably critical access hospitals and other hospitals in rural counties, are reluctant to participate due to the financial risk involved. This resulted in Vermont not meeting its participation targets for the first two years of the Model. The percentage of hospital revenue coming through a global budget increased between the first and second years of the Model. However,
hospitals still serve many beneficiaries that are not attributed through the All-Payer ACO Model so the majority of payments are still made on an FFS basis. Further, hospitals indicated that it was challenging to operate in both an FFS and global budget system simultaneously.26

d. **Pennsylvania** implemented a hospital global budget arrangement specifically for critical access hospitals and other acute care hospitals located in rural counties (defined by the Center for Rural Pennsylvania). It aimed to alleviate the financial distress rural hospitals faced due to dwindling patient volumes. The Pennsylvania Rural Health Model was approved by the Center for Medicare and Medicaid Innovation (CMMI) in 2017, began in 2019 and goes until 2024. Pennsylvania committed to have six hospitals participate in 2019, 18 hospitals in 2020, and 30 hospitals participate each year between 2021 and 2024. Further, the State committed to having at least 75 percent of hospital’s net patient revenue come from global budgets by 2019 and 90 percent for each year between 2020 and 2024.27 The Pennsylvania Department of Health (PADOH) is responsible for administering the global budget model. It created the Rural Health Redesign Office (RHRO) within the PADOH, and then the Rural Health Redesign Center Authority (RHRCA), an independent agency, to provide recruit model participants and provide support to participating hospitals.28

There are limited data to assess the effectiveness of the Pennsylvania Rural Health Model, as it began in 2019 and 2020 was largely impacted by COVID-19. Only five hospitals participated in the first year of the Model, which was below Pennsylvania’s target of six hospitals. The State missed its goal for 2020 as well. A variety of hospital types participated in the model, including critical access, system-owned, and independent hospitals, which indicates the Model’s popularity across the state. The State met its goal of having 75 percent of a hospital’s revenue coming from global budget in 2019 but did not meet its goal for 2020. The Model has potential for all-payer participation because of the high global budget revenue targets, which can have a major impact on rural health and care delivery. While the financial performance of participating hospitals worsened in the first year of the Model, hospitals indicated that regular, global budget helped reduce the impact of seasonality and volume shifts. Pennsylvania needs more experience with global budgets to determine if it is a viable, long-term solution to support rural hospitals.29

4. **Technical Considerations for Developing Hospital Global Budgets**

Hospital global budget methodologies can be developed by the state, unilaterally or in close or loose coordination with private payers. Because of New Mexico’s specific policy interest, we exclude consideration of hospital global budget design when applied by ACOs and other provider entities that are transferring risk to hospitals.

There are several key design decisions to develop hospital global budgets. This section walks through each of the decisions, drawing from state-specific examples as applicable.
a. **Which hospitals should be included?** The more services and providers included under a hospital global budget arrangement, the more incentive there is for health systems, such as an ACO or network of hospitals, to work together to reduce costs and unnecessary utilization.\(^{30}\) Hospital global budgets always include hospital-employed physicians, but the scope of services covered under this arrangement may vary. Maryland’s hospital global budget arrangement, for example, includes inpatient and outpatient hospital services provided by all regulated acute care hospitals in the State. It excludes a limited number of services, including home health, outpatient renal dialysis, and skilled nursing facility services.\(^{31}\)

Hospital global budget arrangements can be limited to include only rural hospitals, as Pennsylvania does, or all hospitals in a state, as Maryland does. Focusing on rural hospitals is administratively easier – it is straightforward to identify the attributed population for a rural hospital because they are geographically isolated. It also concentrates on a care setting that provides necessary services in underserved communities and where financial viability is most precarious. It may be easier to recruit insurer participation in rural areas as well. Commercial insurers in Pennsylvania indicated that they joined the global budget initiative because they wanted to provide stability for hospitals that effectively serve the needs of their community.\(^{32}\)

Implementing global budget arrangements for all hospitals is challenging, especially in urban areas where hospitals typically lack a geographic monopoly. Model participants would need to invest significant resources to monitor and adjust budgets based on utilization (see 4d below). However, using this payment model across a state may yield stronger financial outcomes than doing so only with rural hospitals. It can also result in improved population health because hospitals are encouraged to provide low-margin services that are linked to public health benefits (e.g., substance use treatment) rather than high-margin elective services (e.g., orthopedic surgery).\(^{33}\)

b. **How should one identify which populations to include?** Hospital global budgets work best for areas in which it is easy to identify the “reference population,” that is, the population for which the hospital is accountable.

In the Pennsylvania Rural Health Model, each rural hospital is relatively isolated geographically. Therefore, the State could easily define the service area and reference population for each hospital. Vermont is like Pennsylvania in that it is comprised of relatively isolated hospitals. Each hospital is responsible for delivering care for its surrounding community, referred to as a “health service area” by CMS, and controlling TCOC expenditures for beneficiaries participating in the All-Payer ACO Model.\(^{34}\)

When Maryland expanded its model to include all hospitals, it had to identify a methodology of attributing individuals to hospitals in urban areas that may have overlapping service areas. Maryland looked at historical utilization to identify the
primary zip codes from which a hospital’s volume originates, i.e., “Primary Service Area (PSA),” as well as secondary zip codes, i.e., “Secondary Service Area (SSA).” The HSCRC monitors how much of a hospital’s costs are from the hospital’s PSA and SSA and adjusts a hospital’s budget if there are significant changes in utilization patterns.\textsuperscript{35}

c. **Which payers should participate?** Hospital global budgets work best under an all-payer model. At a minimum, the arrangement should include Medicare FFS, Medicaid FFS and managed care, and a state’s largest commercial insurers. In Maryland, the HSCRC compels commercial insurer participation in the global budget model because it has statutory rate-setting authority. It also includes Medicare because of the State’s Medicare All-Payer Model Agreement with CMS. In other instances, insurers volunteer to enter into an agreement to participate in a global budget payment model. In Vermont, OneCare partners with Medicare, Medicaid, and BlueCross BlueShield of Vermont (BCBSVT) for state insurance exchange members.\textsuperscript{36} Other commercial insurers can, but have not yet volunteered to, participate. Of note, hospitals included in Vermont’s all-payer initiative do not need to contract with all payers involved in the initiative.\textsuperscript{37} In Pennsylvania, the State recruited Medicare FFS, Medicare Advantage, Medicaid managed care, and commercial payers to participate in the global budget model established through the State’s agreement with CMMI. The State recruited private insurers based on historic market share.\textsuperscript{38} New York’s model also included Medicare, Medicaid and Rochester Blue Cross and Blue Shield. Blue Cross held approximately 80 percent of the residents in the Rochester market at the time.\textsuperscript{39}

d. **How should budgets be established and updated?** Budgets can be based on a hospital’s historical revenue and trended forward to account for inflation. They can also be based on a normative approach that multiplies the unit price for services by the anticipated or desired volume of services.\textsuperscript{40} Over time, base budgets should be adjusted to account for changing demographics, market share, and service mix. There can be an annual limit on growth, either for specific hospital costs or total cost of care. Budgets are typically produced using payer data by either a) the payers themselves or b) by a third party entity.

Maryland, New York, and Pennsylvania all based their global budget on historical inpatient and outpatient revenue and adjusted the budget for future years.\textsuperscript{41} Maryland used historical all-payer revenue,\textsuperscript{42} whereas Pennsylvania created separate budgets based on payer-specific revenue.\textsuperscript{43} Pennsylvania uses either a single year or an average of three years of historical data.\textsuperscript{44} Under its 2014 agreement, Maryland developed hospital global budgets using facility allowed revenue data from the prior year (i.e., 2013) and adjusted the budget for future years to account for inflation, approved changes in service volume due to changes in demographics and market share,\textsuperscript{45} quality performance (for measures related to potentially avoidable utilization and readmissions), and uncompensated
care. As described further below, hospitals in Maryland are paid on an FFS basis and rates can be adjusted during the year based on volume to stay on track to meet the budget. Under the All-Payer Model, hospitals could charge up to five percent above the approved rate without any penalty or prior approval from the HSCRC. Maryland was instructed to limit all-payer per capita inpatient and outpatient hospital cost growth to 3.58 percent annually, which represents the historical ten-year growth in gross state product. There were also annual caps on a hospital’s total revenue.46

Under Maryland’s fixed global budget approach, a hospital is provided no additional revenue for volume growth. However, a hospital is rewarded 100 cents on the dollar to reduce volume, because it can keep any savings generated during the year. If a hospital experiences a one percent increase in volume, it would be required to reduce its prices by one percent to meet its fixed budget. Conversely, if a hospital experiences a one percent decrease in volume, it would be required to increase its prices by one percent to meet its fixed budget. This creates a strong incentive for hospital to decrease utilization and shift care to hospitals that are lower cost and higher quality. This can both increase wait times for services and penalize high-performing hospitals.

A flexible global budget approach reduces a hospital’s incentive to decrease volume because its budget shifts based on how its variable costs (e.g., supplies, medication) change with volume fluctuations. For example, let’s consider a hospital that has 50 percent fixed costs and 50 percent variable costs. Under this arrangement, a hospital’s global budget would still cover its fixed costs (e.g., capital and labor costs). However, if a hospital experiences a one percent increase in volume, it would be required to decrease its prices by half a percent to meet its budget (one percent * 50 percent variable cost factor = 0.5 percent). Conversely, if a hospital experiences a one percent decrease in volume, it would be required to increase its prices by half a percent to meet its budget. This modified model still provides predictable revenue for hospitals, but ensures hospitals are not being paid in excess of their variable costs for incremental volume.47

e. The methodology for establishing and updating global budgets is vital because budgets must incentivize hospitals to prevent unnecessary utilization, but also fund needed care and implement strategies, such as care management and care coordination, to reduce overall spending. Hospital leaders in Maryland, notably those in small hospitals, previously indicated that the global budgets were not adequate to fund clinical innovation, capital upgrades and more. The HSCRC tried to address these concerns by partnering with other agencies to provide grants for targeted activities and by accepting rate adjustment applications.48

How should payments be distributed and performance monitored? Hospitals and payers (public and private) must define a mechanism for distributing payments and monitoring financial performance under the hospital global budget. Hospitals can
receive payments on an FFS basis, prospectively, or retrospectively through unit, per diem, or case-based payments.

In Maryland, hospitals are paid on an FFS basis. The service-specific FFS rates are set to match the total global budget for the hospital for a given year, which is based on expected utilization across all payers. Medicare and Medicaid were allowed a six percent discount on rates. Hospitals then billed payers throughout the year for each service covered under the global budget that they delivered.

When payment occurs retrospectively (i.e., after submission of a claim), reconciliation can happen by adjusting rates during the contract year to ensure hospitals meet their budgets. In Maryland, the HSCRC monitored spending and utilization monthly to ensure hospitals were in compliance with their global budget. Hospitals could increase FFS rates during the contract year if they were coming under budget, or decrease rates if they were going over budget. There were limits to the size of these adjustments and adjustments had to be made consistently for all services. Maryland hospitals have identified these rate adjustments to be a critical component for ensuring they meet their budget. Further, hospitals could receive a one-time adjustment to their budgets for the following year if utilization was within 0.5 percent of the projected utilization. Hospitals were penalized if utilization was greater or less than 0.5 percent of project utilization to ensure hospitals tried to align with the global budget.

If Maryland did not meet the requirements outlined in the All-Payer Model Agreement, CMS could have terminated the Agreement and Maryland could lose the higher payment rates it negotiated with governmental payers. This was a strong motivating force for Maryland to adhere to its budget.

Pennsylvania uses two methodologies for distributing payments to hospitals based on the payer type. CMS makes biweekly fixed payments equal to 1/26th of the hospital’s annual budget for Medicare FFS beneficiaries. CMS uses claims (that are not paid) that hospitals submit to modify the hospital’s budget in future years. At the end of each year, CMS conducts a reconciliation process only for critical access hospitals, which receive an additional payment to cover any gap between the global budget payments and actual care provided. This is not a true global budget arrangement, as defined in this report, because it does not hold hospitals fully accountable for maintaining utilization to meet their budget. Budgets for other acute care hospitals in rural areas are not reconciled, but adjusted based on market shifts, demographics, and other factors. Commercial payers, on the other hand, make one up-front payment equivalent to 1/12th of the hospital’s annual budget. They then make payments on an FFS basis and reconcile payments monthly to ensure that total payments equal the hospital’s annual global budget.

In Vermont, BCBSVT and Medicaid make fixed, prospective per member per month payments. Medicaid only pays hospitals for a portion of their budget through This mechanism and pays the remainder of their budget is paid through FFS. For these
fixed prospective payments, BCBSVT and Medicaid do not reconcile payments and therefore operate like a true global budget, but not for all services. If the hospital comes under budget, it can retain the savings; if it goes over budget, it incurs a deficit. Medicare, however, does reconcile payments based on the FFS-equivalent spending at the end of the year. Reconciliation is limited so that it does not exceed or fall below a pre-determined risk corridor, which has historically been limited to three or four percentage points of a pre-determined spending target for the year.\textsuperscript{54,55,56}

In New York, hospitals received weekly prospective payments. Reconciliation occurred on a monthly basis if a hospital experienced admissions beyond the number of budgeted readmissions. As mentioned previously, this is not a true global budget, as defined in this report. Reconciliation, however, was limited to variable costs only.\textsuperscript{57}

f. **How should hospital risk be mitigated?** Hospitals must ensure that they have strategies in place to protect themselves if they go over their global budget. One option is for hospitals to purchase reinsurance, which allows hospitals to receive financial assistance from a third-party entity if spending exceeds a certain threshold. Hospitals can purchase reinsurance independently or with financial assistance from states. Payers and hospitals can also negotiate the parameters for when hospitals can receive additional payments in situations that are beyond the hospital’s control (e.g., market shifts, a strong flu season), as described section 4d above.

g. **Should the hospital global budget include any supplemental payments?** In addition to the global budget arrangement, some models may include one-time or ongoing supplemental payments to aid hospitals in care management, data analytics and health information technology, and/or other investments that improve population health. Over time, the savings generated from a hospital global budget can be reinvested in care management.

When Maryland expanded its global budget model to all hospitals, it included an annual payment of 1.05 percent of hospital base revenue for hospitals to invest in care management.\textsuperscript{58} Further, Maryland established the Care Redesign Program in the fourth year of the All-Payer Model to provide additional funding for hospitals to coordinate care with community-based providers.\textsuperscript{59} New York had high outpatient payment rates to discourage hospital stays and established a supplemental regional contingency fund to support increases resulting from changes in case mix and for select capital investments (which at first were limited to costs approved by the State’s Certificate of Need process).\textsuperscript{60,61}

h. **How should the state monitor cost, access, and quality?** Hospital global budgets can be complemented with value-based incentives, such as pay-for-performance arrangements, to ensure that access to and quality of care does not decline. They can also measure utilization and costs for non-hospital providers, if they’re not included under the payment arrangement, to monitor for “stinting” (i.e., a decrease in
necessary care) due to shifting of care to non-hospital settings to generate savings for the hospital. These additional components can be payer-specific (e.g., a Medicare-specific readmissions measure) or all-payer (e.g., all-payer potentially preventable complication measures), and can leverage state-specific data (e.g., data from an all-payer claims database) or public data (e.g., hospital quality data from CMS’ Care Compare).

Maryland included several cost and quality metrics as part of its All-Payer Model Agreement. Specifically, Maryland committed to generating $330 million in hospital cost savings over five years as well as limiting annual growth in all-payer per-capita inpatient and outpatient hospital cost growth and per-Medicare-member total cost of care. Maryland also had pay-for-performance arrangements based on quality metrics such as 30-day Medicare readmissions and hospital-acquired conditions.

Vermont, per its All-Payer ACO Model Agreement with CMS, is held accountable for performance on quality measures included in the Next Generation ACO program, as well as population-level metrics focused on substance use, suicide, chronic conditions, and access to care selected by the State. It also committed to limiting annual total cost of care spending growth. Further, Vermont established shared savings-like arrangements for community-based care wrapped around the hospital global budget. Specifically, OneCare monitors non-hospital-employed provider spending and out-of-area spending for each hospital’s health service area. If these costs come under a specific budget, then OneCare shares savings with the hospital. If the costs are above budget, the hospital must pay back OneCare. These savings/returns are limited by pre-negotiated risk corridors. Of note, non-hospital-employed providers are only able to participate in the initiative if the hospital within its health service area opts to participate.

In Pennsylvania, the State required participating hospitals to develop a transformation plan with input from stakeholders that identifies how the hospital will redesign care to improve quality and access to preventive care. The State also committed to achieving $35 million in hospital savings during the Model period, limiting annual growth in per-Medicare-member expenditures and per-resident hospital expenditures, and improving performance on outcome, access, and quality metrics. CMS is also requiring Pennsylvania to implement an All-Payer Quality Program, which was to be implemented in 2021, that holds hospitals accountable for performance on multi-payer quality measures. Performance on these measures would impact a hospital’s Medicare FFS global budget. Implementation of the Quality Program was delayed due to COVID-19.

5. Evaluation of State Hospital Global Budgets

Hospital global budgets can be an effective way to contain costs, provide a reliable revenue stream for hospitals, and fundamentally change how hospitals care for patients in a community. They must be carefully designed, however, to yield system-level change and to ensure there is no stinting of care or reduction in quality of care. The following section highlights some of the
advantages and disadvantages of hospital global budgets, including examples from other states as relevant.

a. **Advantages and Successes**: Hospital global budgets can maintain costs, as there is a fixed budget to which a hospital is accountable every year. It can also result in improved quality, equity and utilization based on what other complementary features are built into the payment model. For example, hospital costs in Rochester decreased from 55 percent in 1978 to 38 percent in 1990. Rochester also saw decreased admissions, modest improvements on clinical quality measures and increased patient experience scores.68

Maryland realized many positive outcomes from its global budget model without any adverse effects on hospitals’ finances. During the 2014 to 2018 model period, Maryland realized reduced total expenditures, including hospital expenditures, and slower cost growth relative to the comparison population, as well. This is in large part attributed to slower growth in ED and outpatient spending. While Maryland did realize reduced inpatient admissions for its Medicare beneficiaries, it did not see a corresponding decrease in spending. Maryland only realized reduced hospital expenditures for the commercial population, however.69

While initial studies found that Maryland experienced reduced rates of hospital readmissions and hospital-acquired conditions,70 it realized mixed results when it came to avoidable utilization. Maryland also saw improved outcomes for individuals with multiple chronic conditions and for Medicare and Medicaid dual eligibles. Fortunately, it does not appear as if hospitals have shifted care to alternate sites or cross-subsidized care across payers.71 There are some concerns, however, that Maryland’s findings are influenced by the control groups used in the comparison studies.72

Hospital global budgets can also fundamentally change how hospitals provide care due to a reliable revenue source that is not dependent on volume of services. They give hospitals the autonomy to decide how to best improve care for their population. Hospitals in Maryland, for example, underwent significant transformation from 2014 to 2018. They invested in care coordination and care transitions, discharge planning, social work staffing, and more. Maryland, however, was unable to improve its coordination with community providers following hospitalization.73

Finally, global budgets can provide a steady stream of income for hospitals facing financial hardship, notably rural hospitals. Initial findings from Pennsylvania found that global budgets help stabilize hospitals in the short-term, but they may be less effective in the long-term due to shifts in patient volume. It is worthwhile to note that this evaluation focused on the first cohort of program participants, which only included five hospitals and limits the generalizability of any findings.74

b. **Disadvantages and Challenges**: First, hospital global budgets can be challenging to administer in a non-all-payer setting. As Pennsylvania realized, it is challenging for
global budgets to be a sustainable, long-term solution with limited payer participation. This is because only a small share of hospital revenue is guaranteed through the global budget, making it challenging for hospitals to use the payment mechanism as a steady funding source or to reorient hospital care delivery.\textsuperscript{75} Vermont is another instance in which only one commercial payer, BCBSVT, has agreed to participate in the all-payer initiative for state insurance exchange members only. Further, only 14-15 percent of net patient revenue for hospitals in Vermont is estimated to come from global budgets between 2020 and 2022.\textsuperscript{76} As a result, hospitals are still incentivized to drive up volume because hospitals are still receiving most of their payments through an FFS model.\textsuperscript{77} States can encourage commercial insurers to voluntarily participate in the model. They can also pass legislation or issue regulation that mandates payer participation, although this is harder to accomplish.

Second, hospital global budgets may not lead to systemic change if physicians are still paid on an FFS basis. In New York, and in Pennsylvania, for example, physicians were/are still paid on an FFS basis, which did not incentivize them to change utilization patterns.\textsuperscript{78,79} This was also true for all physicians in the first iteration of the Maryland model and is still true for physicians that are not part of the Maryland Primary Care Program in the second iteration of the Maryland model.\textsuperscript{80,81} Similar to the previous problem, states can address this problem by expanding the parameters of the global budget model or combining global budgets with additional alternative payment models (e.g., capitation and shared savings arrangements). For example, Maryland signed an agreement with CMS in 2018 to expand its global budget model to hold the State accountable for the total cost of care for Medicare FFS beneficiaries. This model engages not only hospitals to improve quality and decreases costs, but also primary care providers and other care partners.\textsuperscript{82}

Third, hospitals and/or payers may be reluctant to engage in a global budget arrangement due to the financial risks or technical challenges associated with implementing the model. States and hospitals can implement mitigation strategies, such as purchasing reinsurance or defining the parameters under which a budget can be modified, to alleviate some of the risk. States could also establish specific agencies that are tasked with implementing and supporting the global budget model, such as Maryland’s HSCRC and Pennsylvania’s RHRO and RHRCA. For example, hospitals participating in the first cohort for Pennsylvania’s model indicated that they had limited staff and time to dedicate to implementation of the hospital global budget model. Hospitals reported that they benefitted from receiving technical assistance from the RHRO.\textsuperscript{83}

Fourth, hospital global budgets may lead to stinting of needed care or shifting care to settings not captured under the global budget if there are not sufficient mechanisms in place to monitor and respond to this threat. It could also result in the price of services or services delivered in settings not covered by the global budget to
increase, which can create a “tax” for individuals that are seeking the service. To counter this threat, states can expand the global budget to include professional services provided by hospital-employed physicians. They can also include complementary pay-for-performance arrangements that are based on access and quality or include disincentives if there is evidence of stinting.

Fifth, hospital global budgets, like many payment and policy models, may reinforce undesired structures and perpetuate inequities in access to and/or quality of care. Hospital global budgets are frequently based on the historical revenue for a hospital or health service area. If a hospital system has traditionally provided sub-standard care for low income, non-English speaking, and Black, Indigenous and People of Color (BIPOC) communities, or has not had the resources to properly service these communities, then the budget could continue to perpetuate this harm. To account for this, states should ensure the budget setting process considers demand for services and population demographics. They can also include supplemental payments to fund infrastructure and population health activities that provide additional support for historically marginalized communities.

Sixth, global budgets may sustain some hospitals that should close or be repurposed. This is more likely to occur in geographic areas with excess bed capacity. This is distinct from sustaining rural hospitals, or safety net hospitals in urban areas, that provide necessary access to services for low-income and uninsured populations.

6. Application to New Mexico

Hospital global budgets can be a viable solution for funding New Mexico’s hospitals. New Mexico must first clearly identify what it wishes to achieve with a hospital global budget model. In more heavily populated regions, like Albuquerque, Santa Fe, and Las Cruces that have multiple hospitals, global budgets can be an effective tool to reduce unnecessary hospital spending and utilization. New Mexico could adopt a methodology like Maryland’s that identifies primary and secondary service areas for each hospital. New Mexico could then establish global budgets based on historical all-payer or individual payer-specific budgets based on payer-specific utilization in the service areas. It would need to monitor utilization regularly and make changes to the budget if there is significant utilization from other areas.

Hospital global budgets are not intended to generate savings in rural regions. They can, however, help contain costs so that spending is growing at an affordable rate. They can also be a sustainable funding source for hospitals in financial distress. Rural hospitals often operate with zero or negative margins that make it challenging for them to realize savings in the short-term. For these non-urban areas, New Mexico could develop service areas that are centered around major rural hospitals. If New Mexico chooses to take this route, it should frame hospital global budgets as a financial mechanism to sustain rural hospitals that provide a vital service for communities.

Success of hospital global budgets in New Mexico will likely be dependent upon the following:
a. **Support and participation from hospitals, non-hospital providers, and commercial payers.** A hospital global budget model is most effective when there is broad participation from hospitals and payers. It does not matter if the participating hospitals are similar or disparate, but it is crucial to have a critical mass of both entities involved. Without their participation, global budgets may not yield the desired results. One reason Maryland has realized some success was because all hospitals were being paid in the same manner by all payers. In states like Pennsylvania and Vermont, there have been challenges because payers are largely still incentivizing hospitals to increase volume through an FFS payment model. New Mexico will have to obtain broad voluntary support or direct mandatory participation among the targeted hospitals and payers to achieve success.

There are not enough examples from other states to say what the implications are of mandatory or elective participation. Mandatory participation is advantageous because it guarantees that hospitals will participate and not pull out of the model due to factors like leadership changes or circumstances that may disrupt hospital business models. New Mexico could also consider mandatory commercial payer participation. For reference, the general literature on state-based rate setting systems indicates that mandatory systems have been uniformly more successful than voluntary or elective systems. Elective participation could possibly be challenging if geographically proximate and competing hospitals are paid using different mechanisms (e.g., one is paid FFS and another is paid through a global budget). It could incentivize a hospital in a global budget arrangement to refer patients to a hospital that is paid via FFS.

Further, including non-hospital services and/or providers will increase the likelihood that the health care system will work together to improve the cost and quality of care. Maryland’s first iteration of its hospital global budget model and Pennsylvania’s model only included hospital-based services, which does not incentivize non-hospital-employed physicians to change their utilization patterns. Expanding the model to include more providers and services, as Maryland did in its second iteration of its model, or creating financial incentives to work with non-hospital systems through complementary alternative payment models, as Vermont did, can lead to system-level results.

b. **State government leadership, support and oversight.** Implementing a hospital global budget is technically complex. It is important to have a quasi-public or state agency in place to oversee and regulate a hospital global budget model. It requires a sophisticated method for developing the prospective payment values, delivering and reconciling payments, identifying the reference population, designing the services and providers included in the model, and mitigating risk. Further, state agencies must work with hospitals to ensure they have sufficient budgets in place that will set them up for success. Agencies must also have mechanisms in place to ensure there are consequences if hospitals and payers are not meeting the requirements of the model. Finally, an agency can potentially pair this payment mechanism with other
statewide cost growth containment and quality improvement policies. In Maryland, there was an existing agency in place that was made responsible for designing and implementing hospital global budgets. Pennsylvania, on the other hand, had to create a new agency focused on its rural hospital global budget model.

Agencies will need staff who are familiar with: (i) hospital financing and budgets (e.g., audited financials, hospital accounting), (ii) principles of prospective payment system, specifically knowledge of the Medicare prospective payment system and policy issues that Medicare must consider and address, (iii) hospital utilization and coding (e.g., knowledge of the DRG system, medical records and clinical coding), (iv) data collection (e.g., gross revenue, net revenue, volume and other hospital operations data), (v) accounting and auditing principles, (vi) legal personnel with knowledge of relevant regulations and (vii) quantitative skills. If a state is looking to combine a hospital global budget model with other policy agendas, such as a patient attribution model, agencies may need additional staff with different analytic skills (e.g., actuarial expertise). It is possible for agencies to contract out to ensure it has the right personnel to develop and oversee a hospital global budget model.

c. **Robust methodology for developing and adjusting budgets.** Hospital global budgets can only be a viable funding source if they provide enough funding to sustain hospitals, but do not encourage hospitals to increase service volume like an FFS payment system. Budgets should ideally have up-front and ongoing funding for hospitals to invest in care management/care coordination, population health, clinical innovation, capital upgrades, and more (with guidelines for how the dollars can be spent). Further, states should have a mechanism to adjust budgets on an annual basis to account for changes in demographics, market share, inflation, and/or quality performance. They can also have a separate process for hospitals to request a change in rates based on approved changes in service volume, as Maryland does.

d. **A strong health information technology infrastructure and population health initiatives as they shift their orientation from generating service volume to advancing population health.** Hospitals need resources to properly monitor and analyze their utilization and spending. This should definitely include assessing performance for the hospital system but can also include non-hospital providers in the region if a global budget is paired with complementary alternative payment models. Having a robust statewide health information exchange (HIE) is an asset for doing this work. Hospital systems with common electronic health records (EHRs) can also be advantageous, but this is out of a state agency’s control. In addition, hospitals may benefit from concurrent initiatives focused on improving population health. Maryland’s Care Redesign Program, for example, provided additional funding for hospitals to invest in care coordination, care management, and other population health strategies to manage care for patients with complex conditions and social risk factors. There is limited evidence, however, that this initiative had positive impacts on quality of care.87
In summary, hospital global budgets hold potential to address multiple public policy aims, including:

- supporting financially distressed hospitals that provide necessary access to care by ensuring steady, predictable financing;
- controlling the growth in hospital spending, and
- motivating the repurposing of hospital resources to meet community needs.

They need to be designed and updated in a thoughtful manner to ensure that hospitals are incentivized to control budgets without stinting care. While Maryland appears to have realized some success with the first iteration of its global budget model, the State is unique due the HSCRC’s rate-setting authority. It will be important to look to Pennsylvania and Vermont to see if global budgets can be successfully implemented in states without all-payer rate setting and other differences from Maryland.
Endnotes


56 Melamed, M., Kinsler, S., & Rooney, P. (2021, October 21). Vermont Hospital Global Budget Details. [E-mail].

57 Charbonneau, A. (2022, January 4). Rochester Hospital Global Budget Details. [E-mail].


