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GLOBAL BUDGETS AS AN ALTERNATIVE PAYMENT APPROACH FOR TENNESSEE RURAL HOSPITALS

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Executive Summary

With the advent of health care reform, rural hospital closures have increased, particularly in the South. Tennessee is one of the hardest-hit states with the second highest number of closures since 2010. **Global budgets have been suggested as an alternative payment policy to stabilize rural hospital finances.**

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They have been adopted as a payment methodology in Maryland's All Payer Model, and a pilot program for rural hospitals has been initiated in Pennsylvania.

Under global budgets, hospitals receive fixed revenue, regardless of the volume of services provided. Hospitals are at risk for volume increases, so if inpatient discharges, emergency room visits or clinic visits increase, the hospital may lose money. Hospitals also keep the revenue if services are reduced. **The methodology dramatically shifts economic and financial rewards from traditional incentives to increase volume under fee-for-service payments.** Incentives to increase discharges and visits are shifted toward reducing unnecessary care and improving coordination of services across the health care continuum. Hospitals reap the rewards for any improvement in operations and reduction in services through an improved operating margin. Global budgets can be supplemented with pay-for-performance incentives to ensure that providers do not reduce access to essential services to control costs, and clear expectations should be established between hospitals and payers for measurement and expected levels of achievement.

This payment model has drawbacks and risks for hospitals, and it is not universally applicable to all rural hospitals. **However, it may offer an effective alternative to a long list of state and federal policies that have not prevented rural hospital financial distress.**

This study, commissioned by the Tennessee Hospital Association, describes the use of global budgets as a rural hospital financing mechanism in national demonstration models and discusses the necessary conditions for this model to serve as a viable payment option for Tennessee rural hospitals. The overarching issue is guaranteeing that a predominant portion of the hospital's revenue is covered under the budget. Otherwise, the hospital is still exposed to substantial variations in revenue, and more important, the hospital would face conflicting incentives between the global budget and the fee-for-service segments of its business. This study demonstrates the issues in budget development based on data from two volunteer hospitals.

If Tennessee chose to pursue a global budget model for its rural hospitals, the preferred approach would be to include Medicare fee-for-service, Medicare Advantage,

TennCare, and commercial payers in the State. An important issue would be Medicare's willingness to include fee-for-service Medicare. As noted above, CMS is currently pursuing a global budget demonstration model in Pennsylvania, but the model is in the early stages of implementation. It is unknown whether CMS would be interested in or willing to extend the model outside of Pennsylvania until some results on the model's performance are known.

As an alternative, Tennessee rural hospitals could partner with TennCare and large commercial payers in the State, potentially as a prelude to Medicare fee-for-service participation. Because two of the Medicaid Managed Care Organizations in the State are part of organizations with commercial and Medicare Advantage products, a large portion of payments could be covered with a cooperative initiative.

A voluntary program for the State's rural hospitals could offer a means of stabilizing rural hospital finances while the hospitals and the systems they are a part of develop strategic responses to rationalize their delivery of services in the long run.

Introduction

The emphasis of health care reform has been to contain health care spending by government, business, and consumers. But that laudable goal, combined with clinical and technological innovation, increasing information technology requirements, service shifts from inpatient to outpatient settings, and declining rural populations have placed increasing financial pressure on rural hospitals. ***This ongoing pressure has resulted in rural hospital closures and mergers.***

According to *Becker's Hospital CFO Report*, "Of the 26 states that have seen at least one rural hospital closure since 2010, those with the most closures are located in the South, according to research from the North Carolina Rural Health Research Program." Texas had the most closures during that time at fourteen. Tennessee followed with eight while Georgia experienced six with Alabama, Mississippi and North Carolina seeing five closures each. (Becker's, 2018) Since the publication of the Becker's CFO report, Tennessee has experienced additional closures, adding yet another with the closure of Cumberland River Hospital on March 1, 2019. In addition to these closures, the NC Rural Health Research Program finds that there were also 380 rural hospital mergers between 2005 and 2016. Rural hospital mergers, like closures, occurred disproportionately in the South.

As the pressure to constrain health care spending continues, these pressures are unlikely to abate. The result may be limited access to care for rural residents, particularly for elderly and low-income patients unable to travel for alternative providers.

This study was commissioned by the Tennessee Hospital Association (THA) to explore the viability of global budgets as an alternative payment approach for rural hospitals in the State. Global budgets have been used as an alternative payment methodology in other states and have been a particular focus of attention in recent CMS demonstration models in the United States. ***This study describes the use of global budgets as a rural hospital financing mechanism in these demonstration models and discusses the necessary conditions for this model to serve as a viable payment option.***

Background

Rural hospital closures are not a recent phenomenon or consequence of recent health care reform activities. According to the U.S. Government Accountability Office (GAO), 140 rural hospitals closed between 1985 and 1988 following the introduction of Medicare's Inpatient Prospective Payment System (IPPS) that established predetermined rates by Medicare hospital discharge based on diagnosis related groups (DRGs), (GAO 2018, 1990). The intent was to provide hospitals financial incentives to deliver inpatient services more efficiently, but some small rural hospitals experienced large financial losses and increased financial distress.

In response, the federal government adopted several policies to assist these and other safety-net hospitals. Specific payment programs for Medicare include designations for Critical Access Hospitals, Sole Community Providers, Medicare Dependent Hospitals, Low Volume Hospitals, and Rural Referral Centers. In each of these categories, Medicare payments differ from the standard prospective payment system for inpatient and outpatient services to acute care hospitals, and the goal is to provide additional resources for qualifying facilities (GAO, 2018). These designations are supplemented with other programs targeted toward rural facilities such as grants, cooperative agreements and contracts as well as special recognition of rural status in health care reform policies. Closures and mergers have continued, despite these targeted policies.

These targeted policies have been juxtaposed against broader health care reform efforts, clinical and technological trends shifting care from inpatient to outpatient settings, and demographic trends that have lowered demand for rural hospital services. As part of national health care reform, Medicare spending growth has slowed or declined year over year, and Medicare bad debt reimbursements for hospitals were reduced in response to Medicaid expansion. In non-expansion states, however, expanded Medicaid payments did not offset these reductions in revenue. Further exacerbating these policy changes are the shift of services from inpatient to outpatient settings, depleting rural hospitals' ability to cover the fixed costs of existing facilities. Combined with declining rural populations that are aging and characterized by relatively low incomes, relatively high unemployment rates, and low labor force participation rates, the financial viability of many rural facilities is in question.

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Global Budgets as an Alternative Payment Mechanism

While rural hospital financial distress is not new, neither is the use of global budgets to finance hospital operations. This financing mechanism has been used in other countries such as Canada and France at various times and was the subject of a demonstration model in the Finger Lakes in New York in the 1980s (Redmon and Yakoboski (1995), Chen and Fan (2016), Global Health Payment, LLC (2018), Murray and Berenson (2015)).

More recently, global budgets have been used in Maryland's all payer rate-setting system. Maryland's unique waiver from Medicare prospective payment systems has allowed the State to regulate hospital rates for commercial and governmental payers, including Medicare and Medicaid. In 2010, the State's hospital regulatory agency – the Health Services Cost Review Commission (HSCRC) – established a pilot program called the Total Patient Revenue (TPR) model, consisting of 10 rural hospitals with relatively self-contained service areas. The program established baseline service volumes and associated revenue for these hospitals based on their historical performance and created a three-year agreement for updating hospital rates based on annual inflation expectations, population aging and other anticipated demographic shifts, and planned changes in service mix.

The purpose of the TPR model was to establish a predictable revenue stream for rural hospitals in the State. Under Maryland's largely fee-for-service system, rural hospitals could see dramatic fluctuations in revenue from year-to-year, making planning for the future difficult. The TPR model established predictability in exchange for predictable-

but-limited update factors from year to year. The program was designed to reward hospitals for reducing the cost of care by eliminating avoidable and unnecessary utilization. Quality performance targets were put in place to guarantee that patient care did not suffer from overly zealous reductions in hospital services.

In 2014, this pilot was absorbed into a larger demonstration model for the entire State of Maryland. At that time, the State and the Centers for Medicare and Medicaid Services (CMS) announced a demonstration model to replace the all-payer rate-setting system that had been developed in the 1970s. Under the new model, the State would continue its waiver from the Medicare prospective payment systems and maintain its status as an all-payer regulator. However, all hospitals in the State would be subject to a new model that limited all-payer hospital spending in the State to 3.58% per capita annual growth (the long-term growth rate of the Maryland economy), required minimum Medicare cumulative savings of \$330 million over the five-year demonstration model, established specific targets for future quality performance, and required population-based payment methods to cover at least 80% of hospital revenue by the end of the five-year demonstration. The model could be renewed if performance was successful but would be required to transition beyond hospital revenue only to Medicare total cost of care in the second phase of the model.

The Pennsylvania Rural Hospital Model was announced by CMS in January 2017 with planned implementation for January 2019. Under this model, at least six rural hospitals would operate under global budgets with participating governmental and commercial payers to pay proportionate shares of each hospital's fixed budget. In combination with the fixed budget, hospitals would develop a transformation plan that specifies how the hospital would redesign care to invest in quality and preventive care tailored to meet the local community's needs. The model is intended to cover the period CY 2017 – CY 2024, with CY 2017 – CY2018 serving as the base period for model development. Pennsylvania expects to have at least 30 of the 67 qualifying hospitals participating in the model for CY 2021 – CY 2024.

Benefits

From the rural hospital's perspective, the chief benefit of a global budget is a stable, predictable flow of revenue. Payment arrangements are generally based on a hospital's historical revenue base¹, and they are prospectively determined and trended year over year by a factor that covers inflation in the costs of hospital inputs. Further adjustments

¹ Approaches other than historical revenue have been suggested with the intent of eliminating payment for excess utilization, but hospitals would have little incentive to forego revenue to participate in a global budget experiment at the outset of the model.

may be considered to cover expected changes in population, aging, or expected demographic shifts that providers and payers would recognize as affecting the demand for necessary hospital services. This arrangement provides hospitals with a predictable revenue flow, giving hospital management flexibility and autonomy in providing patient care.

Under these arrangements, hospitals receive fixed revenue, regardless of the volume of services provided. Hospitals are at risk for volume increases, but hospitals also keep the revenue as services are reduced. Because the methodology dramatically shifts economic and financial rewards from traditional fee-for-service incentives toward volume, it supports other value-based payment methods such as ACO and bundled payments. Global budgets provide incentives to invest in streamlined operations by rewarding hospitals for any improvement in operations through an improved operating margin. They can be supplemented with pay-for-performance incentives to ensure that providers do not reduce access to essential care to control costs, and clear expectations should be established between hospitals and payers for measurement and expected levels of achievement.

Global budgets provide incentives to invest in streamlined operations by rewarding hospitals for any improvement in operations through an improved operating margin.

Finally, this approach offers the potential for administrative simplification. While no reimbursement methodology in health care could be considered simple, the global budget approach offers an opportunity for reductions in reviews for medical necessity and denials (although anecdotal evidence in Maryland suggests that has not been the case thus far). ***Under the global budget, the hospital has no financial incentive to provide unnecessary services and clear incentives to avoid doing so.*** Further, the payer has a fixed budget, regardless of the number of services actually provided by the hospital. This alignment of interests offers the potential for some streamlining of administrative costs, particularly for denials and reviews of medical necessity.

Challenges

Global budgets have attractive features, but they are not a panacea for rural hospital financial problems. Because they are often based on historical revenues, the revenue base may not cover existing costs if a hospital is currently experiencing financial losses. That issue must be addressed with payers in establishing the baseline budget. Likely such a discussion will lead to suggestions for operational improvements for the hospital in addition to possible revenue solutions. Further, global budgets are not easily implemented outside an all payer model. To do so requires either a series of bilateral

discussions with each potential payer participant or a multilateral negotiation among willing participants – either of which is a complex and time-consuming process.

Further this model can encourage the shifting of services from the rural hospital to non-hospital settings, resulting in payers effectively paying for the same health care services in two settings. To prevent this potential outcome requires careful monitoring of patient volumes as a condition of the ongoing relationship.

Adopting a global budget for hospital services only can cause misalignment between hospitals and physicians. To the degree that physicians are reimbursed on a fee-for-service basis, financial incentives still revolve around volume. Physician revenue will be determined by the number of services provided. As the hospital management works to reduce unnecessary and avoidable utilization, it could conflict with physicians' business interests, although the problem may be somewhat mitigated as physicians participate in related value-based reimbursement programs under MACRA or other performance-based arrangements.

A further issue for rural hospitals under global budgets is the financial risk presented under a global budget. Under a global budget, the hospital bears the risk for containing costs of care, but a single severe patient that is an outlier from the baseline budget could result in losses under the global budget. The participating hospital can acquire reinsurance to limit such risk or address these issues in the global budget agreement with payers prospectively. Protection from other risks may also need to be addressed. For example, rising drug and device prices can increase hospital costs outside its ability to control them. While the hospital can benefit from exogenous decreases in input costs, the trend is toward higher costs in healthcare, placing hospitals at risk beyond the annual update factors for the global budget unless some arrangement is predetermined for addressing these issues.

The static nature of the budget may present a problem as well for global budget processes over time. Because the base budget is a snapshot of hospital operations at the time of its development, updated budgets that reflect inflation and demographic trends are unlikely to capture technical and clinical innovations. This limitation may prevent the hospital from updating services, equipment, and infrastructure to reflect modern clinical requirements. If the global budget process extends over long periods of time, *periodic negotiations may be needed to address modernization of services as part of future budget adjustments.*

In addition, the global budget is difficult to administer as the degree of overlapping service areas increases. No rural hospital will supply all of the services within its catchment area, but global budgets are easiest to administer when the service area is largely self-contained. The greater the degree of overlap, the greater the degree of uncertainty that improved utilization at one facility is the shifting of services to other

providers in the area. These may be addressed, to the degree needed, through a pre-arranged formula for adjusting future budgets to realign revenue with actual patient volumes.

Finally, some consideration of the end game is necessary for hospitals that are successful in reducing preventable or unnecessary utilization. Payers reap immediate rewards under the global budget through reduced update factors (in exchange for hospital revenue stability). Hospitals reap an improved operating margin to the degree that costs can be reduced, including volume reductions from historical levels. Because hospitals keep established revenues with a declining volume of services, the effective price for each unit of service rises. Over time, the effective unit price of services can rise substantially, with consequences for patient cost-sharing. Hence, this issue could also be addressed periodically in negotiations as global budget arrangements are renewed.

Necessary Conditions for the Global Budget

For the global budget methodology to be feasible as an alternative payment model, there are some necessary conditions that must be met. The arrangement should be structured in a manner to guarantee that payers do not pay for services more than once. Otherwise the arrangement will not be attractive for payers and will not be sustainable. Generally, decreases in rural hospital utilization must come from reductions in avoidable or unnecessary services. To the degree that services are shifted from the hospital setting to non-hospital facilities or to other hospital providers in another or overlapping service area, the payer would be paying twice for the same care.

For the global budget to be sustainable, the hospital must be transparent in the services it is providing on an ongoing basis, and budgets must be adjusted to recognize those shifts in services. To the degree that services should be shifted from the hospital setting, payers may choose to cover some of the hospital's fixed cost for those services for a limited time to the degree that both payer and provider benefit from the resulting realignment. As an example, in Maryland's global budget model, shifts of services between hospitals generally occur at 50% of the regulated revenue – for hospitals giving up a service, 50% of the revenue in the global budget is transferred to the acquiring hospital.² Revenue follows the patient to some degree, but the hospital losing the patient retains some of the revenue in its budget for some time to cover the hospital's fixed costs as well as to mitigate the link between revenue and volume. Likewise, the payer cannot attempt to shift new patients to the rural hospital under the

² The HSCRC began market shift adjustments in Maryland as an annual adjustment in the following year's global budget but has increased the frequency of the adjustment to every 6 months.

global budget unless provisions are made for additional compensation beyond that for the existing covered populations and/or service area.

For this approach to be worthwhile, there must be some minimum efficient share of the patient population to be covered under this reimbursement model. While in theory the approach could be adopted for small subsets of the hospital's patient base, the benefits associated with the global budget are unlikely to be realized if only a small portion of the hospital's patients is subject to this approach. For a hospital to invest in the infrastructure to transform its existing model of service delivery, a substantial proportion of its patients must be covered by the global budget model. Otherwise, conflicting incentives between the global budget approach that decouples revenue and volume and a substantial fee-for-service patient population that pays for volume for services will present an unsustainable conflict for the hospital. Under Maryland's unique All Payer Model, 100% of patients are under the global budget for most hospitals, providing strong, consistent incentives to reduce avoidable and unnecessary care. Under the Pennsylvania Rural Health Model, the State has committed to having each participating rural hospital's global budget account for at least 75% of its net patient revenue by CY 2019 and at least 90% during CY 2020 – CY 2024 (Global Health Payment LLC 2018). The precise minimum proportion of net patient revenue to be covered by the global budget for the model to provide improved financial performance is not known, but logic suggests that the incentives become stronger as the proportion covered by the budget increases. Financial performance is also likely to be related to other value-based endeavors the hospital participates in, such as membership in an ACO, and whether non-covered revenues are based on fee-for-service payments versus capitation.

While the basic mechanics of constructing a budget for each payer is operationally the same independent of size, the transactions costs of discussions are high. Each payer is likely to have different concerns and perhaps have little interest in the approach for a small hospital where it has only a small amount of business. The cost of designing and managing the global budget within its existing infrastructure may not be worthwhile for that payer.

Hence, the provider's largest payers are the most likely candidates for the development of a global budget approach.

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Along with the establishment of the global budget, the participating hospital must begin the implementation of a strategic plan that changes the business model under which the hospital operates. While the global budget provides stability in revenue for the hospital, it will also grow slowly to provide payers in the market stability for their hospital payments over a defined time horizon. For the hospital to generate

improved financial earnings, the hospital must strategically modify the way that it delivers care – ideally by expanding access to primary care and keeping patients in appropriate settings with lower acuity than the hospital. ***By improving care delivery, the hospital will lower the cost of patient care, allowing it to improve financial performance.***

Application to Tennessee Rural Hospitals

With the shifts in economic and financial incentives from traditional fee-for-service incentives toward volume, the global model supports other value-based payment methods. This fact is particularly important with respect to Tennessee’s bundling approach under TennCare. For bundled payment incentives to provide effective incentives for improvement, hospitals must have sufficient scale in these programs to make investments in performance improvement economically feasible. That is unlikely for small rural hospitals. Global budgets, by rewarding hospitals for any improvement in operations through an improved operating margin, provide incentives for a rural hospital to invest in streamlined operations without specifically designating programs for improved operations. The global budget model provides stronger incentives for improvement in the rural context than the targeted incentives under TennCare by allowing rural hospitals more flexibility to achieve improved outcomes.

Global budgets, by rewarding hospitals for any improvement in operations through an improved operating margin, provide incentives for a rural hospital to invest in streamlined operations without specifically designating programs for improved operations.

For Tennessee rural hospitals as a whole, the largest payers are Medicare fee-for-service at about 33% of hospital payments and Medicare Advantage at another 14% for a combined Medicare presence of 47%. (Note that payments are the basis of the global budget for the hospital.) This is followed by TennCare with about 12%. Government payers combined then account for 59% of hospital payments. If they participated in a global budget approach, rural hospitals would have a substantial proportion of their revenue stabilized and subject to the incentives of the alternative payment approach. Without government participation, however, the maximum achievable would be 41% if all other payers were willing to participate. If Blue Cross Blue Shield (BCBS) would participate with its 19% of payments to rural hospitals, government and BCBS combined would represent the vast majority of payments at 78% -- more than Pennsylvania’s first year goal for its program but less than its later target of 90%.

Table 1: Tennessee Rural Hospital Payment Summary by Payer Type

Payer Type	Rural Hospital Payments (\$)	Percent of Total (%)	Accumulated Percent (%)	Payment Rate (%)
Medicare FFS	\$ 749,151,928	32.92%	32.92%	20.80%
TennCare	\$ 266,289,562	11.70%	44.62%	13.99%
Medicare MCO	\$ 326,839,477	14.36%	58.98%	21.19%
BCBS	\$ 442,261,445	19.43%	78.42%	32.33%
Commercial	\$ 304,292,507	13.37%	91.79%	39.23%
Self Pay	\$ 69,410,909	3.05%	94.84%	10.87%
Workers Comp	\$ 16,389,476	0.72%	95.56%	27.82%
Other	\$ 101,112,566	4.44%	100.00%	25.99%
Total Charges:	\$ 2,275,747,870	100.00%		22.14%

While there is no magic minimum share that must be reached for a global budgeting model, a predominant portion of the hospital's revenue should be covered by the global budget. Otherwise, the hospital is still exposed to substantial variations in revenue. More important, however, is the fact that the hospital would face conflicting incentives. The global budget would provide stability for the revenue under the budget, but it also provides incentives to reduce avoidable and unnecessary care. If a large portion of the patients are still under fee-for-service payments, however, actions to reduce avoidable and unnecessary care will reduce fee-for-service revenue for that portion of the hospital's revenue not under a global budget. The conflicting incentives would likely defeat the attempt to move to a value-based care approach.

If Tennessee chose to pursue a global budget model for its rural hospitals, the first (and most appealing) option would be to build a model based on Medicare fee-for-service, Medicare Advantage, TennCare, and commercial payers in the State. With this broad participation, over 90% of payments to Tennessee rural hospitals would be included, providing comprehensive incentives toward value-based care and away from fee-for-service incentives.

Because Medicare has initiated this policy in selected states, it is not clear if CMS would be interested in expanding the demonstration model until further evidence is available to assess its efficacy. Hence, Medicare fee-for-service likely would not be available for inclusion in the short run for a Tennessee global budget initiative.

A second option could be based on TennCare, however. Because global budgets are designed to achieve many of the same goals the State has targeted with its bundling initiative, the payment approach may hold some appeal for State officials. Because the Medicaid Managed Care Organizations are parts of the largest commercial insurers in the State, the approach also offers the possibility of including the TennCare MCO commercial payers and their Medicare Advantage products to stabilize rural hospital finances while reinforcing value-based economic incentives. From the aggregate State data in Table 1, Medicaid, Medicare Advantage and commercial payments (including

BCBS) account for 59% of rural hospital payments. This would account for a predominant share of payments under the global budget, even without Medicare fee-for-service participation. For a more detailed analysis of potential Tennessee hospital candidates for global budgets, see the appendix to this report.

While volume-based incentives would represent some conflict between global budgets and Medicare, CMS's persistent move towards value-based care (with Accountable Care Organizations, for example) would be aligned with global budget incentives, though not as completely as if Medicare were an active participant in the budget.

Constructing a Global Budget

The process of constructing a global budget begins with an analysis of a hospital's historical revenues to develop the base budget. This base budget is established to cover a specific set of services for a defined population of patients to be treated at the hospital. Historical payment levels may need to be adjusted if the service mix differs from past levels, if the hospital is relatively inefficient, or if the hospital cannot cover costs at historical revenue levels. Once the base budget is established, it would be updated over time to adjust for factors affecting hospital costs and demand for services outside of the hospital's control. This process includes (but may not be limited to) the following steps:

- Determining services to be included in the global budget
- Defining covered patient populations
- Establishing participating payers
- Updating base-year budgets over time
- Adjusting base budgets (e.g., annual adjustments for changing demographics of reference population, addition of "seed funding" to jumpstart care management activities, changes in planned service composition, improving the base budget to reduce financial losses, etc.)
- Administering and complying with budget caps
- Using reinsurance and/or other risk mitigation
- Accounting for market share changes
- Establishing quality performance requirements, potential incentive structure
- Developing and implementing the contractual agreement between parties

Below are data from two Tennessee rural hospitals. Hospital leadership in each hospital volunteered to participate in the global budget evaluation by providing three years of detailed data for analysis. These exercises demonstrate the practical process of developing the model for each facility and the feasibility of applying the approach.

Each hospital provided three years of data with patient demographic information, primary payer, diagnosis and procedure codes, and payment information for each patient encounter. These data provided the basis to develop a simple global budget for each hospital. The purpose of this exercise is to demonstrate the process of budget development and the unique considerations that must be taken into account in a practical application of this payment model. Note, however, that final budgets could differ considerably – the negotiations between the hospital’s leadership and participating payers committed to this process would shape the final base budget and process, given the specific realities of each market.

For purposes of this white paper, the hospitals have not been identified by name, but they provided actual data to illustrate model development. The process begins with an analysis of the hospital’s payer mix and volume of services provided. The purpose is to determine the feasibility of working with payers to construct a budget. Preparing an actual budget is most feasible if the hospital’s services are distributed among a few payers.

Hospital 1

The following data from Hospital 1 provide the general profile of volume and revenue by inpatient and outpatient services.

Table 2: Hospital 1 Payments by Payer Type

HOSPITAL 1						
INPATIENT & OUTPATIENT PAYMENT BY FINANCIAL CLASS [1]						
Payer	FY18					
	IP Discharges	IP Payments	OP Visits	OP Payments	Total Payments	% of Total
Commercial	395	\$4,809,793	13,925	\$10,126,192	\$14,935,985	35.23%
Medicare Advantage	1,373	\$7,757,571	15,767	\$4,169,468	\$11,927,038	28.14%
Medicare	1,032	\$6,660,125	12,807	\$2,640,861	\$9,300,986	21.94%
Managed Medicaid	368	\$1,718,567	10,322	\$3,283,781	\$5,002,348	11.80%
Other	340	\$471,861	5,495	\$752,256	\$1,224,117	2.89%
Total	3,508	\$21,417,917	58,316	\$20,972,558	\$42,390,475	100.00%

[1] Note: Total payment exclude accounts receivables

In this case, the hospital receives 50.08% of its payments from Medicare (21.94% from Medicare fee-for-service and 28.14% from Medicare Advantage) and 11.80% from TennCare. The combined governmental share is 61.88%. A global budget approach with governmental participation would provide a strong foundation for a global budget. Medicare and Medicaid combined would approach a sufficient volume to devote

resources to transform from a fee-for-service to a value-based model that focuses on removing unnecessary utilization. Governmental payers in combination with large commercial payers would certainly achieve that result, with the remaining inpatient and outpatient volumes representing random variation in volume, for the most part.

For purposes of this exercise, commercial insurance, Medicare (both fee-for-service and Medicare Advantage), and Medicaid will be treated as part of the hospital's global budget. Table 3 provides the payer distribution from Table 2 but excludes non-participating payers. Note that the percentage by payer differs from the distribution in Table 3 because other payers have not been included in the designated budget. Non-participating payers would continue to operate under the mutually agreed upon payment arrangements between the payer and hospital.

Table 3 provides the revenue for the base year for Medicare and Medicare Advantage, Medicaid, and participating commercial payers (this exercise assumes 100% participation). The base year for the model is FY2018 with the budget becoming operational in FY20. FY18 revenue is updated for the IHS Hospital market basket forecast of 2.33% for FY19 to update revenue for forecasted price increases. For FY20, the IHS Hospital market forecast rises to 2.41% and that rate is applied with no further adjustment for the first year of operation of the model. Note that possible adjustments include the annual market basket for inflation, a demographic adjustment to reflect population growth, aging, and a potentially shifting demographic mix. For this illustration, demographic changes are kept at 0 for the three-year model, but population forecasts may easily be applied to allow for expected utilization changes due to shifting population characteristics.

Another potential adjustment may be made for changes in market share, although in rural markets this may not be necessary to the degree that the hospital's service area is relatively self-contained. Similarly, adjustments to the budget would need to be made if the hospital changed its service mix by offering services not originally included in the budget or if offered services are discontinued and no longer available from the hospital.

Finally, this exercise shows the introduction of an efficiency adjustment to require improved productivity from the hospital. The size of such an adjustment would be the subject of negotiations and could differ by hospital, depending on market conditions.

Table 3: Hospital 1 Potential Global Budget for Commercial, Medicare, and Medicaid Payments

**MODEL BUDGET FOR HOSPITAL 1
INPATIENT & OUTPATIENT SERVICES BY FINANCIAL CLASS**

Major Payer	FY18		FY20	FY21	FY22	
	Payment	% of Total	Payment	Payment	Payment	% of Total
Commercial	\$14,935,985	36.28%	\$15,652,338	\$16,013,907	\$16,359,807	36.28%
Medicare Advantage	\$11,927,038	28.97%	\$12,499,077	\$12,787,806	\$13,064,023	28.97%
Medicare	\$9,300,986	22.59%	\$9,747,076	\$9,972,233	\$10,187,633	22.59%
Managed Medicaid	\$5,002,348	12.15%	\$5,242,268	\$5,363,364	\$5,479,213	12.15%
Total Payments:	\$41,166,357	100.00%	\$43,140,759	\$44,137,310	\$45,090,676	100.00%
Annual Market Basket:			2.41%	2.41%	2.41%	
Demographic Adjustment:			0.00%	0.00%	0.00%	
Efficient Adjustment:			0.00%	-0.10%	0.00%	
Market Share Adjustment:			0.00%	0.00%	-0.25%	
Planned Service Adjustments:			0.00%	0.00%	0.00%	
Total Adjustments:			2.41%	2.31%	2.16%	

**Note: Assumed that FY19 adjustment is 2.33%.*

This approach is clearly a stylized approach to demonstrate some of the considerations in budget development. A number of additional hospital-specific issues could be introduced in the negotiations. Note that this budget could be negotiated jointly with a group of payers (the most efficient approach probably), with each payer making periodic payments for their share of the budget to the hospital. However, a similar approach could be taken payer by payer, but separate uncoordinated budgets would be difficult to administer and would complicate the process for budget development and revenue stability over time.

Hospital 2

For Hospital 2, the global budget approach is similar. The volume and payer mix for the hospital are shown in Table 4 below.

Table 4: Hospital 2 Payments by Payer Type

HOSPITAL 2 INPATIENT & OUTPATIENT PAYMENT BY FINANCIAL CLASS [1]						
Payer	FY18					
	IP Discharges	IP Payments	OP Visits	OP Payments	Total Payments	% of Total
Commercial	43	\$ 361,338	7,091	\$ 4,298,039	\$ 4,659,377	43.94%
Medicare Advantage	93	\$ 341,600	3,476	\$ 879,524	\$ 1,221,124	11.52%
Medicare	304	\$ 1,585,297	9,186	\$ 1,972,453	\$ 3,557,750	33.55%
Managed Medicaid	26	\$ 66,271	3,408	\$ 933,469	\$ 999,740	9.43%
Other	8	\$ 23,360	1,342	\$ 142,303	\$ 165,664	1.56%
Total	474	\$ 2,377,867	24,503	\$ 8,225,788	\$ 10,603,655	100.00%

[1] Note: Total payments excludes accounts receivables

For this hospital, government payers account for about half of the payments, with much of the remaining patient volume concentrated among commercial payers. Of the \$5.4 million in commercial payments, \$2.2 million are from Blue Cross Blue Shield (BCBS), accounting for 17.2% of the hospital's payments in FY2018. The remaining commercial payments are spread across a number of payers, all of whom are secondary in size. Combining BCBS payer share with governmental payers, accounts for nearly 72% of the hospital's payments, and all commercial and governmental payments comprise 98.4% of the hospital's payments.

The small size of this hospital makes it unlikely that payers would be interested in engaging in discussions around a global budget because of limited opportunities for savings and impactful change. As part of a system-wide program or a demonstration program with a systematic approach that could be applied across several hospitals, hospital 2 could be an attractive candidate.

Even with its small scale, the hospital's data can be used to construct a budget – the mechanics are the same as for Hospital 1. This is demonstrated in Table 5 below with the same market basket trends and other adjustments.

Table 5: Hospital 2 Potential Global Budget for Commercial, Medicare, and Medicaid Payments

MODEL BUDGET FOR HOSPITAL 2 INPATIENT & OUTPATIENT SERVICES BY FINANCIAL CLASS						
Major Payer	FY18		FY20	FY21	FY22	
	Payment	% of Total	Payment	Payment	Payment	% of Total
Commercial	\$4,659,377	44.64%	\$4,882,848	\$4,995,641	\$5,103,547	44.64%
Medicare Advantage	\$1,221,124	11.70%	\$1,279,691	\$1,309,252	\$1,337,532	11.70%
Medicare	\$3,557,750	34.08%	\$3,728,385	\$3,814,511	\$3,896,905	34.08%
Managed Medicaid	\$999,740	9.58%	\$1,047,689	\$1,071,891	\$1,095,043	9.58%
Total Payments:	\$10,437,991	100.00%	\$10,938,613	\$11,191,295	\$11,433,027	100.00%
Annual Market Basket:			2.41%	2.41%	2.41%	
Demographic Adjustment:			0.00%	0.00%	0.00%	
Efficient Adjustment:			0.00%	-0.10%	0.00%	
Market Share Adjustment:			0.00%	0.00%	-0.25%	
Planned Service Adjustments:			0.00%	0.00%	0.00%	
Total Adjustments:			2.41%	2.31%	2.16%	

*Note: Assumed that FY19 adjustment is 2.33%.

Conclusions and Next Steps

Global budgets offer an interesting alternative to conventional payment methodologies for rural hospitals. They modify traditional provider economic incentives away from driving volume toward using financial resources to improve care for the population the hospital serves. **However, this paper demonstrates that public payer participation is the best option for the global budget approach to work – accounting for 59% of Tennessee rural hospital revenue, Medicare and Medicaid cover the majority of the patients treated.** Combined with commercial participation, these payments account for more than 90% of rural hospital revenue in the State.

If Tennessee rural hospitals were to pursue global budgets as a payment approach, an important issue would be Medicare's willingness to participate. As noted above, CMS is currently pursuing a global budget demonstration model in Pennsylvania, but the model is in the early stages of implementation. It is unknown whether CMS and CMMI would be interested in or willing to extend the model outside of Pennsylvania until some results on the model's performance are known.

As an alternative, ***Tennessee rural hospitals could partner with TennCare and large commercial payers in the State, potentially as a prelude to Medicare fee-for-service participation.***

Because the Medicaid Managed Care Organizations in the State are part of organizations with commercial and Medicare Advantage products, a large portion of payments could be covered with a cooperative initiative. A

voluntary program for the State's rural hospitals could offer a means of stabilizing rural hospital finances while the hospitals and the systems they are a part of develop strategic responses to rationalize their delivery of services in the long run.

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In the broader policy environment, global budgets could eventually replace the patchwork of federal programs designed to support rural hospitals and the access to care that they represent. Instead of a list of methodologies that continue to operate within the context of traditional fee-for-service reimbursement for services, ***global budgets directly move toward paying for value over volume to improve health outcomes.***

Tennessee rural hospitals have faced substantial financial distress with the second highest closure rate in the nation in recent years. To the degree that this approach could be applied to stabilize hospital finances while the rural delivery model is strategically recast, this approach offers an opportunity for substantial reform.

Clearly, the model cannot address all issues of concern to rural hospitals, but the benefits may be worth exploring in concert with TennCare and commercial payers in the State – and eventually with CMS.

Questions & Further Interest

If you have questions, comments, or further interest in learning about global budgets and how they could be relevant to Tennessee rural hospitals, contact Bill Jolley, Senior Vice President, Rural Health Issues at the Tennessee Hospital Association.

Appendix

Global budgets provide their strongest incentives to reduce avoidable and unnecessary care when all hospital services are included – to the degree that some payers provide payment on a fee-for-service basis, efforts to reduce and rationalize care reduce hospital revenue. Consequently, a predominant share of the hospital’s revenue must be covered by a global budget if the desired result is a realignment and rationalization of current services and operations. There is no precise minimum threshold, but the table below summarizes the number of hospitals that would qualify under some selected scenarios. The hospitals are located outside a Metropolitan Statistical Area (MSA) or have been serving a rural population even though they are located within an MSA. 68 Tennessee hospitals have been identified by THA as potential candidates for a global budget under this approach.

Further, three options have been identified as potential definitions in this appendix. In the main discussion of the paper, the global budget aggregates all commercial payers together, recognizing that most of the commercial payments are made by a few large payers. However, that approach is expanded in this appendix to include a more refined focus on hospitals that might have interest in global budgets and meet the basic conditions for this alternative payment approach. Three options are assessed here. For each hospital, payer mix was examined and the share of revenue was computed for each of the following three options:

- Option 1: Medicare (FFS and MA), TennCare, BCBS & United
- Option 2: Medicare MA, TennCare, BCBS & United
- Option 3: Medicare MA, TennCare, BCBS, United, CIGNA & Aetna

Option 1 includes all Medicare payments along with revenue from TennCare and the largest commercial payers (BCBS & United). This represents a substantial share of revenue for most hospitals. It is not clear that Medicare would participate in the global budget approach, however, given the existence of current demonstrations, unless directed to do so by legislation. Medicare Advantage (as private payers of Medicare) and commercial payers might participate with TennCare and their MCO siblings if TennCare chose to participate in the alternative payment model. Therefore, option 2 examines the share of revenue that remains if Medicare FFS is not part of the model. Option 3 starts with option 2 as its foundation and adds CIGNA and Aetna commercial payments to determine the effect if more commercial payers could be brought into the model for rural hospitals.

Table A1 below summarizes the results. For option 1, 42 hospitals have at least 80% of their revenue accounted for by Medicare, TennCare, BCBS and United. By this definition, they “qualify” for a global budget at this threshold. (Note that the term qualify

is not imply an official requirement – it is only a guideline for this exercise.) More hospitals qualify as the threshold is lowered, as one would expect. If the threshold is lowered to 60% for option 1, all 68 hospitals are considered qualified.

For option 2, with Medicare FFS removed from the option 1 revenue base, far fewer hospitals would meet the threshold. While all hospitals qualify at 60% for option 1, only 7 meet that threshold under option 2 that excludes Medicare FFS. If the threshold is reduced to 50%, 28 hospitals qualify.

Finally, option 3 begins with the option 2 revenue base that excludes Medicare FFS and adds CIGNA and Aetna, to expand the commercial base participating. If CIGNA and Aetna chose to participate, 17 hospitals would qualify for a global budget at the 60% threshold, rising to 35 if the threshold were established at 50%.

Table A1: Number of Hospitals Qualifying as Candidates for a Global Budget

	% of Hospital Payments	Total Qualified
Option1: Medicare, TennCare, BCBS, & United	80%	42
	75%	57
	70%	65
	65%	67
	60%	68
Option 2: Option1 without Medicare FFS	65%	6
	60%	8
	55%	16
	50%	28
Option 3: Option2 with CIGNA & Aetna	65%	11
	60%	18
	55%	29
	50%	35

Total Potential Participating Hospitals: 68

Table A2 below summarizes the results of this analysis for each Tennessee rural hospital considered in this analysis. While option 1 is clearly the preferred scenario with the largest proportion of revenue covered by the global budget, both options 2 and 3 present viable options for consideration. Option 3 results in more inclusive budgets with their resulting benefits, but option 2 results in 28 hospitals with at least half their revenue under the included payers. To the degree that payers without TennCare business would be willing to participate, the global budget approach would be stronger

with 35 of the 68 candidate hospitals having at least 50% of their revenue concentrated among TennCare, Medicare Advantage and large commercial payers. Even without Medicare FFS, the model may be a viable option for a number of rural facilities.

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