Hospital Global Budgets: An Introduction

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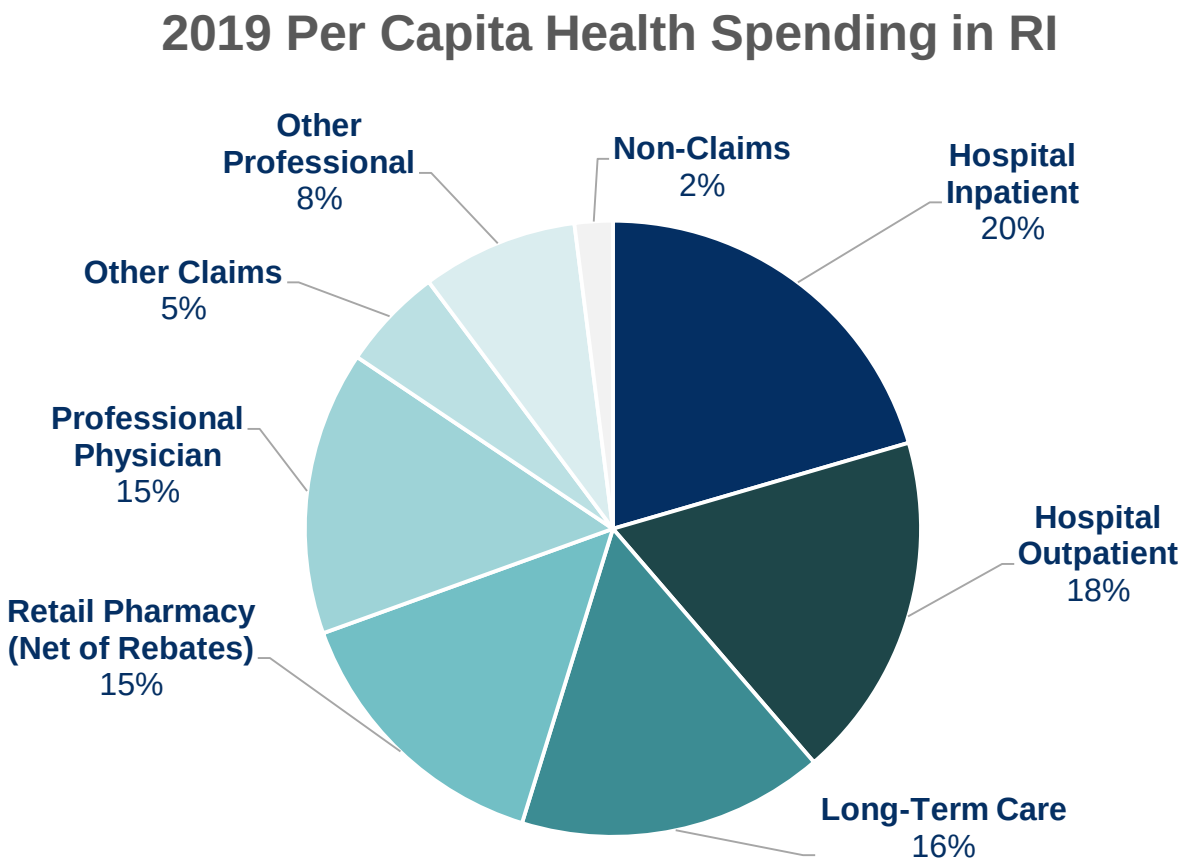
bailit health

Agenda

1. Overview of hospital global budget design and use in the U.S.
2. A flexible global budget approach for possible use in RI
3. A Maryland hospital's experience with hospital global budgets

Overview of hospital global budget design and use in the U.S.

Why Consider a Hospital Global Budget?



Sources:
2019 Rhode Island Cost Growth Target Benchmark Data Collection

The RI Cost Trends Steering Committee is interested in advancing adoption of advanced VBP models.

The VBP Subcommittee has been examining how to move away from fee-for-service payment models.

Because hospitals represent a large share of spending (nearly 40% of Rhode Island health care spending in 2019), it makes sense to consider VBP models for hospitals.

Why Consider a Hospital Global Budget? (Cont'd)

- RI hospitals faced plummeting volume once **COVID-19** hit, and only federal relief payments helped keep many solvent. More recently, a surge in hospitalizations and **workforce concerns** have created additional problems.
- Hospital global budgets can be supportive of hospitals and advance the objectives of the Cost Trends Project because they can:
  - ensure **steady, predictable financing**;
  - provide **greater flexibility** to modify hospital service offerings to best meet community needs,
  - produce **positive outcomes** without having adverse effects on hospital finances, and
  - **control growth** in hospital spending at an affordable level.

What is a Hospital Global Budget?

A fixed prospective payment that is based on historical utilization and is adjusted annually based on changing demographics, market share and service mix

Current Hospital Payment Model

- Hospitals are **paid per unit of service**.
- Hospitals are compelled to **deliver more services**, and **higher margin services**, to maintain financial viability.

Hospital Global Budgets

- Hospitals receive a **budget** for a set of **defined services** that is determined **prospectively**.
- Budgets are based on **anticipated utilization** during a specific time period.
- Budgets can be **modified from year to year** based on changes in market share and other factors.

State Implementation of Hospital Global Budgets

- Four states have experimented with hospital global budgets to date:
  - New York (1980 – 1987)
  - Maryland (2010 – present)
  - Vermont (2017 – present)
  - Pennsylvania (2019 – present)

- Each state's model is unique and is reflective of state-specific policies and market dynamics.
  - We will review these examples to help you understand how hospital global budgets have been employed.
  - **Rhode Island's approach is likely to differ from all four examples**.

State Implementation of Hospital Global Budgets (Cont'd)

Hospital Participation

- **NY**: seven Rochester hospitals and one hospital outside city limits
- **MD**: all acute care hospitals
- **PA**: critical access and acute care hospitals in rural areas
- **VT**: 14 VT hospitals distributed across the state and Dartmouth-Hitchcock (NH) – all part of OneCare VT (statewide ACO)

Payer Participation*

- **MD**: all-payer (i.e., commercial, Medicaid, Medicare)
- **NY, PA**, **VT**: Medicaid, Medicare and select commercial participation

*Medicare participates in hospital global budget arrangements via a special state agreement with CMMI.

State Implementation of Hospital Global Budgets (Cont'd)

Distributing Payments and Monitoring Performance

- **MD**: hospitals are paid retrospectively on an FFS basis; rates are adjusted up and down during the year to stay on track to meet the budget
- **NY**: hospitals received weekly prospective payments; reconciliation occurred on a monthly basis for variable costs only
- **PA**: CMS makes bi-weekly fixed prospective payments and reconciles budgets to actual costs *only* for critical access hospitals (i.e., not a "true" global budget); commercial payers make FFS payments that are reconciled to adhere to the budget
- **VT**: BCBSVT and Medicaid makes fixed, prospective PMPM payments; Medicare reconciles payments based on FFS-equivalent spending (within a pre-determined risk corridor)

State Implementation of Hospital Global Budgets (Cont'd)

Establishing and Updating Budgets

- **NY**, **MD**, **PA**: historical inpatient and outpatient revenue, adjusted for future years
- **MD** uses all-payer revenue, while **PA** uses payer-specific revenue
- **VT**: unsure

Additional Supports

- **MD**: includes additional programming and funding (e.g., Care Redesign Program) aimed to improve coordination with community-based providers
- **NY**: included a regional contingency fund to support increases resulting from changes in case mix and select medical technology

Findings from State Experiences

New York

- Reduced growth in hospital operating revenues and expenses
- Improvements in net margins
- May have yielded stronger results with model expansion

Maryland

- Reduced hospital spending for Medicare and commercial
- Reduced total expenditures for Medicare
- Reduced admissions for Medicare and commercial
- Reduced ED visits for Medicaid and commercial

Vermont

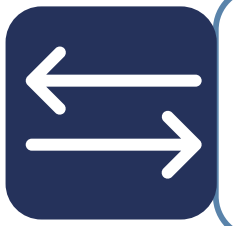
- Decreased hospital-based utilization and expenditures for Medicare
- Majority of hospital payments are still based on FFS, which is challenging for hospitals
- Some hospitals in rural areas have been reluctant to participate due to financial risk

Pennsylvania

- Limited data to assess effectiveness (one year of non-COVID-impacted data (2019))
- Participation from many hospital types (critical access, system-owned, independent)

Challenges with Hospital Global Budgets

Hospitals and/or payers may be **reluctant to engage** in a global budget arrangement due to perceived **financial risks** or due to **technical challenges** associated with implementing the model.



Global budgets **could 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 risk.

Global budgets may **reinforce undesired structures** and **perpetuate inequities** in access to and/or quality of care.

Four Key Factors for Success

1. **Support** from hospitals, non-hospital providers and payers.

2. Robust **methodology** for developing and adjusting **budgets**.

3. Strong **HIT infrastructure** and **population health initiatives** as hospitals shift their orientation from generating service volume to advancing population health.

4. **State government support** to help address the technical complexity around designing and implementing global budgets.

A flexible global budget approach for possible use in RI

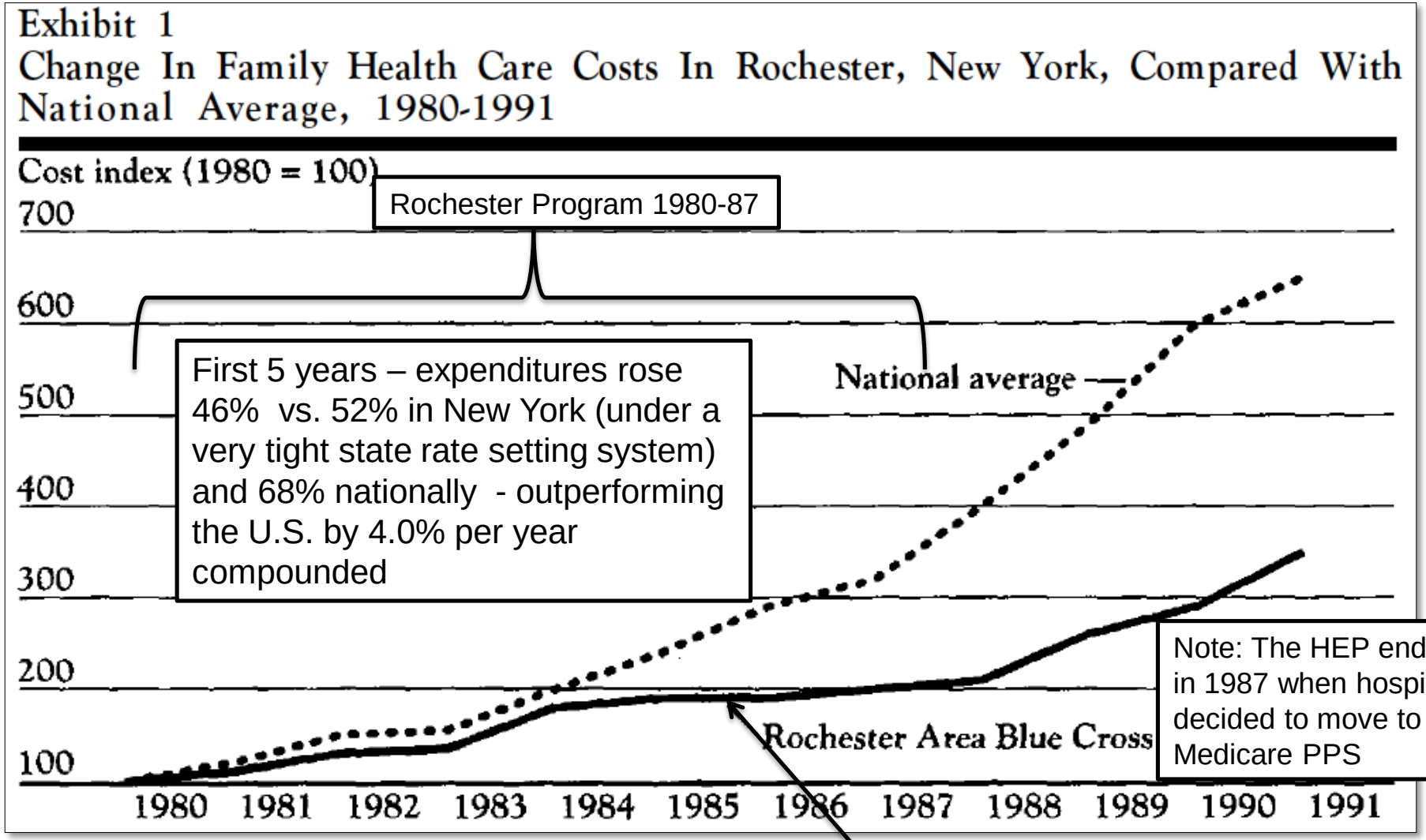
Introduction – A System of Flexible Hospital Global Budgets

- The proposed model is based on Maryland's extensive experience with hospital global budget implementation, but…
  - removes the excessive detail and complexity of the current Maryland approach
  - is informed by experience in Rochester and the Finger Lakes region in NY
- While the original Maryland hospital global budgets were 100% fixed (i.e., did not change with changes in patient volume), this model has been designed to be more flexible.
- The following slides will review the key principles and operational details of "Flexible Hospital Global Budgets." They will also present an example of how the model would be developed and operated for a single hospital.

Quick Review of Rochester's Hospital Experimental Payment Program

- The "Hospital Experimental Payment" programs (HEP) ran 1980-87.
  - It involved 9 hospitals with $1 billion in revenue for 800,000 residents in the Rochester area.
  - It was developed with strong involvement and support by local business and by Blue Cross.
  - It received a federal All-Payer Waiver to allow for Medicare and NY State Medicaid participation.
- The system was very "formulaic" - each hospital's base year budget was derived from historical 1978 costs and regulated each hospital's aggregate budgeted revenues.
  - Base year budgets were trended by inflation, demographic adjustments & other adjustments.
- The entire system administered by a small staff.
- The payment model provided very strong incentives for hospitals to be efficient, reduce waste and coordinate with pre- and post-discharge care efforts.
- **The results**: much lower hospital expenditure trends, but also increased financial stability and improved profitability for the hospitals

Results from a HEP Evaluation



Hall and Griner et al. *Health Affairs* 1993

Results from another HEP Evaluation

Table 1.—Cumulative Operating Profit (Loss) of Hospitals in Various Regions of New York State, 1980 Through 1984

Region	Operating Profit/(Loss), Millions of Dollars
New York City	(693.7)
Northern metropolitan (downstate)	(150.1)
Nassau/Suffolk	(180.7)
Abany	(41.7)
Utica	(33.7)
Syracuse	(77.7)
Rochester	11.9
Buffalo	(122.3)

Table 2.—Hospital Admissions to General Hospitals in New England, New York State, and Rochester, NY

Year	Admissions/1000		
	New England	New York State	Rochester
1979	148	149	135
1980	149	149	133
1981	147	150	132
1982	146	149	126
1983	146	148	124
1984	141	148	124
Net change, 1979-1984	−7	−1	−11

Profitability and cash flow of these hospitals was significantly better than other New York hospitals 1980-84

System also experienced larger drops in use rates than other nearby areas (NY and New England)

Block *JAMA* 1987

Simplifying the Maryland Model for Rhode Island

- The Flexible Global Budget Model borrows concepts from both Maryland and the earlier Rochester HEP.
- The original Maryland model was a highly complex, prescriptive, and administratively challenging system, largely because of requirements of Maryland's statute and its Medicare waiver.
  - The statute and waiver imposed very rigorous compliance requirements on hospital charging practices – at an individual revenue center level, across some 70 rate centers.
  - Over the decades, Maryland and its hospitals have also layered on additional adjustments and requirements – further complicating the system
- In contrast, the HEP regulated hospital revenues at the aggregate budget level, was largely "formula-driven," with a clear mandate for financial predictability (for hospitals), improved affordability (for first party payers) and improved services "planning" to benefit the community.

Maryland Hospital Global Budgets: Generation 1

- **2008**: Maryland negotiated with rural hospitals to test 100% fixed global budgets.
- Budgets were adjusted for changes in projected patient volumes due to demographic changes – i.e., population growth and aging.
- But 100% fixed global budgets meant that during a given Performance Year a hospital's revenue didn't change with real-time changes in hospital volume.
  - This was OK for isolated rural hospitals because these hospitals served a generally self-contained patient population.
  - Also, rural hospital have cost structures that are more "fixed" (i.e., higher proportion of fixed and standby costs that don't vary with volume changes = 80-90%% fixed and 10-20% variable).
- **Budget Control Mechanism**: If hospital revenues were exceeding the approved budget during the year due to volume growth > projected, Maryland would reduce a hospital's rates such that its rates times its volumes = its global budget.

Maryland Hospital Global Budgets: Generation 2

- **2014**: The 100% fixed global budget system was extended to all hospitals.
- Setting 100% fixed budgets for all hospitals proved to be problematic.
  - Penalized hospitals that were lower cost and higher quality – when payers, medical homes and ACOs attempted to shift volume their way.
  - Provided disproportionately strong incentives for hospitals to attempt to "shed" volumes, eliminate service lines, discourage specialty practices – resulting in some evidence of long waiting times for care.
  - Thus, fixed budgets tended to impede the free flow of patients across hospitals
  - Were not as accommodating of new technology adoption by AMCs.
  - This experience mirrors the experience of fixed hospital global budgets in Europe and Canada
- This model is not a good option for RI. Let's now consider an alternative.

First – A Primer on Why FFS Payments Incentivize Volume Growth

- Standard **FFS payment systems** have significant weaknesses:
  - they provide financial incentives for hospitals to increase the volume of services
  - they penalize hospitals financially when volumes decline
- These dynamics are a function of *hospital cost structures*. Cost studies in Maryland and other states found that larger hospitals have costs that are about 50% fixed (i.e., overhead, standby costs, capital/depreciation) and 50% variable (i.e., costs vary as volumes change).
- Under FFS payment, when a hospital is paid 100 cents on the dollar for each new service (variable revenues) and the cost to produce the service is 50 cents on the dollar (variable costs), hospitals make additional profits when volumes increase and lose money when volumes decline.
  - e.g., VR > VC when volume increases & when volume decreases, VR lost > hospital fixed costs
- In contrast, 100% **fixed hospital global budgets** provide no additional revenue for any volume growth – but likewise they reward the hospital 100 cents on the dollar for volume reductions. This creates extremely strong incentives to reduce volume and may encourage hospitals to stint on care, eliminate services or shift care to unregulated settings.
- **Flexible hospital global budgets** work similar to fixed global budgets, but without extreme rigidity and overly strong incentives to reduce volumes.

How Flexible Global Budgets Work Conceptually

- While fixed global budgets do not increase or decrease the amount of revenue a hospital receives when volumes change during a given year, flexible budgets *would* flex marginally, based on how a hospital's variable costs change, as volumes change.
- For instance, assuming hospital costs that are 50% variable with volume change, a flexible global budget provides additional revenue to cover these new variable costs in the case of a volume increase.
  - e.g., the budget wouldn't be completely capped – it would recognize that hospitals that receive more volumes – due to say volume shifts to the hospital from HMOs, ACOs or PCPs – will need some additional revenue to cover the variable costs associated with these new volumes.
- Likewise, if a hospital experienced a volume decrease, the global budget would flex down slightly, reflecting the proportion of variable costs associated with the lost volume.
  - The hospital would still be rewarded with amounts in its global budget that reflect its fixed costs.
- This system thus removes the excess of variable revenue > variable cost of FFS payment when volumes increase, but still provides enough revenue to cover fixed costs when volumes decline.

Flexible Hospital Global Budgets – Operational Features

- Operational features of flexible global budgets:
  - System administered by a quasi-public entity or an independent state regulatory agency
  - Budget is set and enforced at an aggregate level (just as in Rochester) and does not recreate Maryland's excessively complex unit rate system
  - Grandfathers in each hospital's historical rate base and revenues
  - Retains current hospital and payer claims payment systems (no need to change the current basis of payment)
  - In subsequent years, each hospital gets adjustments for changes in demographics (population growth and aging) of its patient service area population and an annual inflation adjustment
  - Budget includes hospital-based inpatient and outpatient services and can also include employed physician services, and other non-hospital services (home health, SNF)

Flexible Hospital Global Budgets – A Better Alternative

- A flexible global budget model has the following advantages:
  - Money follows the patient consistent with market principles.
  - Flexible global budgets don't restrict payer, patient, or physician choice.
  - The model still removes incentives to increase volumes unnecessarily.
  - The model provides predictable revenues to hospitals – covering fixed costs if volumes decline – and provides flexibility in terms of how resources are deployed to improve population health and operational efficiency.
  - The model applies to all hospitals and all payers, including Medicare and Medicaid.
  - It supports cost growth target attainment through the application of an affordable annual inflation updates to each global budget.

Example of Global Budget Model Development for One Hospital

- Just as in Maryland, charge levels would be adjusted on a monthly basis as volumes fluctuated such that Price x Quantity = Hospital Target Budget
- This approach provides more flexibility versus a model which specifies a fixed PMPM payment by payer
- **Step 1**: Obtain data on **historical** hospital gross revenues, net revenues and volume by payer

Hospital A - Base Year Data Required

	Medicare	Medicaid	Blue Cross	Other Private	Other	Totals
Payer Mix	42.0%	23.0%	20.0%	12.5%	2.5%	100.0%
Gross Patient Revenue	$84,000,000	$46,000,000	$40,000,000	$25,000,000	$5,000,000	$200,000,000
Discount from Charges	58.0%	66.0%	28.0%	23.0%	80.0%	
Net Patient Revenue	$35,280,000	$15,640,000	$28,800,000	$19,250,000	$1,000,000	$100,000,000
Discharges	3,632	1,989	1,730	1,081	216	8,649

- **Step 2**: Fix payer discounts for all payers at historical levels
  - Payer discounts (relationship between gross charges net payments by payer) need to be fixed – to cause net payments to vary with allowed charge levels under the model

Example of Global Budget Model Development for One Hospital

- **Step 3:** Calculate an aggregate measure of volume (hospital case mix-adjusted discharges)

Total Hospital Discharges (IP & OP)	8,649
Hospital Case Mix Index	0.925
Case Mix Adjusted Discharges (IP) and Equivalent Case Mix Adjusted Discharges (OP)	8,000

Discharges x CMI = CMADs (measure of hospital volume)

- **Step 4**: Project performance year volumes by adjusting hospital's historical volumes (adjusted cases) x demographic adjustment and inflate hospital "prices" GPR/adjusted case & NPR/adjusted case by annual approved inflation adjustment

		A Historical Base Yr. Data		B Inflation Adjustment (1)	C Demographic Adjustment (2)		D = A x C Projected Volume	E = A x B Projected Prices	F = D x E Performance Yr Target Budget
L1 IP Adjusted Cases (CMADs)		5,000							
L2 OP Equvalent Adjusted Cases (ECMADs)		3,000							
L3		8,000		X	1.015	=	8,120		
L4 Gross Patient Revenue		$200,000,000							$208,075,000
L5 Net Patient Revenue		$100,000,000							$104,037,500
L6 GPR/Adjusted Case	L4/L3	$25,000	X	1.025		=		$25,625	
L7 NPR/Adjusted Case	L5/L3	$12,500	X	1.025		=		$12,813	
Discount (Net to Gross) fixed for each payer		50.0%						50.0%	

- The product of the projected volumes (CMADs) x the inflated price measures (GPR/CMAD and NPR/CMAD) = the initial performance year target budgets ($208 million GPR Budget and $104 million NPR Budget)

Example of Global Budget Model Development for One Hospital

- **Step 5:** During the course of the performance year, the hospital would monitor overall volume change (on the basis of case mix-adjusted discharges).
  - If the model were a 100% fixed budget model, and the hospital experienced a 1% increase in volumes, it would be required to reduce prices by 1% to meet its fixed budget.
  - Likewise, a 1% decrease in volume would require a 1% increase in its prices.

- Under a Flexible Global Budget model, the required (monthly) price changes are "moderated" by the hospital's "Variable Cost Factor."
  - For a 1% *increase* in volume, the hospital would decrease its prices by 0.5% (1.0% x 50% variable cost factor = 0.5% price change). This allows a hospital to fund an increase in variable costs.
  - But unlike in a FFS system, the hospital is **now not** being paid in **excess** of its variable costs for incremental volume.
  - For a 1% *decrease* in volume, the hospital would be required to increase its prices by an amount commensurate with the change in its variable costs (50%) or 1% x 0.5 = 0.5%. Thus, the hospital continues to cover its fixed costs when volumes decline
  - This approach reduces the incentive to increase volumes but protects the hospital when volumes decline.

In Summary

- Hospital global budgets can provide revenue stability to hospitals and support cost growth target attainment.
- The flexible hospital global budget approach described today provides better coverage of hospital fixed costs if volumes decline, but it also removes incentives for hospitals to unnecessarily increase volume. It also is simpler to administer and requires less administration to support.
- Payments are not prospective, allowing payers and providers to retain existing claims payment systems - *and* for ERISA payers to participate.
- Flexible Global Budget models are still very compatible with population-based payment approaches and models (such as ACOs).
- There are other adjustments and modifications than can be made.
- This was only an introductory presentation. Additional detail can be explored subsequently, and potential modifications discussed.

A Maryland hospital's experience with hospital global budgets

A Maryland hospital's experience with hospital global budgets

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Director at Berkeley Research Group LLC

Former Senior Director, Executive Director and Vice President at the University of Maryland Medical System

Wrap-up and Next Steps

Resources

Resources

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