



Monitoring Maryland Performance Medicare Fee-for-Service (FFS)

Data through December 2018 – Claims paid through February 2019

Source: CMMI Monthly Data Set



HSCRC

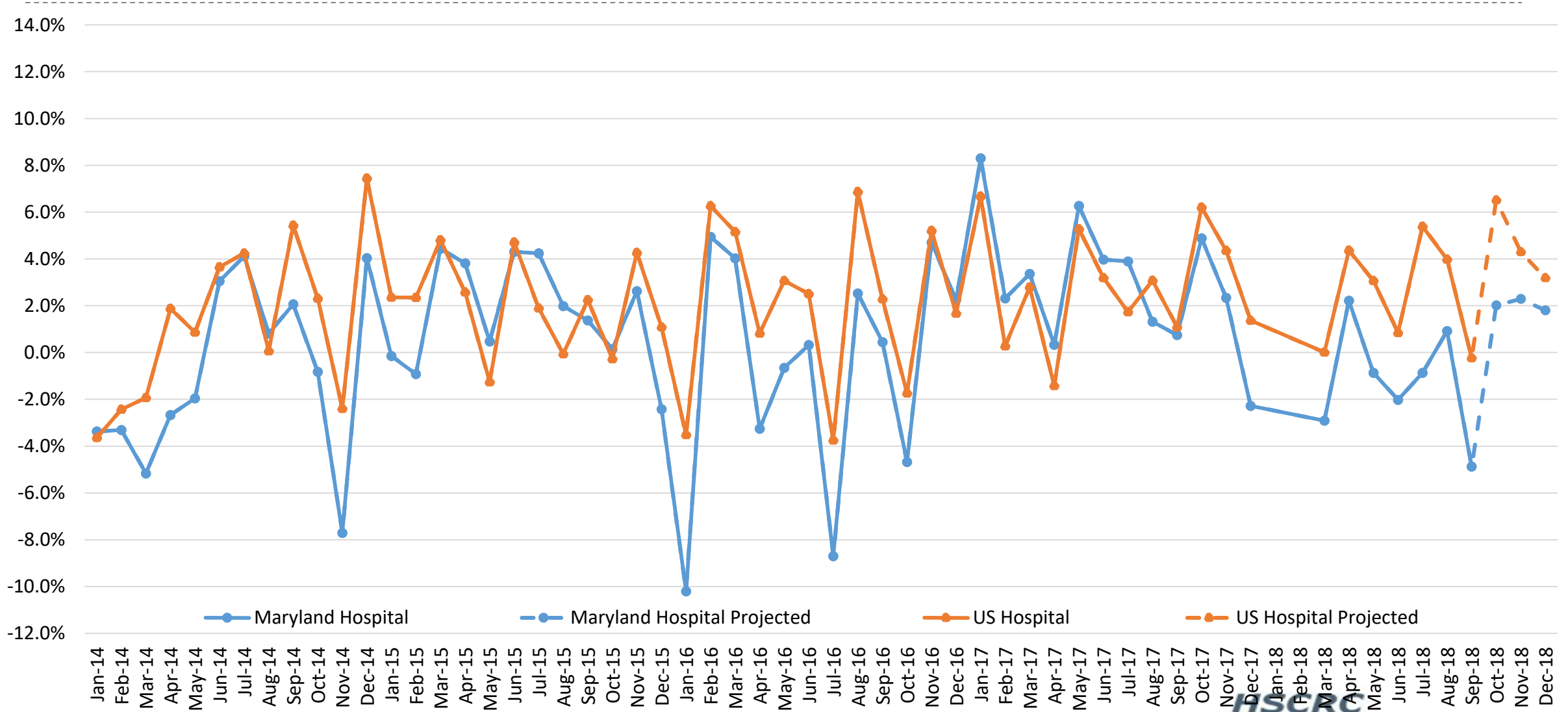
Health Services Cost
Review Commission

Disclaimer:

Data contained in this presentation represent analyses prepared by HSCRC staff based on data summaries provided by the Federal Government. The intent is to provide early indications of the spending trends in Maryland for Medicare FFS patients, relative to national trends. HSCRC staff has added some projections to the summaries. This data has not yet been audited or verified. Claims lag times may change, making the comparisons inaccurate. ICD-10 implementation and EMR conversion could have an impact on claims lags. These analyses should be used with caution and do not represent official guidance on performance or spending trends. These analyses may not be quoted until public release.

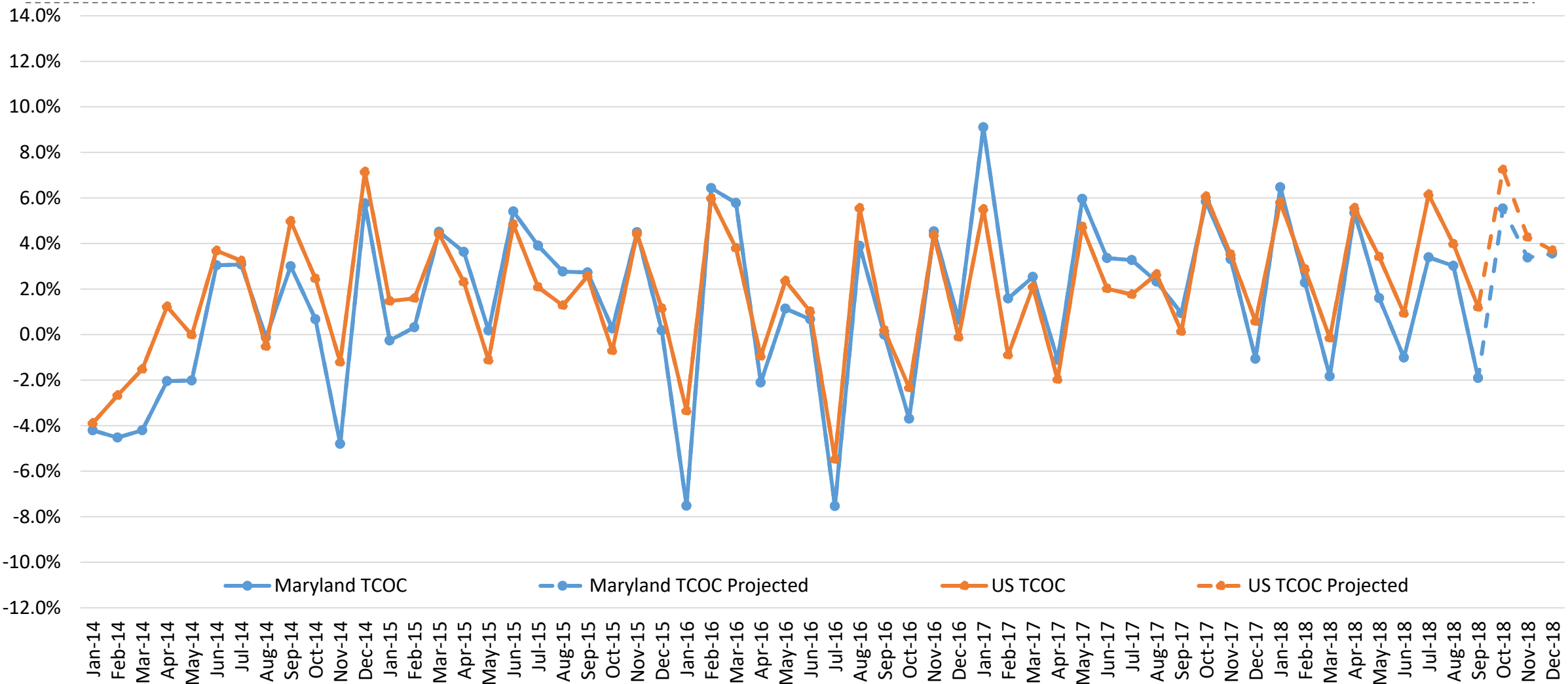
Medicare Hospital Spending per Capita

Actual Growth Trend (CY month vs. prior CY month)



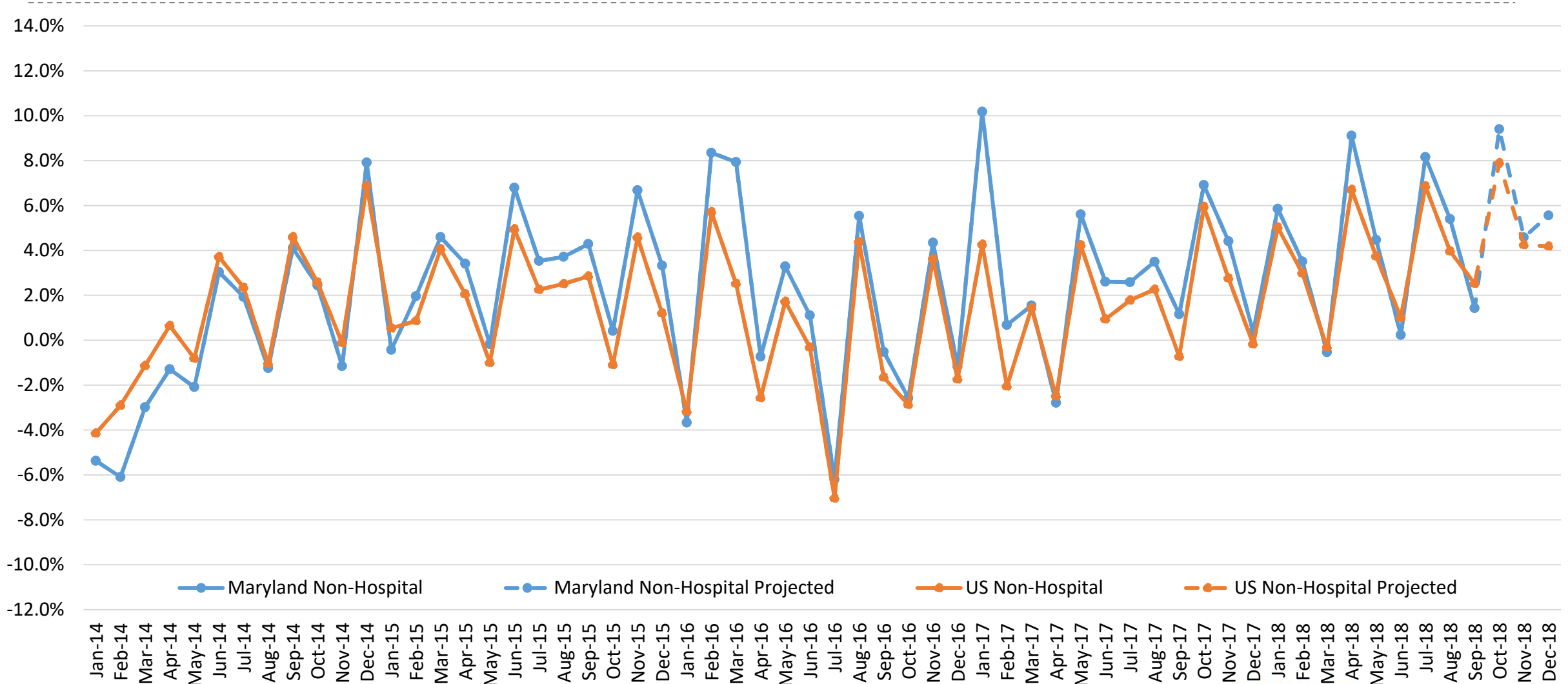
Medicare Total Cost of Care Spending per Capita

Actual Growth Trend (CY month vs. prior CY month)



Medicare Non-Hospital Spending per Capita

Actual Growth Trend (CY month vs. prior CY month)



Update Factor for Drug Costs

April 2019

Overview: Drug Inflation Update

Recommendation

- ▶ Prior analysis has shown drug funding is adequate overall but has some issues with distribution
- ▶ Growth is concentrated in the high cost outpatient and oncology drugs rather than all drugs.
- ▶ Staff is proposing to narrow the drug inflation factor to apply to only these drugs with the remaining drug inflation funded through the standard inflation factor
- ▶ Staff is recommending drug inflation of 10%
 - ▶ Inflation factor covers price inflation and drug mix impacts, a separate increase is provided for drug volumes.

Data Review

- CAGR = Compounded Annual Growth Rate.
- 340B programs= discount programs under federal rules, which are provided to hospitals (and other qualified providers) with higher proportions of Medicaid use. After the ACA Medicaid expansion, additional hospitals qualified for discounts.



Inflation factor is primary source of drug funding

▶ Revenue sources captured include:

Sources of Funding for Drug Cost Growth From Jan. 2014 through FY 2018 (In Millions of Dollars)

Inflation provided through annual update	\$215.8	← Subject of this discussion
High cost drug adjustment and deregulation	\$15.1	← Volume adjustment before deregulations reflects ~\$30 M or 12% of total growth.
Car-T and Spinraza	\$8.6	
Total	\$239.5	

▶ Additional sources not included in the analysis are:

- ▶ Special revenue adjustments (e.g. Anne Arundel rate review)
- ▶ Demographic adjustment
- ▶ Categorical and intensity adjustment, except CAR-T and Spinraza
- ▶ Market shift for inpatient and outpatient services, other than oncology and infusion drugs, PAU adjustments for inpatient services

Outpatient Oncology and Infusion Drug Growth is the Inflationary Driver

Drug Costs by Category, FY 2014 - FY 2018 (in Millions of Dollars)

	Inpatient	Outpatient Oncology and Infusion	Other Outpatient	Total	Annual Growth
FY 14	\$335.9	\$250.0	\$170.2	\$756.1	
FY 15	\$337.0	\$277.8	\$187.2	\$802.0	6.1%
FY 16	\$327.3	\$322.7	\$194.7	\$844.6	5.3%
FY 17	\$336.0	\$345.7	\$168.7	\$850.4	0.7%
FY 18	\$326.8	\$366.3	\$154.6	\$847.6	-0.3%
CAGR (FY14-FY18)	-0.7%	10.0%	-2.4%	2.9%	

- ▶ Total cost is from hospitals' annual cost report with HSCRC, where available.
- ▶ The split between inpatient and outpatient costs was estimated based on the proportion of IP and OP drug revenues.
- ▶ High cost oncology and infusion services were split based on the CDS-A supplemental drug report, increased by dividing reported cost by .8 to estimate 100 percent of cost.
 - ▶ FY 2014 CDS-A figures, which were not available, were estimated at 90% of FY 2015 figures, based on outpatient drug cost trends. This may underestimate the actual growth of oncology and infusion drugs for FY 15 over FY 14, based on the general trend in inflation for other outpatient drugs.

Drug Cost Inflation Mitigating Factors

- ▶ Since FY15¹ 340B expansion significantly reduced the total trends:

	All Drugs	All Drugs Excluding 340B Expansion	Outpatient and Oncology Infusion	Outpatient and Oncology Infusion Excluding 340B Expansion ²
FY16 over FY15	5.3%	9.7%	16.1%	24.2%
FY17 over FY15	0.7%	4.7%	7.2%	13.9%
FY18 over FY15	-0.3%	1.7%	5.9%	7.8%
CAGR FY15 to FY18	1.9%	5.3%	9.7%	15.1%

1. 340B did not impact periods prior to FY15 so current slides only reflects trends since then.
2. Impact on Outpatient and Oncology Infusion is slightly overstated as some of the 340-B impact relates to IP drugs, but the HSCRC does not have the data to segregate at that level

- ▶ In addition to the 340-B savings hospitals have been able to suppress trend by negotiating discounts where previously there was no incentives for hospitals to seek price discounts.

Recap of Drug Cost Trends

- ▶ Most drug cost growth is high cost oncology and infusion drugs
- ▶ Drug cost growth was higher in FY 2015 and FY 2016, but moderated in FY 2017 and FY 2018.
 - ▶ Frederick Hospitals deregulation of infusion drugs in FY 2017 reduced costs by approximately \$15 million. Growth in new programs at Johns Hopkins Bayview and Garrett Memorial Hospital offset this decline.
 - ▶ 340 B programs helped reduce outpatient drug spending for several new hospitals in 2016, 2017, and 2018, in addition to reducing ongoing costs for hospitals already in the program.
 - ▶ Total 340B savings increased by \$103 million between 2015 and 2018 resulting in significant trend mitigation.
- ▶ There were modest changes in spending for inpatient and outpatient drugs that are not high-cost oncology and infusion drugs across the entire period from 2014 through 2018.
 - ▶ There may be some shifting in reported costs between high cost oncology and infusion drugs and other outpatient drugs.

Proposed Inflation Factor

- ▶ From FY 2014 to FY 2018 Outpatient and Oncology Infusion Drugs have grown at an average annual rate of 10%:
 - ▶ Adding back incremental savings from 340B would increase cost growth CAGR to 15%
 - ▶ Excluding the amount funded through volume adjustments would decrease cost growth CAGR to ~9%
 - ▶ But the 2017 to 2018 growth rate was only 7.8% (after adding back incremental 340B savings)
- ▶ High-level staff modeling excluding incremental 340B benefits and volume adjustments, and normalizing trends for drug adoption status supported 9% annual trend.
- ▶ HSCRC is proposing 10% drug inflation factor to balance these various indicators.



Recommendation



Drug funding policy recommendations

- ▶ **Policy change recommendation:**
Limit additional inflation in annual update to oncology and infusion drugs
 - ▶ Leave remainder of other drug inflation dollars in general update factor
 - ▶ Consider refinements based on the mix of drugs (high growth vs. low growth drugs)
- ▶ Continue to adjust for use changes in high cost oncology and infusion drugs through the CDS-A
 - ▶ Move toward populating the CDS-A from the case mix data

Drug funding policy recommendations

- ▶ Eligible drugs determined as follows:
 - ▶ For RY 2020, use CDS-A drug list
 - ▶ For RY 2021, develop a list of drugs for CDS-A that will be populated by all hospitals. All listed outpatient drugs will be eligible for the additional inflation. Update the list periodically to add new drugs and remove drugs annually as needed.
- ▶ Fund high cost drugs inflation at 10% for RY 2020
- ▶ Other drugs will get state wide inflation

Hospital X Example

FY2018 CDS-A Cost Reported	\$20 M
Inflation Factor	10%
Inflation Cost	\$2 M
Mark Up	10%
Added Revenue	\$2.2 M
FY2018 Actual Revenue	\$500 M
Drug Inflation Factor	0.44%



Volume Methodologies Workgroup Update

April 5, 2019



HSCRC

Health Services Cost
Review Commission

Executive Overview

- ▶ Analysis of Volume Methodologies that adjust GBR budgets indicate that funding is sufficient at a statewide level but distribution and predictability can be improved by:
 - ▶ Modifying Distribution of the Demographic Adjustment
 - ▶ Simplifying Market Shift by reducing number of cells/markets
 - ▶ Not discussed in this presentation
 - ▶ AND at the same time maintain the incentives of the TCOC Model

- ▶ If a hospital has retained revenue with poor cost outcomes, staff proposes to address this through Efficiency methodologies, including:
 - ▶ Interhospital Cost Comparison
 - ▶ Total Cost of Care Analyses

Visual Representation of Revenue Adjustment Methodologies

Efficiency	MPA	ICC			
	Attainment	TCOC Benchmarks	Credit for Costs of New Model		
Quality (One-time)	MHAC	QBR	RRIP		
			New Targets		
Volume	Market Shift	Demographic Adjustment	PAU	Deregulation	Innovation
	Simplify, Reduce Unpredictability	Correct Vol. Distribution	Per Capita	Formalize Policy	Refine
Foundational	Major Capital Financing	GBR	Update Factor	Casemix Methodology	
			MPA Efficiency	Refine, Fine Tune	

- Upcoming
- In Process
- In Place

Definitions

- ▶ **Unfunded Volume Growth** – The differential between volume funding from various Volume Methodologies and funding of all volume at a 50% variable revenue factor, i.e. a volume variable system.
- ▶ **Retained Decline** – The differential between volume funding from various Volume Methodologies and the defunding of all volume at a 50% variable revenue factor, i.e. a volume variable system.

Scope of Volume Funding Addressed

Included (~70% of revenue)

In-state cases

- ▶ Case-mix adjusted discharges
- ▶ Case mix adjusted outpatient cases (grouped into Enhanced Ambulatory Patient Groups)

Mechanisms

- ▶ Market Shift Adjustment
- ▶ Demographic Adjustment
- ▶ Other Adjustments

Not Included (30% of revenue)

Cases

- ▶ Out-of-state
- ▶ Radiation and Infusion Therapy and Drugs (drugs addressed separately)
- ▶ Defined quaternary cases, (“Categorical” exclusions such as transplants, research, severe burn, Car-T, Spinraza)
- ▶ Readmissions and Prevention Quality Indicators (classified as potentially avoidable utilization, “PAU”)

Mechanisms

- ▶ Volume Variable for select cases
- ▶ Rate review or special GBR adjustments
- ▶ Intensity Adjustment

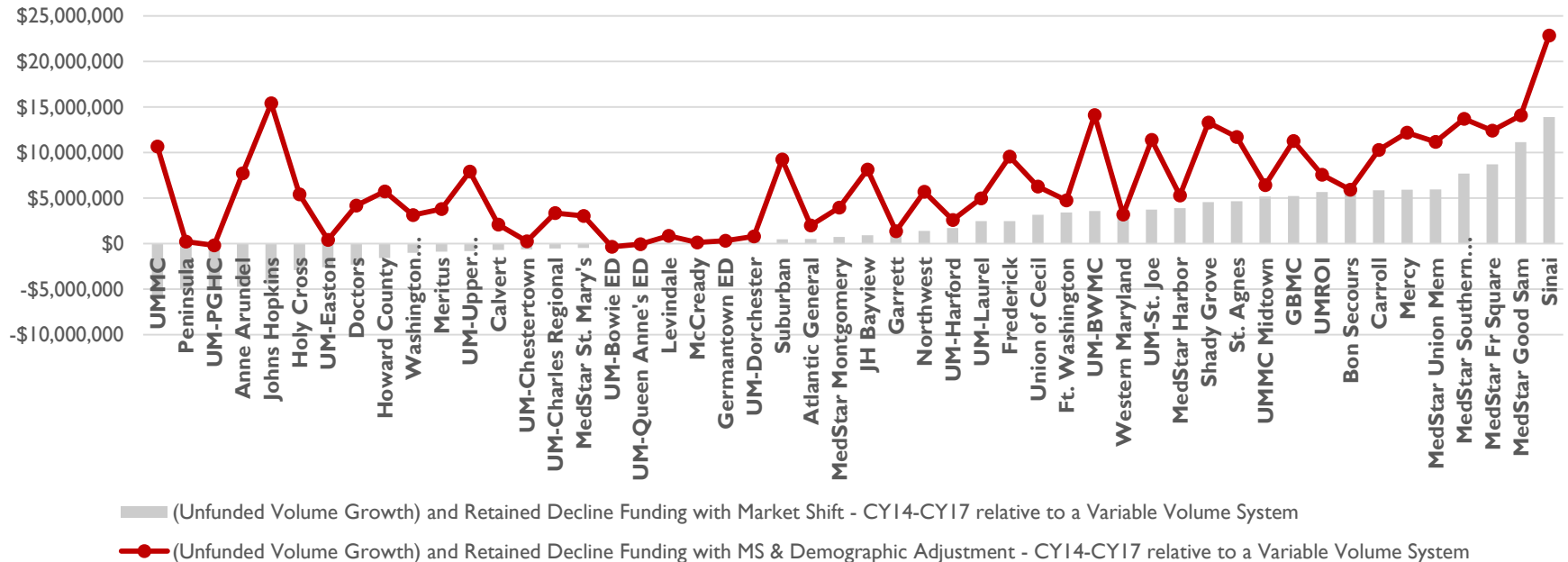


The Demographic Adjustment Reduces Unfunded Growth but Increases Retained Revenue for Hospitals with Volume Declines

Market Shift moves 50% of the average charge for volume growth that has a corresponding decrease in a given service line and geography. This formulation is not applied to excluded volumes (readmissions, out-of-state, defined quaternary cases, oncology).

Demographic Adjustment is a measure of age adjusted population growth that is distributed based on current market share and is capped to the total population growth rate of the State. It does not distribute revenue based on volume growth.

Residual Funding Differences of In-State Volume CY14-CY17 Market Shift and Demographic Adjustment*



Problems with Demographic Adjustment

- ▶ The demographic adjustment was intended to tie revenue growth to a population
 - ▶ It does remove revenue in parts of the state that are experiencing population declines and adds to areas with growth
- ▶ But—
 - ▶ Changes in utilization do not necessarily correlate with changes in population
 - ▶ Especially true for dense portions of the state and/or locales with more competitive hospital markets
 - ▶ Confounded by hospitals that are moving services to deregulated settings and by hospitals responding differently to the incentives of the Total Cost of Care Model

If there is a distributional problem, what policy can address this while maintaining the incentives of the TCOC model?

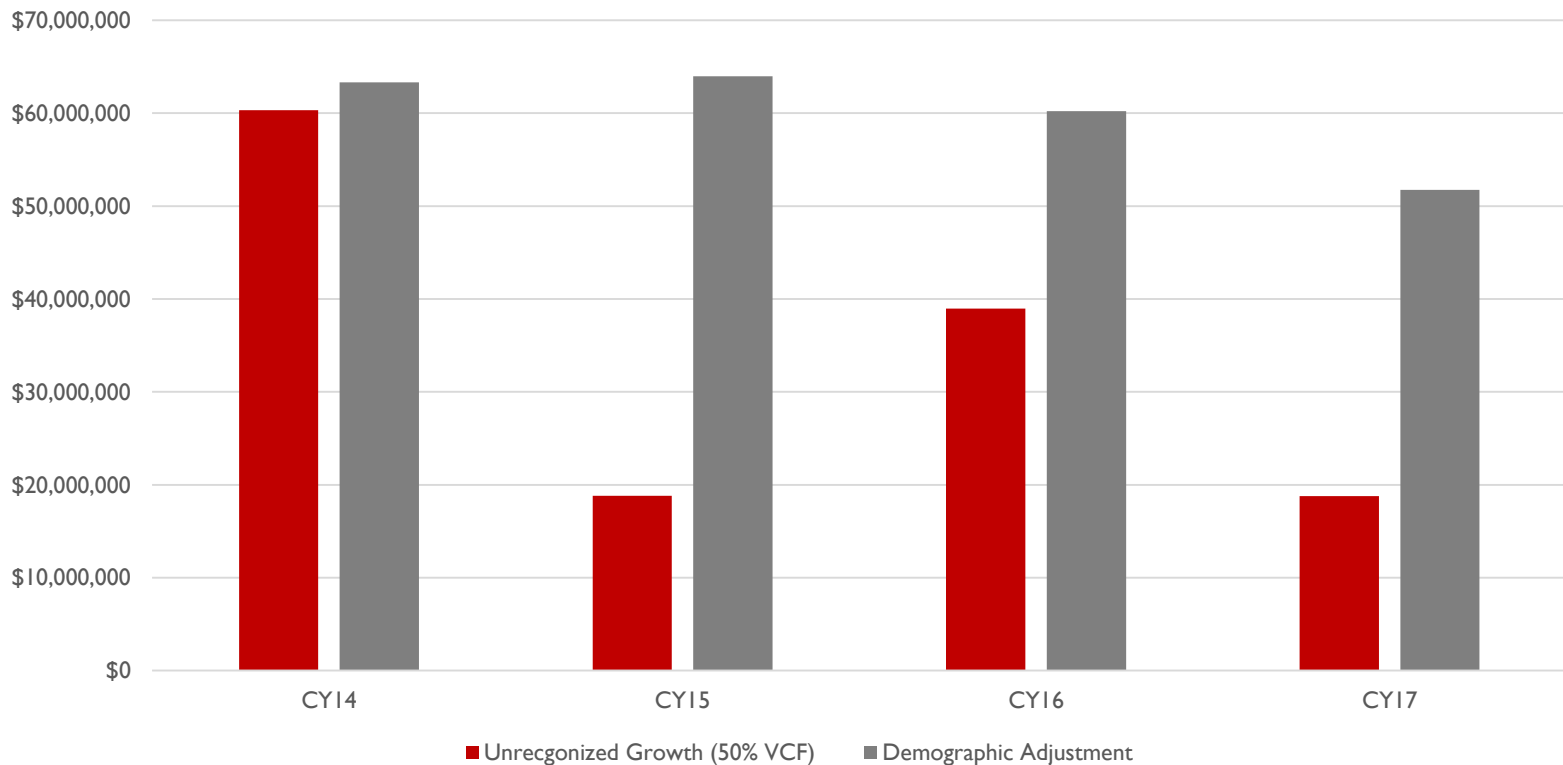
Potential Options:

1. Move all volume to a volume variable system that recognizes growth at a 50% variable revenue factor and declines at a 40% variable revenue factor
 1. See Hopkins white paper for additional details
 2. Modify the demographic adjustment to recognize volume growth not accounted for in the Market Shift at a 50% variable revenue factor and distribute residual funding if available, per the current Demographic Adjustment methodology or some other algorithm/policy.
 1. What Volume growth should be recognized and prioritized? Should it just be for high intensity services, e.g. inpatient services and major outpatient surgeries? Especially since the vast majority of unrecognized growth has been IP?
 2. When should the HSCRC investigate unrecognized volume growth and what actions should the Commission utilize to account for this(90/10 rule)?
 1. EX: General Surgery volume increases related to ICD-10 conversion
 2. EX: Deregulation adjustments for volume declines related to utilization shifts as opposed to avoided utilization.
 3. Should the residual demographic adjustment be distributed as permanent revenue or even at all?
 4. If demographic adjustment funding is not sufficient, unrecognized growth will not be reimbursed. How should this potential situation be handled?
 3. Continue pursuing deregulation adjustments for the movement of services from OP to unregulated settings.
 4. Pursue #2 and #3 while also working to simplify the Market Shift by reducing the number of service lines and geographies.
-

Demographic Adjustment Sufficiency

Since the start of the All-Payer Model, the Demographic Adjustment has been sufficient to cover unrecognized growth. In CY14 it was narrowly sufficient but the gap has widened since, presumably because of the incentives of the Model.

Demographic Adjustment vs. Unrecognized In-State Growth*

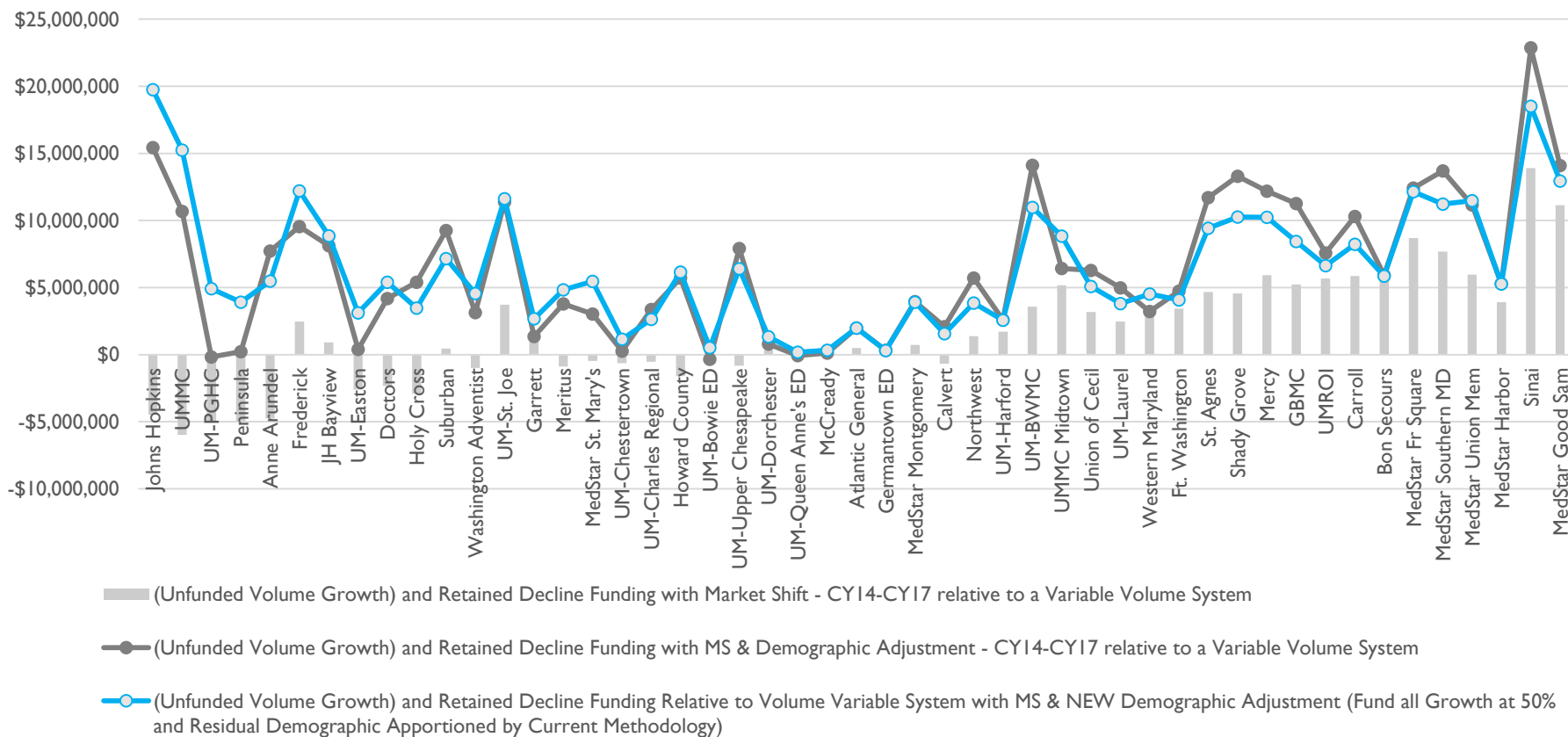


*CY14 is not inclusive of the funding the Commission provided for Medicaid Expansion - \$57M.



CY14-CY17 Funding with Modified Demographic Adjustment

Residual Funding Differences of In-State Volume CY14-CY17 Market Shift and Demographic Adjustment Funding*



*Modified Demographic Adjustment distributes residual Demographic Adjustment per existing methodology.
*Residual Market Shift Funding is inclusive of Medicaid Expansion and Deregulation/Special Adjustments

CY14-CY17 Effective Revenue Factor Analysis (Unrecognized Increase & Decreases)

The new predictability of the volume system is that hospitals can expect an effective 50% variable revenue factor for growth and a retention of 100% of revenue for declines that are not market shifts or deregulation.

	MSA Effective Revenue Factor	MSA PLUS Revised Demographic Adjustment Effective Revenue Factor*	MSA Effective Revenue Factor	MSA PLUS Revised Demographic Adjustment Effective Revenue Factor	Residual Demographic Adjustment Revenue
	Unrecognized Increases		Unrecognized Decreases		
CY14	4.02%	50%	27.7%	27.7%	\$1.8M
CY15	29.5%	50%	27.8%	27.8%	\$44.5M
CY16	20.1%	50%	25.7%	25.7%	\$20.1M
CY17	31.2%	50%	12.1%	12.1%	\$32.3M

*There is a high degree of variation in the effective revenue factor – 17% to 110%.

Potential Uses of the Residual Demographic Adjustment

- After funding unrecognized growth through the Demographic Adjustment, there is a residual amount of funding referred to as the Residual Demographic Adjustment.
 - The question staff would like to explore is how this funding should be distributed given that the Market Shift and revised Demographic Adjustment create a more predictable system, whereby net growers received 50% for all volume and net decliners retain on average 75% of all declines.
- Possible options include:
 - Distribute residual per current Demographic Adjustment methodology (demonstrated in earlier modelling slides)
 - Distribute based on a hospital's lack of opportunity to reduce potentially avoidable utilization, thereby narrowing the budget opportunity of medically based hospitals and high intensity based hospitals.
 - Do not distribute
 - Distribute as a cumulative one-time adjustment that may be pulled back in order to finance appropriate large scale capital projects

Implications for Payment Model Workgroup

- ▶ The Demographic Adjustment in RY20 is .3%, approximately \$50M.
- ▶ Unfunded Growth for the first six months of calendar year 2018, i.e. volume growth not recognized by the Market Shift, was \$12.7M
- ▶ If the staff proposal for a revised distribution of the Demographic Adjustment is approved, there is a question to the payment models workgroup about whether or not the residual Demographic Adjustment is distributed.

Drug Cost Appendix:
Background and Context of Rate Setting
Mechanisms



Overview of Drug Funding-Pre Global

- ▶ Prior to 2014, drug costs were funded through four mechanisms:
 1. Inpatient drugs were part of a DRG.
 - ▶ Growth in the volume of cases was funded at 85 percent variable cost, or a
 - ▶ Substitution of drugs for a service within the DRG that offset typical expected costs (e.g. drug related reductions in length-of-stay) provided funding at 100 percent retention.
 2. Drug price inflation was provided through the annual update factor, which increased DRG rates per case.
 3. Inpatient categorical cases (cancer research, transplants, burns) provided a pass through of included inpatient drug costs (“categorical adjustment”) for AMCs.
 4. Outpatient drugs were funded at reported cost.
 - ▶ Cost growth was funded at 100 percent during the year of increase when billed, and 85 percent of the growth was funded on a permanent basis after removing 15 percent of the change in cost.

Overview of Drug Funding-Post 2014

Under the global revenue model:

- ▶ Inpatient and outpatient drugs were incorporated into global revenues.
 - ▶ Hospitals could substitute drugs for other services and this would provide funding source (e.g. drug substitutes for surgery or drug-related reductions in length of stay).
 - ▶ Other funding mechanisms included the demographic adjustment and reductions in avoidable or unnecessary utilization.
- ▶ Inflation provided through the annual update process: all hospitals received the same inflation percentage, including a specific component for drugs.
 - ▶ This was regardless of the portion of a hospital's costs attributable to drugs.
- ▶ Inpatient categorical cases (cancer research, transplants, burns) provided an update for changes in inpatient drug costs annually, based on a “cost report” from two AMC hospitals.

Concerns under global revenues:

- ▶ There was extensive growth in outpatient drug costs, particularly for new oncology and biological drugs.
- ▶ Hospitals and doctors complained that drugs were underfunded.

HSCRC Changes to Drug Funding in Rate Year 2017

- ▶ **Changed the distribution of drug inflation provided on July 1, 2016.**
 - ▶ Not all hospitals provide outpatient oncology services, the largest source of drug cost growth.
 - ▶ Redistributed drug cost inflation using each hospital's drug costs as a proportion of total costs.
- ▶ **Provided an adjustment for increases in the volume of top 80 percent spend for high cost oncology and infusion drugs (RY 2016 over RY 2015 use), the intent was to fund growth in new drugs.**
 - ▶ 50 percent permanent, and
 - ▶ 50 percent one-time funding.
- ▶ **Replaced categorical adjustment for AMCs with a 1/2 percent intensity adjustment to simplify the adjustment.**
 - ▶ HSCRC and AMCs experienced difficulty in administration as some services shifted to outpatient settings and there were delays in the cost reports.

Rate Year 2018 Funding

- ▶ In July 2017, the new drug inflation distribution method approach was continued, providing higher inflation revenues to hospitals with a higher proportion of drug costs.
- ▶ The HSCRC also provided a prospective growth estimate for changes in the volume of high cost outpatient oncology and infusion drugs for RY17 over RY16.
 - ▶ The HSCRC used 50 percent of the total dollar figure determined from the volume adjustment made in the preceding rate year to develop the estimate.
 - ▶ The HSCRC replaced this prospective growth estimate with the actual growth (or reduction) for RY 2017 over RY 2016, using data collected from hospitals on changes in the top 80 percent of cancer drugs, as identified by each hospital.

Rate Year 2019 Funding

- ▶ In July 2018, HSCRC continued the drug inflation distribution method approach, providing higher inflation revenues to hospitals with a higher proportion of drug costs.
- ▶ The HSCRC did not provide a prospective growth estimate for changes in the volume of cancer drugs for RY18 over RY17, due to lower cost growth
- ▶ AMCs were provided a one percent intensity adjustment for certain high cost inpatient cancer and biologic drugs and related treatments
- ▶ Deregulation adjustments were made for drugs shifted to outpatient settings
- ▶ CDS-A schedules were submitted earlier, leading to inclusion of changes in usage for high cost drugs for FY 2018 over FY 2017 in the January 2019 rate order update process