

# Medicare Fee-for-Service Global Payment Straw Model

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# Overview of Straw Model

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- The purpose of the straw model is to incorporate Advisory Group input into our modeling approach and share preliminary information that is concrete.
- Sometimes there was definitive input from Advisory Group members on a particular element of the model, and at other times input varied.
- Some elements of the straw model have not yet been discussed by the Advisory Group.
- Therefore, the analytics team made some assumptions in constructing the straw model and those assumptions are identified. Data are not validated, and some calculations are approximated.
- In the process of creating the straw model, if the team identified data issues or other operational barriers that resulted in a different assumption than what we discussed with the Advisory Group, these are identified.
- This is a first draft at providing this type of information, and we look forward to continued discussion and refinement.

# TAG meeting objectives

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Review high level methods presented at August TAG meeting

Discuss some options and solicit feedback from TAG members

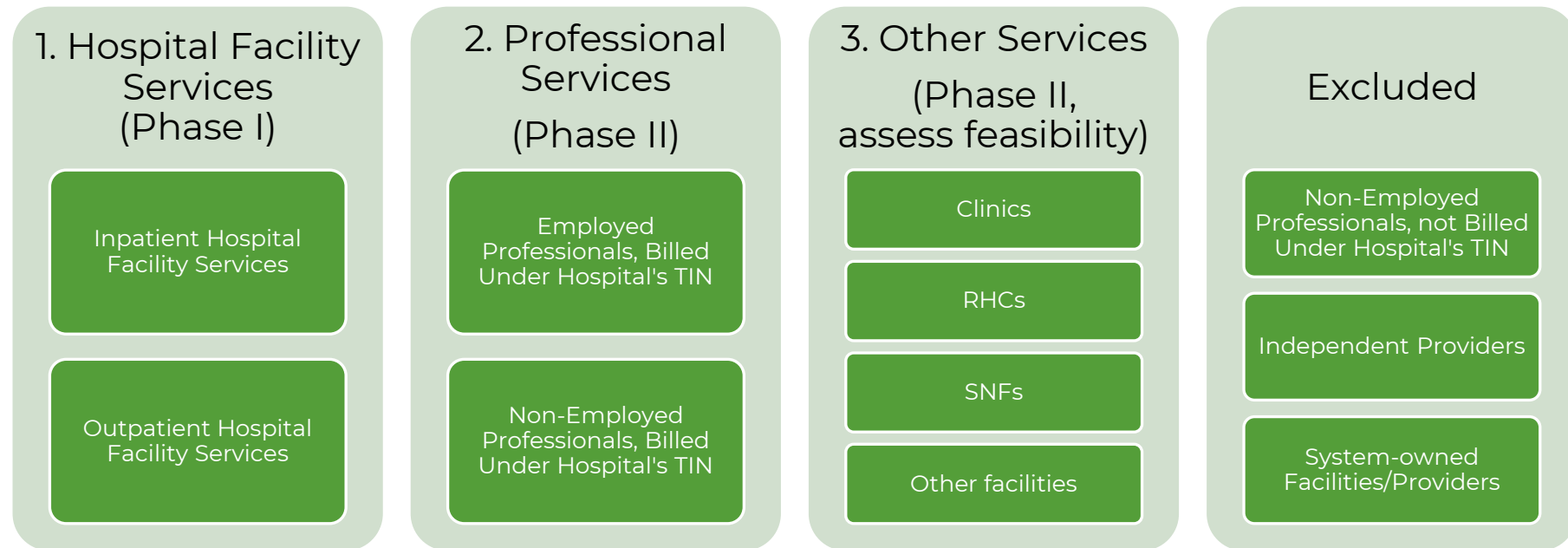
Provide additional detail on new topics

# Eligibility and inclusions / exclusions

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# Prioritize Medicare Hospital Facility Services

Straw model developed using Medicare FFS as an example; working on identifying areas where commercial payers will differ



# Other operating revenue is excluded from straw model due to operational considerations

## Hospital Operating Revenue Classification

### 1. Net Patient Revenue and ACO Fixed Prospective Payments

- Claims-based payments for hospital services (include in straw model)
- ACO Fixed Prospective Payments (include in straw model)
- Claims-based payments for professional and other services (exclude in straw model)

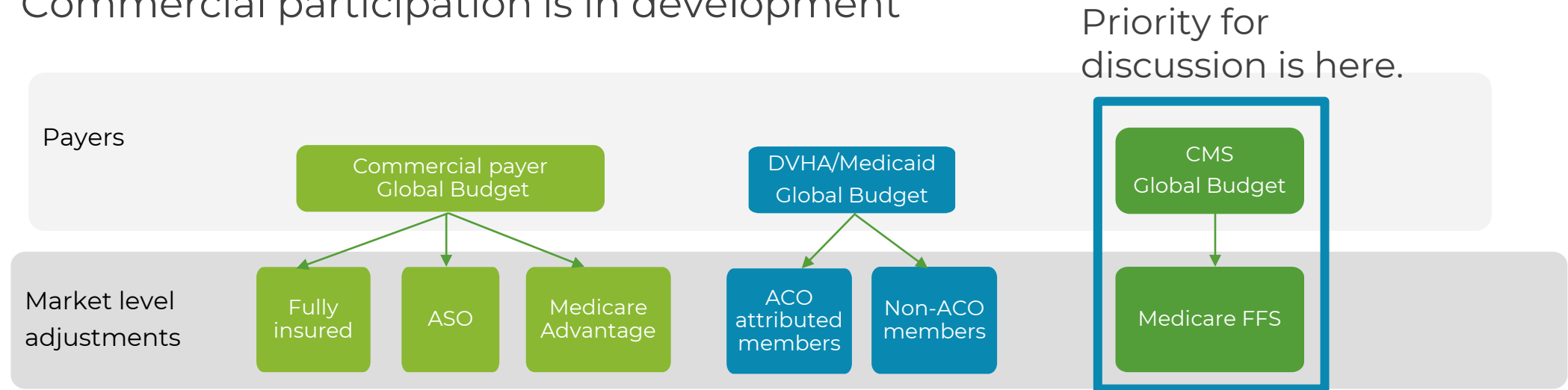
### 2. Other operating revenue (exclude from straw model)

- Disproportionate Share Payments
- Graduate Medical Education
- Other reform payments
- Revenue streams billed under the pharmacy benefit (e.g., retail pharmacy)
- Other non-Net Patient Revenue

All-payer total operating revenue	Other operating revenue (excluded)	Percent of operating revenue excluded from the model
\$3,457 M	\$439 M	13%

# Global budget payment determinations

- Global budgets will be calculated for each payer with market-level adjustments
- Methodologies will be aligned as much as possible across different payers
- Commercial participation is in development



# Straw model maximizes participation to show **potential** impact

Net Patient Revenue Breakdown	2022 Estimates	Proportion of Total Net Payer Revenue and Fixed Prospective Payments
<b>Total Net Payer Revenue &amp; Fixed Prospective Payment</b>	<b>\$2,964,685,921</b>	<b>100%</b>
Physician revenue	\$473,387,653	16%
Other payer exclusions*	\$232,595,943	8%
Patient portion	\$285,045,137	10%
<b>Global Payment Revenue</b>	<b>\$1,973,657,189</b>	<b>67%</b>
<b>Medicare FFP</b>	<b>\$770,799,102</b>	<b>26%</b>
Medicaid - FFP	\$102,349,994	3%
Medicaid- GB	\$133,277,144	4%
Commercial - Potential	\$1,006,129,143	34%

\*Other payer exclusions: revenue from workers comp, uninsured and self-pay, Non-VT Medicaid, uncategorized amounts in Adaptive financial reports.

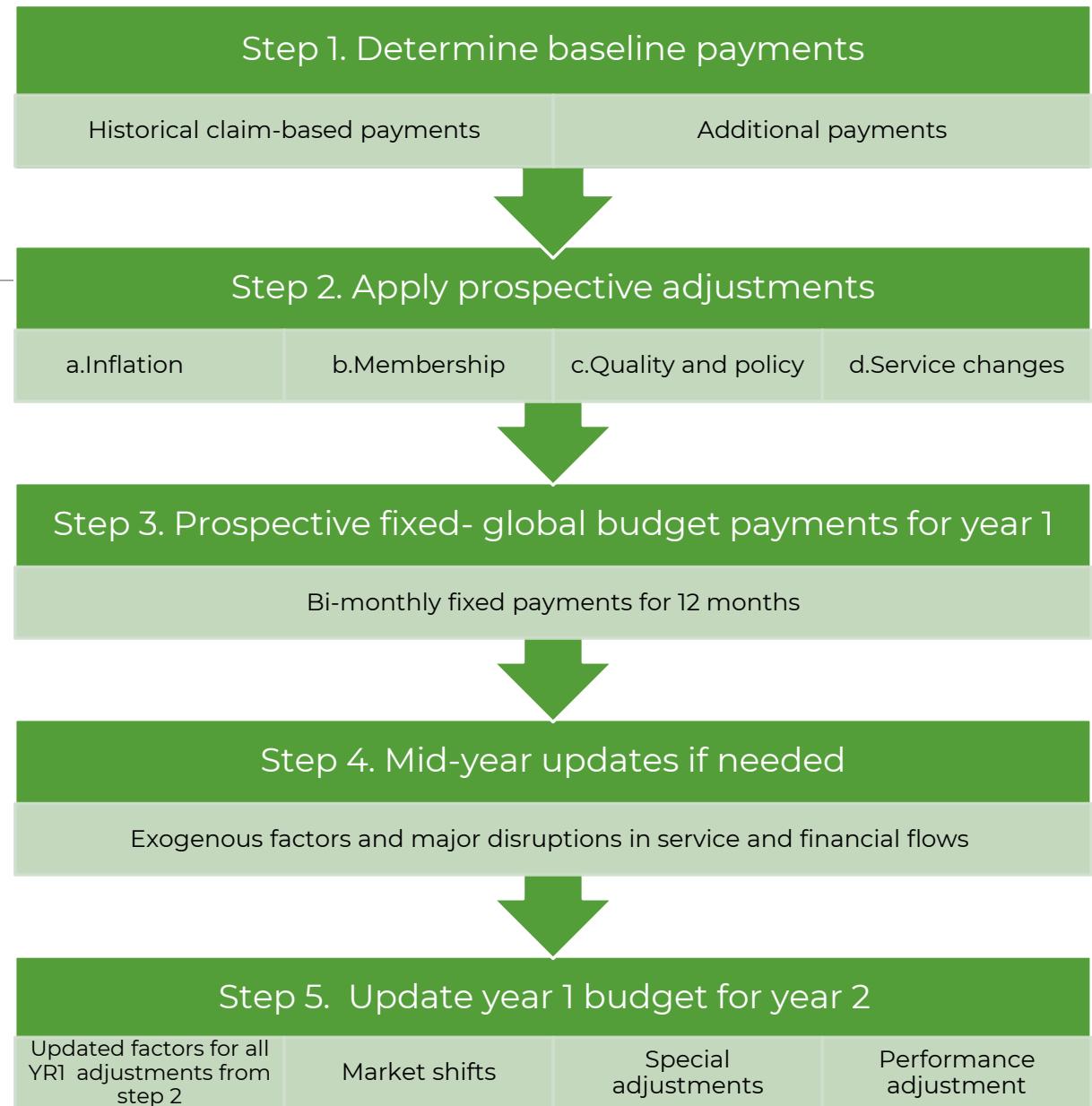


# Global budget payment calculations

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# Medicare FFS global payment straw model

- Straw model describes main concepts in each step in global budget payment
- Many details are in progress
- Commercial payers may align in most steps but will have their unique considerations



# Step 1: Determine baseline payments

Include all CMS payments to Vermont hospitals for hospital inpatient and outpatient services

- Excludes Part D payments (retail pharmacy benefits administered by Part D plans)
- Excludes beneficiary co-pays / coinsurance
- Excludes payments made outside of claims

CMS Medicare FFS Payment Types			
Medicare FFS claim types	CMS claim payments for Part A and B	Vermont non-claim-based payments	Payments made outside of patient claims
<ul style="list-style-type: none"> <li>• <b>Included</b></li> <li>• Part A (inpatient)</li> <li>• Part B (outpatient)</li> <li>• <b>Excluded</b></li> <li>• Part D (drugs)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Included</b></li> <li>• DRG, APC and RVU payments</li> <li>• CMS quality adjustments</li> <li>• Indirect Medical Education (IME)</li> <li>• Disproportionate Share Hospital (DSH)</li> <li>• Uncompensated Care (UCC)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Included</b></li> <li>• All-inclusive per beneficiary payments (AIPBP)</li> <li>• Advance Shared Savings (Blueprint PCMH, CHT, SASH funding)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Excluded</b></li> <li>• Bad debt (BD)</li> <li>• Organ acquisition (OA)</li> <li>• Direct graduate medical education (DGME)</li> <li>• Nurse and allied health education (NAHE)</li> </ul>

\*FFY=Federal/Hospital fiscal year

# Step 1: Operational calendar accommodates reporting timelines

Expected start date for the model: CY 2026

Hospital budget determinations: September 2025 (Claim-based calculations will have 3-month run-out time, calculations can be made in September-October 2025.)

Baseline data: Average payment years FY2023 and FY2024

Data inputs: Medicare FFS claims, Medicare cost reports, Medicare Updates (IPPS regulations), hospital service line plans

Calendar year	2023				2024				2025				2026				2027							
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
<b>YEAR 1</b>																								
YR 1 Baseline period	FY2023 & FY2024 data																							
Claims available with 90-day run-out (May)											O													
Cost report due date (Feb)											O													
YR1 payment rates determination (Sep)													X											
IPPS regs finalized (Aug)													O											
YR1 Prospective budget payments															CY 2026									

# Step 1: Determine baseline payments

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## Baseline:

- Average the last two or three years of payments  
CY 2026 payments will use FY2023 and FY2024

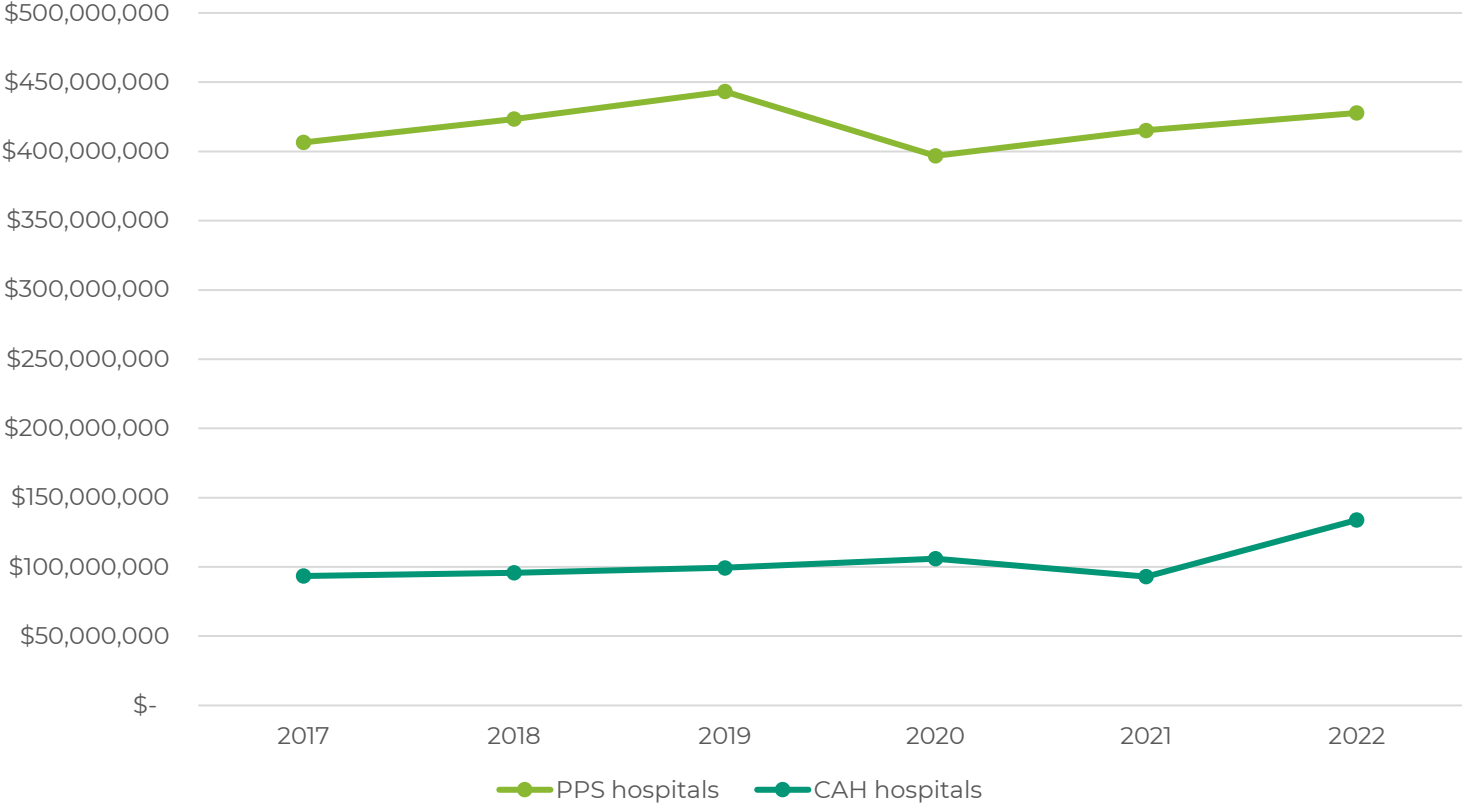
## Sub-steps:

1. Remove quality payments from total Medicare FFS payments; they will be added back for each year
2. Price level past years using Medicare IPPS market basket
3. Average two years, with a higher weight for recent year
4. Apply policy changes, e.g., UVM designation changed to sole community hospital in FY2024, which increased its Medicare outpatient payments by 7%

## Questions for TAG:

1. Should we include 3 years; FY2022, FY2023, and FY2024?
2. If yes, what should the weight distribution be?

# Medicare FFS Net Patient Revenue with Settlement: Vermont Hospital Total by Hospital Type



Annual Rate of Change	PPS hospitals	CAH hospitals	State Total
2017 to 2018	4%	2%	4%
2018 to 2019	5%	4%	5%
2019 to 2020	-10%	7%	-7%
2020 to 2021	5%	-12%	1%
2021 to 2022	3%	44%	11%



# Step 2: Apply prospective adjustments

## a. Inflation

- CMS market basket
- High-cost drugs inflation factor

## b. Membership

- Beneficiary changes
- Adjusted for age/gender/ESRD
- Proportional adjustments based on hospital's share in health service areas

## c. Quality and policy

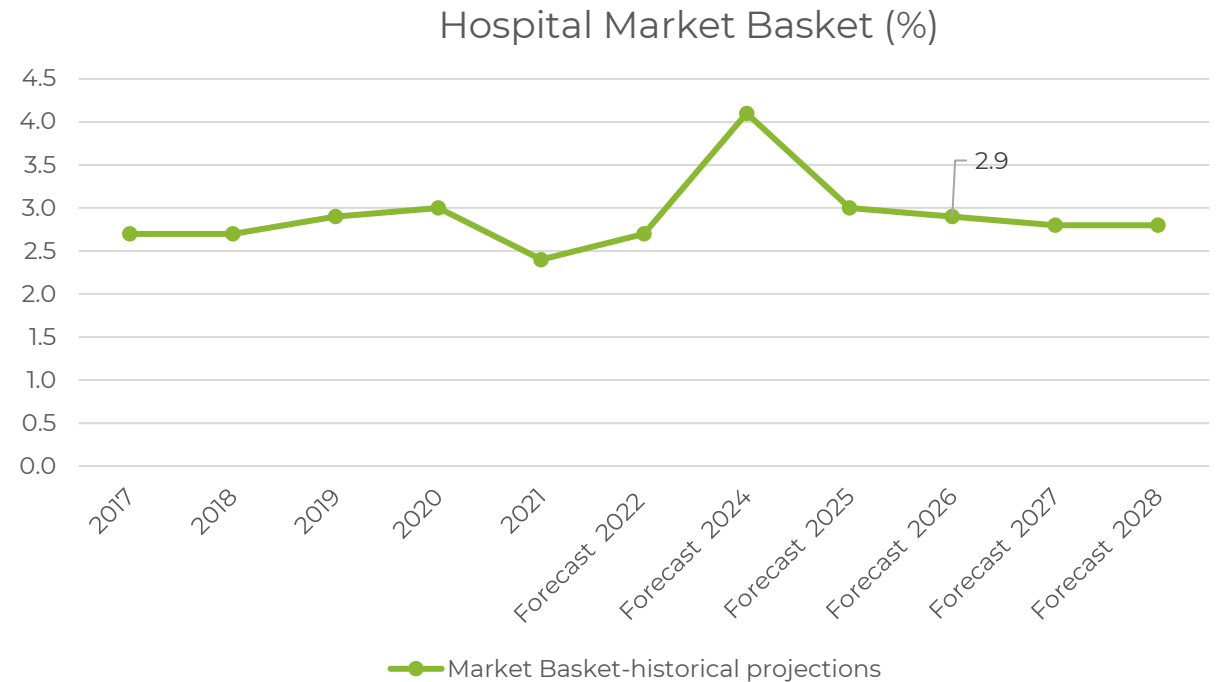
- Current CMS quality program scores and rules
- Policy updates, wage index, low volume adjustment, etc.
- Health equity and infrastructure investment

## d. Service line changes

- New service lines or closed services
- Threshold for impact (e.g., \$ or % revenue)
- Payment adjustment considerations

# Step 2a: Inflation adjustment

- **CMS Hospital Market Basket**
  - updates inpatient hospital operating, outpatient PPS payments for Medicare FFS
- **Critical Access Hospitals (CAH) adjustments may be different**



Source: <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/medicareprogramratesstats/marketbasketdata>. Latest update: reflects the 2022Q4 forecast with historical data through 2022Q3

## Step 2. Apply prospective adjustments

Inflation

Membership

Quality and  
policyService line  
changes



# Step 2a: Inflation adjustment for drug cost increases

- Maryland earmarks a portion of its inflation allowance to help fund increases in outpatient oncology and infusion drugs.
  - Maryland collects actual utilization data for specified drug list to allocate earmarked revenue across hospitals.
  - For rate year 2020, 0.19% of the total inflation allowance was allocated to high-cost outpatient oncology and infusion drugs (the inflation allowed was 2.96%).
  - For 2019, 0.2% was earmarked.
- Based on initial VHCURES analysis chemotherapeutic drug trend (*other infusion drugs are missing*) is inconsistent over the years but constitutes a small portion of hospital net patient revenue.

	2017 to 2018	2018 to 2019	2019 to 2020	2020 to 2021
Hospital payment growth- all-payer allowed amounts for VT residents	-14%	-3%	-6%	14%
Payments for chemotherapeutic agents	-7%	9%	24%	-7%
Payments for chemotherapeutic agents as % of total payment	3%	4%	5%	4%

# Step 2a: Inflation adjustment for drug cost increases

Six hospitals have significant revenue from Chemotherapy agents (more than 1% of all payer net patient revenue).

Hospital name	\$ Estimate of OP Chemo drug revenue	Proportion of revenue in OP Chemo Drugs in 2021	Annual rate of growth			
			2018	2019	2020	2021
Central Vermont	\$6,105,824	7%	-4%	22%	66%	-13%
Southwestern	\$3,487,965	7%	0%	-55%	120%	-24%
Brattleboro	\$1,920,297	6%	43%	23%	-1%	-5%
Rutland	\$7,350,110	6%	24%	47%	6%	-17%
UVMHC	\$22,419,888	5%	-20%	12%	13%	2%
Copley	\$1,049,151	2%	-6%	22%	17%	11%
Mt. Ascutney	\$116,361	1%	438%	-67%	23%	-51%
Gifford	\$160,386	1%	-23%	-20%	-10%	4%

**Questions for TAG:**  
Should we make a routine drug inflationary adjustment given the trends and small proportions of revenue?

# Step 2b: Membership changes

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1. Calculate Medicare FFS beneficiary growth trend by hospital service area
2. Apply age, gender, ESRD weights to factor demographic changes
3. Calculate the hospital's proportion of payments from each health service area
4. Apply calculated demographically adjusted growth using proportions for each hospital

## Step 2. Apply prospective adjustments

Inflation

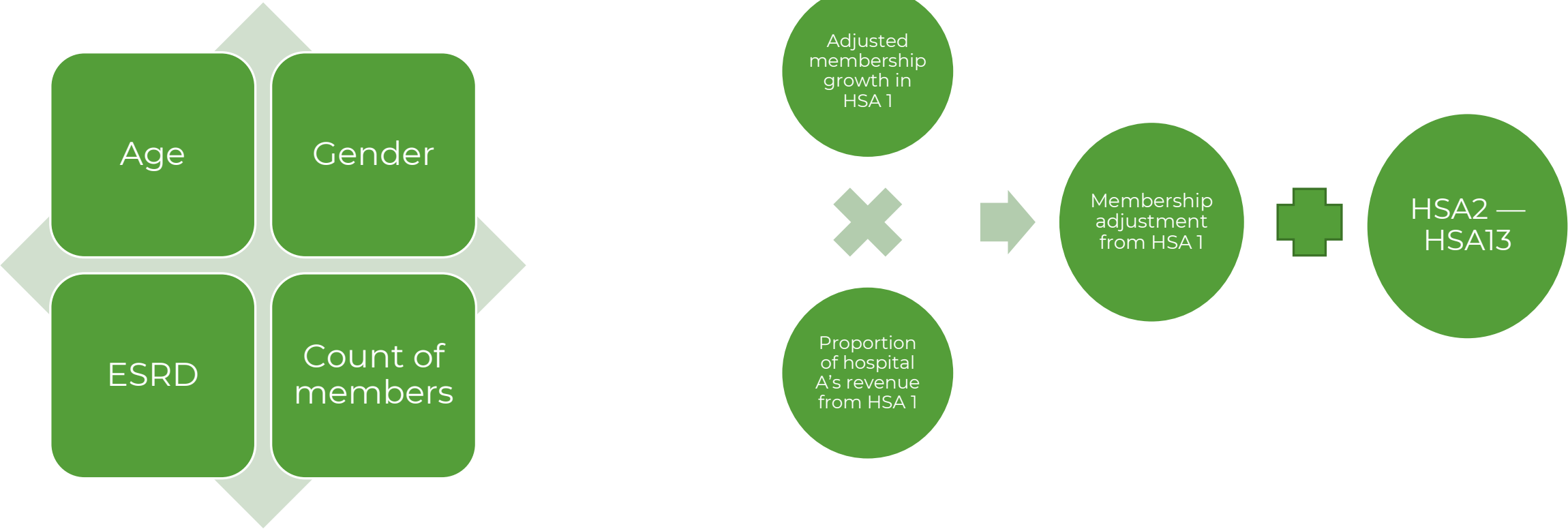
Membership

Quality and  
policy

Service line  
changes

# Step 2b. Membership change adjustment

Adjusted membership growth



# Step 2b: Membership changes-

Medicare FFS membership has declined sharply in the last two years across all HSAs, corresponding with increases in Medicare Advantage enrollment.

Annual Rate of Change in Medicare FFS Beneficiaries					
HSAs	2017 to 2018	2018 to 2019	2019 to 2020	2020 to 2021	2021 to 2022
Barre	2.5%	1.5%	1.4%	<b>-3.0%</b>	<b>-6.3%</b>
Bennington	1.8%	0.0%	0.2%	<b>-5.1%</b>	<b>-6.9%</b>
Brattleboro	2.7%	1.0%	0.5%	<b>-3.2%</b>	<b>-5.9%</b>
Burlington	3.1%	1.4%	0.6%	<b>-7.0%</b>	<b>-6.4%</b>
Middlebury	2.3%	1.7%	0.7%	<b>-3.7%</b>	<b>-8.3%</b>
Morrisville	1.6%	0.4%	1.1%	<b>-4.3%</b>	<b>-8.9%</b>
Newport	2.0%	-0.7%	1.1%	<b>-5.4%</b>	<b>-9.1%</b>
Randolph	1.0%	1.5%	0.7%	<b>-4.2%</b>	<b>-7.6%</b>
Rutland	1.1%	-0.2%	1.1%	<b>-5.3%</b>	<b>-9.4%</b>
Springfield	1.0%	-0.8%	-0.7%	<b>-5.4%</b>	<b>-8.0%</b>
St Albans	2.2%	0.2%	-0.2%	<b>-4.0%</b>	<b>-6.7%</b>
St Johnsbury	1.5%	0.7%	-1.0%	<b>-5.1%</b>	<b>-10.0%</b>
White River Jct	2.5%	0.6%	2.2%	<b>-3.6%</b>	<b>-5.5%</b>
<b>State Total</b>	<b>2.1%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>-4.9%</b>	<b>-7.3%</b>

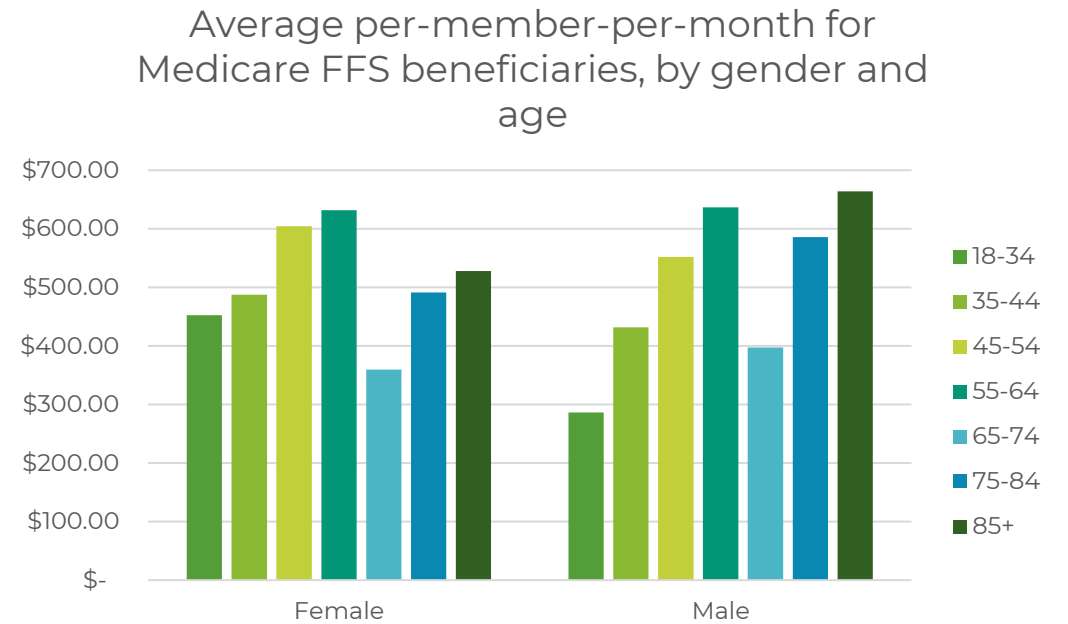
# Step 2b: Membership Change - Aging

Medicare FFS membership has declined across all ages, with the lowest decline rate in 75-84 age break out.

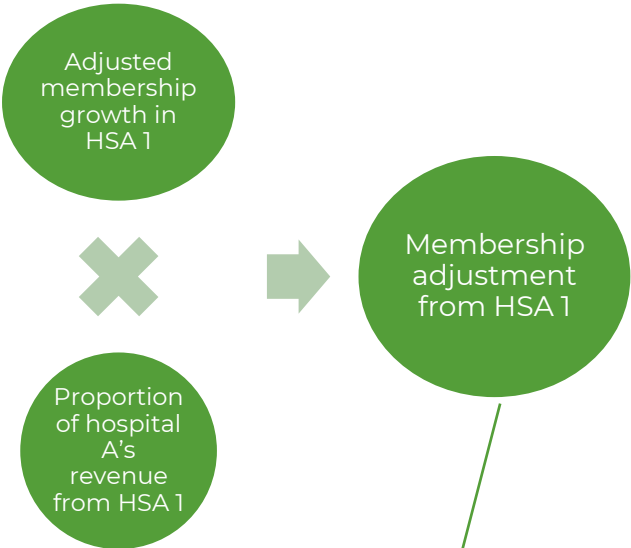
Age, gender, and ESRD are demographic factors to adjust for “case-mix” in global payments due to changes in enrollment.

Annual Rate of Change in Medicare FFS Beneficiaries by Age Group						
HSA	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	20-22 two-year trend
0-64	-2.3%	-5.1%	-4.7%	-7.2%	-6.6%	-13%
65-74	2.6%	1.5%	1.0%	-4.1%	-9.4%	-13%
75-84	4.9%	2.8%	3.1%	-3.6%	-2.9%	-6%
85+	-0.7%	-1.2%	0.9%	-6.3%	-6.5%	-12%

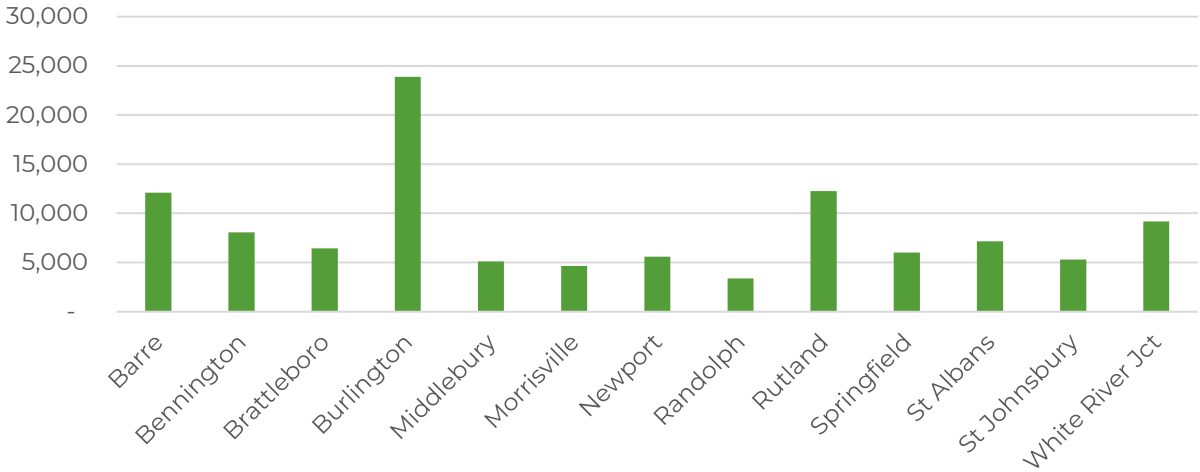
Age Distribution of Medicare FFS Beneficiaries						
Age Group	2017	2018	2019	2020	2021	2022
0-64	18%	17%	17%	16%	15%	15%
65-74	49%	49%	49%	49%	50%	49%
75-84	23%	24%	24%	25%	25%	26%
85+	10%	10%	10%	10%	10%	10%



# Step 2b: Weighted membership growth



Number of Medicare FFS beneficiaries, 2022



Example	Barre	Bennington	Brattleboro	Burlington	Middlebury	Morrisville	Newport	Randolph	Rutland	St Albans	St Johnsbury	White River Jct	Total
Membership changes	-6%	-7%	-6%	-6%	-8%	-9%	-9%	-8%	-9%	-7%	-10%	-6%	
Central Vermont revenue distribution	87%	0%	0%	1%	0%	4%	0%	4%	0%	0%	2%	1%	
Central Vermont membership change	-5.4%	0.0%	0.0%	0.0%	0.0%	-0.4%	0.0%	-0.3%	0.0%	0.0%	-0.2%	-0.1%	-6.5%

# Step 2b: Membership HSA weights

**Question for TAG:**  
Should we consider choosing 1-3 HSAs with the highest proportion for all hospitals, except for UVMMC?

Using sum of allowed amounts	Hospital's Medicare Revenue Distribution by Hospital Service Area													
Hospital	Barre	Bennington	Brattleboro	Burlington	Middlebury	Morrisville	Newport	Randolph	Rutland	Springfield	St. Albans	St. Johnsbury	White River Jct	Grand Total
Central Vermont	87%	0%	0%	1%	0%	4%	0%	4%	0%	0%	0%	2%	1%	100%
UVMMC	8%	0%	0%	62%	6%	6%	1%	0%	7%	0%	9%	1%	0%	100%
Gifford	13%	0%	0%	0%	0%	0%	0%	74%	1%	0%	0%	0%	12%	100%
Copley	5%	0%	0%	17%	0%	73%	3%	0%	0%	0%	2%	0%	0%	100%
Northeastern	1%	0%	0%	0%	0%	1%	7%	0%	0%	0%	0%	88%	2%	100%
Rutland	0%	3%	0%	0%	2%	0%	0%	0%	91%	2%	0%	0%	0%	100%
North Country	0%	0%	0%	0%	0%	1%	98%	0%	0%	0%	0%	1%	0%	100%
Porter	0%	0%	0%	4%	82%	0%	0%	1%	13%	0%	0%	0%	0%	100%
Mt. Ascutney	0%	0%	0%	0%	0%	0%	0%	1%	0%	21%	0%	0%	77%	100%
Northwestern	0%	0%	0%	12%	0%	0%	0%	0%	0%	0%	88%	0%	0%	100%
Southwestern	0%	97%	1%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	100%
Brattleboro	0%	5%	91%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	100%
Grace Cottage	0%	5%	77%	0%	0%	0%	0%	0%	0%	18%	0%	0%	0%	100%



# Step 2c: Quality and Policy

- CMS quality programs
- CMS policy adjustments
- Vermont health equity and infrastructure payments
  - Blueprint payments (PCMH and CHT)
  - SASH payments
  - Potential for other payments for improving primary care

VT hospitals improved over the years in CMS quality programs. Revenue impact is less than one percent of total hospital revenues based on estimated amounts.

Hospital	Estimated CMS quality adjustments (VBP, readmission) as a % of total Medicare net patient revenue	
	FY 2022	FY2024
Central Vermont	-0.9%	0.5%
UVMMC	-0.2%	-0.6%
Rutland	-0.3%	-0.1%
Brattleboro	-0.1%	0.9%
Southwestern	-1.0%	-0.1%
Northwestern	-0.5%	0.3%

Step 2. Apply prospective adjustments			
Inflation	Membership	Quality and policy	Service line changes

# Step 2c. Adjustments for social risk – health equity

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Goal: Provide additional funding to invest in reducing health disparities

Determine a set amount at the state level and distribute the funding based on social risk scores of the patients for whom hospitals are providing care.

Measure selection: CMMI uses "Area Deprivation Index", which combines many factors.

**Prior TAG comments:** Members had previously expressed support for the concept of adjustment for social risk but acknowledged it may be premature to incorporate a budget adjustment at this time due to limitations in existing research and tools.

# Step 2c. Example of social risk measures

SDOH DOMAIN(S)	Dimension(s)	Area Deprivation Index	Social Vulnerability Index (SVI)
ECONOMIC WELLBEING	Income & poverty levels	✓	✓
ECONOMIC WELLBEING	Educational attainment	✓	✓
ECONOMIC WELLBEING	Employment & occupation	✓	✓
ECONOMIC WELLBEING	Family & household composition	✓	✓
ECONOMIC WELLBEING	Housing availability & affordability	✓	✓
ECONOMIC WELLBEING	Cost of living & other	✓	✓
ECONOMIC WELLBEING	Geographic or social mobility		
ECONOMIC WELLBEING	Public assistance rate		
EDUCATION ACCESS & QUALITY	Education access		
EDUCATION ACCESS & QUALITY	Teacher Workforce		
EDUCATION ACCESS & QUALITY	Academic achievement		
BUILT ENVIRONMENT	Housing type/safety/quality	✓	✓
BUILT ENVIRONMENT	Transportation	✓	✓
BUILT ENVIRONMENT	Food access & quality		
BUILT ENVIRONMENT	Physical activity access		
BUILT ENVIRONMENT	Community resources & services		
PHYSICAL & CHEMICAL ENVIRONMENT	Water pollution, air pollution		
PHYSICAL & CHEMICAL ENVIRONMENT	Toxic waste sites		
PHYSICAL & CHEMICAL ENVIRONMENT	Heat, climate change		
SOCIAL & COMMUNITY CONTEXT	Social capital, cohesion & support		
SOCIAL & COMMUNITY CONTEXT	Community empowerment		
SOCIAL & COMMUNITY CONTEXT	Attitudes & social norms		
SOCIAL & COMMUNITY CONTEXT	Safety		
SOCIAL & COMMUNITY CONTEXT	Other social & community context		
HEALTHCARE ACCESS & QUALITY	Health insurance		✓
HEALTHCARE ACCESS & QUALITY	Healthcare utilization		
HEALTHCARE ACCESS & QUALITY	Availability of healthcare centers		
HEALTHCARE ACCESS & QUALITY	Availability of providers		
SOCIAL DEMOGRAPHICS	Racial & ethnic composition		✓
SOCIAL DEMOGRAPHICS	Language		✓
SOCIAL DEMOGRAPHICS	Age distribution		✓
SOCIAL DEMOGRAPHICS	Sex distribution		
SOCIAL DEMOGRAPHICS	Disability status		✓
OPPRESSION & MARGINALIZATION	Racial residential segregation		
OPPRESSION & MARGINALIZATION	Place-based inequities		
OPPRESSION & MARGINALIZATION	Discriminatory policies & practices		
OPPRESSION & MARGINALIZATION	Cultural attitudes, stigma		

## Area based measures:

- 1. Area Deprivation Index (ADI):** The index was originally developed using data from the 1990 census, updated with 2020 data. Example use: CMMI payment adjustments.
- 2. Social Vulnerability Index (SVI):** The index is largely intended to assess needs before, during, and after an emergency event such as severe weather, floods, disease outbreaks, or chemical exposure. Example use is for the CDC to distribute emergency funds.

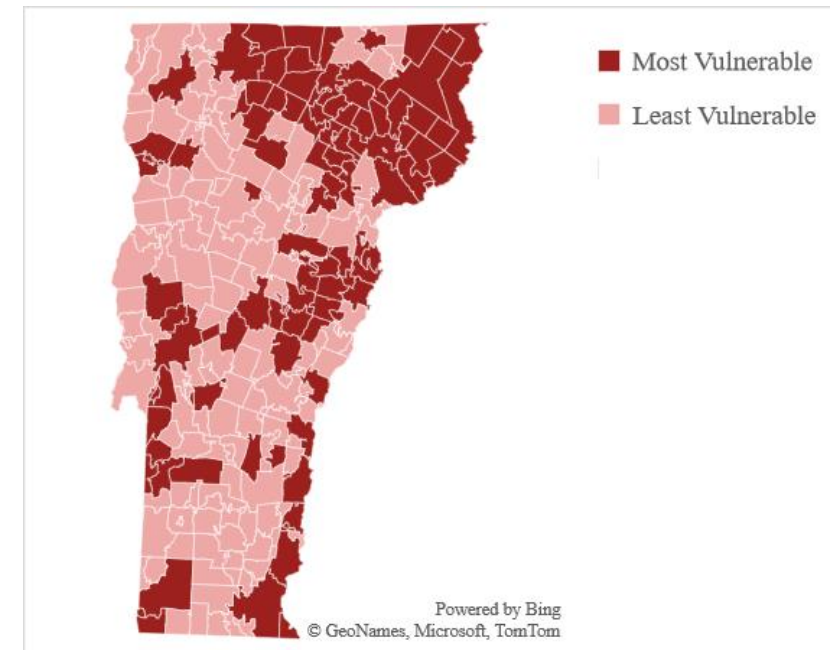
**Health-related social risk:** Medicare’s Inpatient Quality Reporting (IQR) program mandated reporting starts in 2024. Hospitals will be required to screen admitted patients for five adverse social conditions that negatively impact a person’s health or health care:

- food insecurity
- housing instability
- transportation needs
- utility difficulties
- interpersonal safety

# Step 2c. Preliminary analysis of Social Vulnerability Index - hospital patients

Median SVI score of patients receiving care from the hospital	Commercial	Medicaid	Medicare	All-Payer	Total Patients
Brattleboro	0.81	0.81	0.81	0.81	15,009
Springfield	0.81	0.81	0.81	0.81	13,653
North Country	0.75	0.75	0.75	0.75	15,145
Northeastern	0.74	0.74	0.74	0.74	16,973
Northwestern	0.62	0.62	0.62	0.62	25,409
Copley	0.56	0.71	0.59	0.60	15,305
Rutland	0.58	0.65	0.58	0.58	36,974
Gifford	0.54	0.54	0.54	0.54	11,570
<b>All hospitals</b>	<b>0.46</b>	<b>0.62</b>	<b>0.53</b>	<b>0.52</b>	<b>349,063</b>
Southwestern	0.47	0.76	0.47	0.48	21,564
Porter	0.46	0.46	0.46	0.46	17,057
Grace Cottage	0.44	0.38	0.44	0.44	4,052
Central Vermont	0.42	0.47	0.42	0.42	37,753
UVMCC	0.38	0.46	0.40	0.40	111,701
Mt. Ascutney	0.18	0.69	0.28	0.24	6,898

Note: SVI score ranges from 1-10 (10 is most vulnerable). Table is sorted by all-payer median SVI score.



Note: “Least Vulnerable” ZIP codes map to deciles 1 through 5 of the overall SVI index. “Most Vulnerable” ZIP codes map to deciles 6 through 10 of the overall SVI index

# Step 2d: Service line changes

Prospective adjustments for service line methodology in development.

## TAG discussion questions:

1. How do we define service line, inpatient and outpatient specialties?
2. What services would be qualified for adjustment?
  - Significant impact: thresholds for \$ value or % revenue?
  - Temporary vs. permanent/planned: timing of change and adjustment?
  - New service lines: access related vs. increasing market share?
3. How do we calculate the global payment adjustment?
  - FFS equivalents?
  - Variable cost?
4. What would be the process for identifying service line changes?
5. How would we reconcile planned vs. actual utilization?

## 3 Scenarios:

1. Planned service line changes to increase market share (Step 5 adjustment)
2. Planned service line changes to better meet community needs
3. Temporary service line changes (e.g., due to provider retirement)

Step 2. Apply prospective adjustments

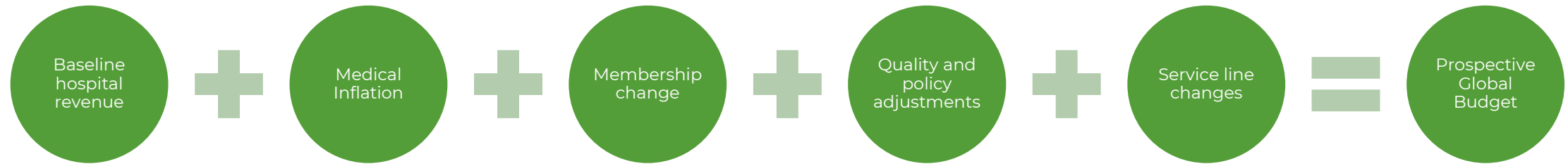
Inflation

Membership

Quality and  
policy

Service line  
changes

# Budget Development Summary



**Implications:** Hospital is at 100% risk for utilization increases beyond historical levels, adjusted for membership changes and service line changes. TBD: risk corridors and re-baselines

## Incentives:

- Short-term example: Manage utilization by, e.g., focusing on reducing potentially avoidable admissions and ED visits
- Long-term example: Transform services provided by hospitals to deliver patient-centered high-quality care

### Questions for TAG:

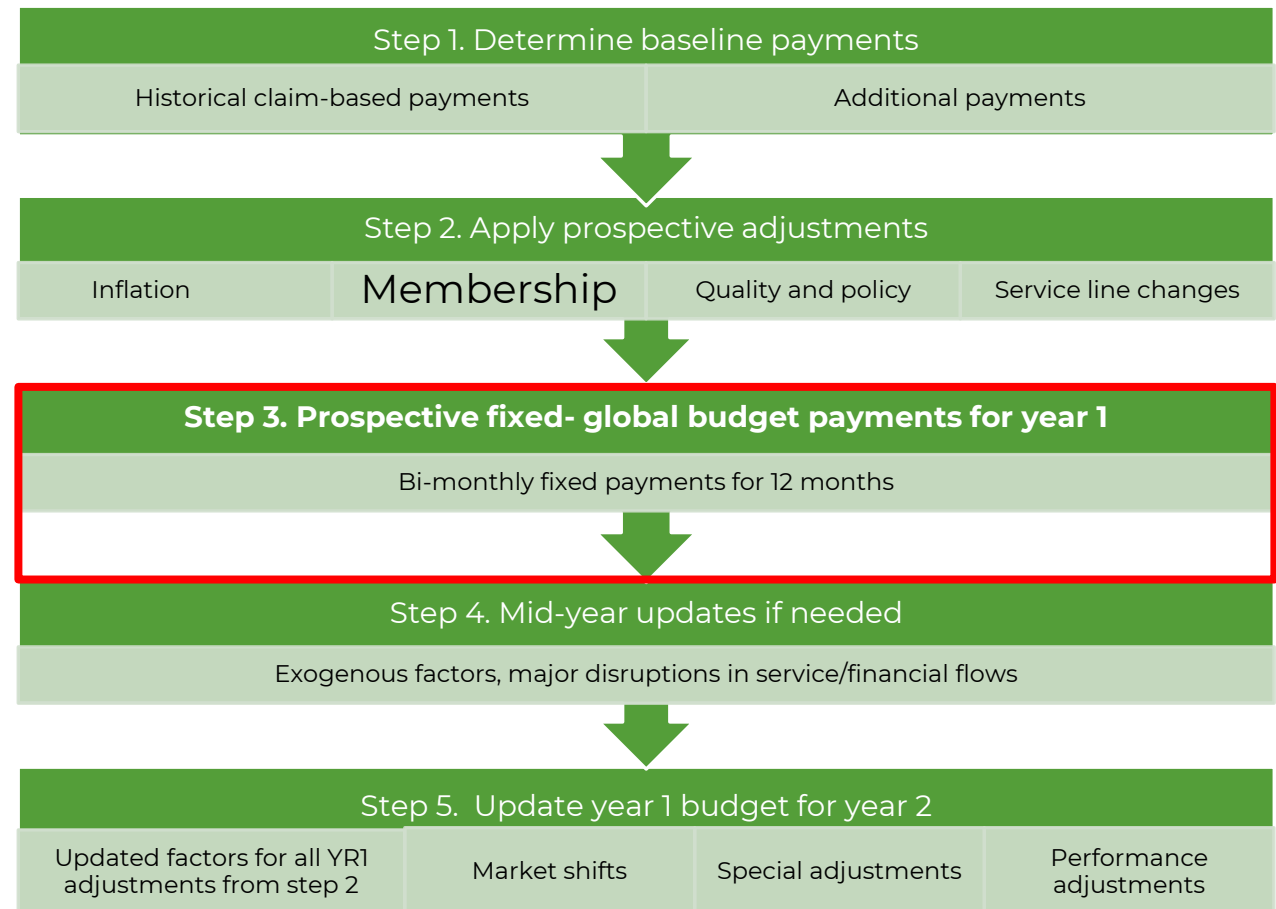
Is 100% risk for utilization increases appropriate? Do we want to implement a risk corridor or other methods to mitigate this risk?

What should be the risk-corridor for additional adjustments or re-baselining?

- Operating margin exceeding X%, or below X%
- Variance in utilization under/over X%

# Step 3: Payment method

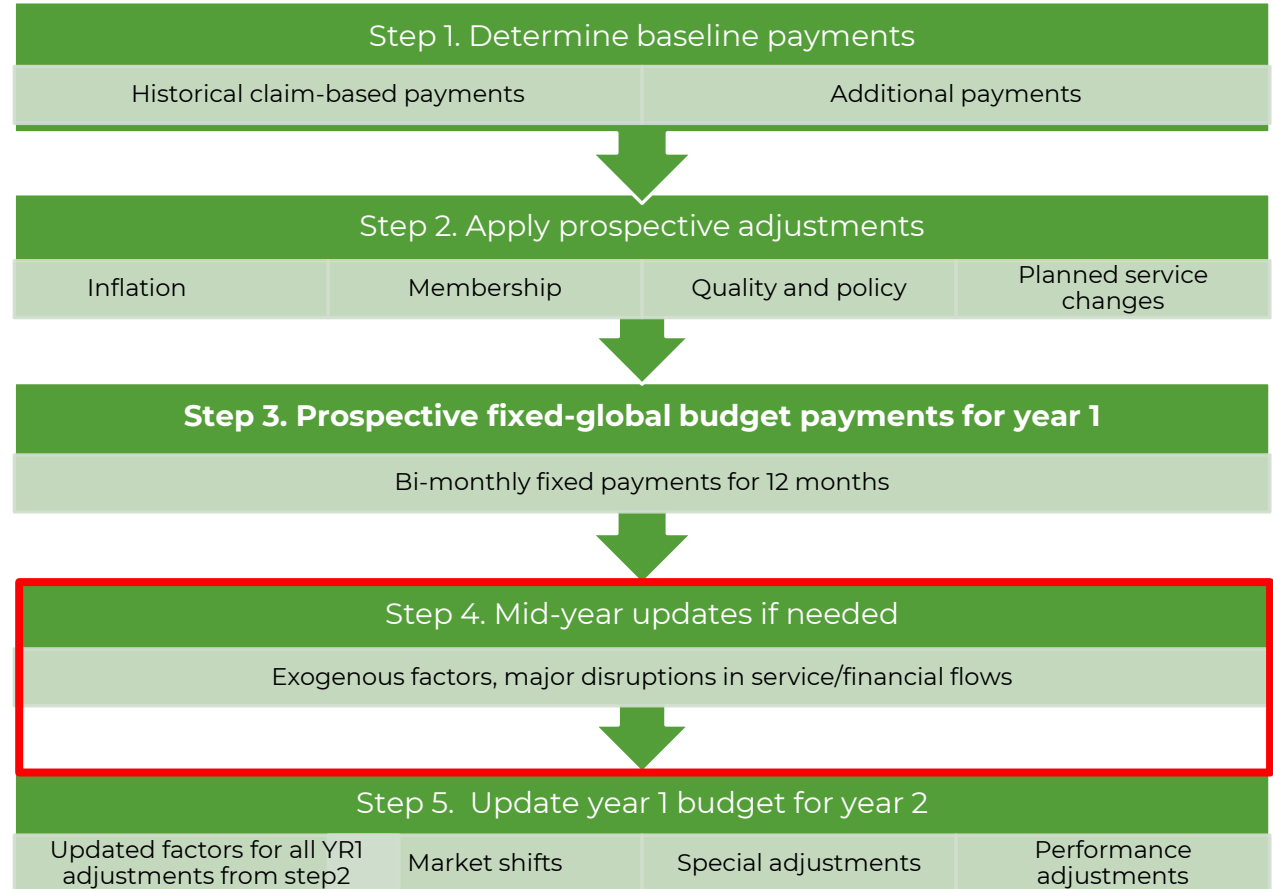
- CMS will stop claim payments for included claims and issue fixed payments every 2 weeks.
- Global payments: Year 1 prospective global budget payment/26



# Step 4: Mid-year updates

**Question for TAG:**  
Should we be more specific about adhoc adjustments or general language is sufficient?

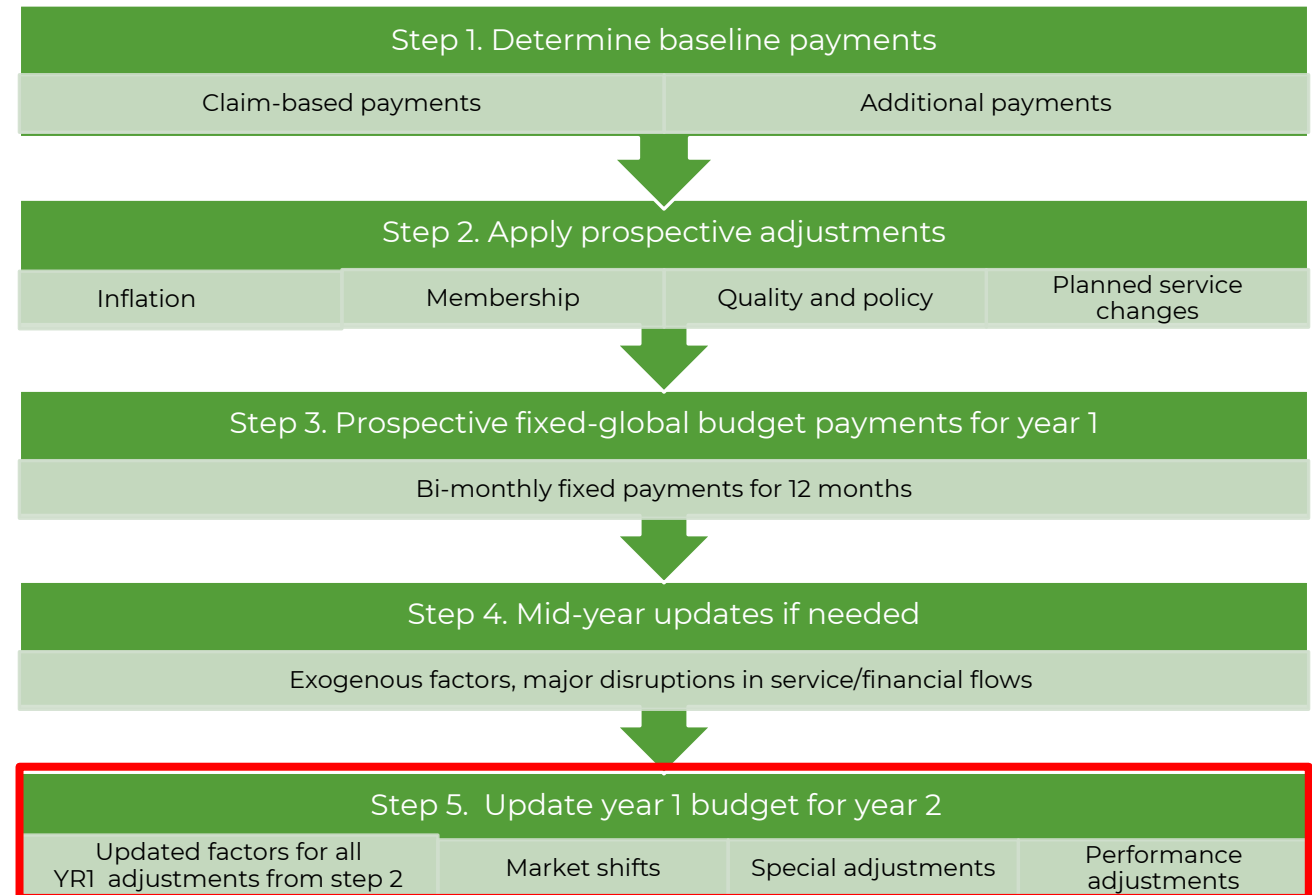
- Hospitals could request mid-year adjustments for certain conditions (e.g., exogenous factors, major disruptions in services, financial flows, etc.)
- Align timing of GMCB hospital budget process and global budget processes





# Step 5: Payment updates in future years

1. Inflation, membership and planned service changes will be implemented using similar methods from year 1
2. Additional adjustments will be calculated starting year 2
  - Market shifts
  - Special adjustments
  - Performance adjustments



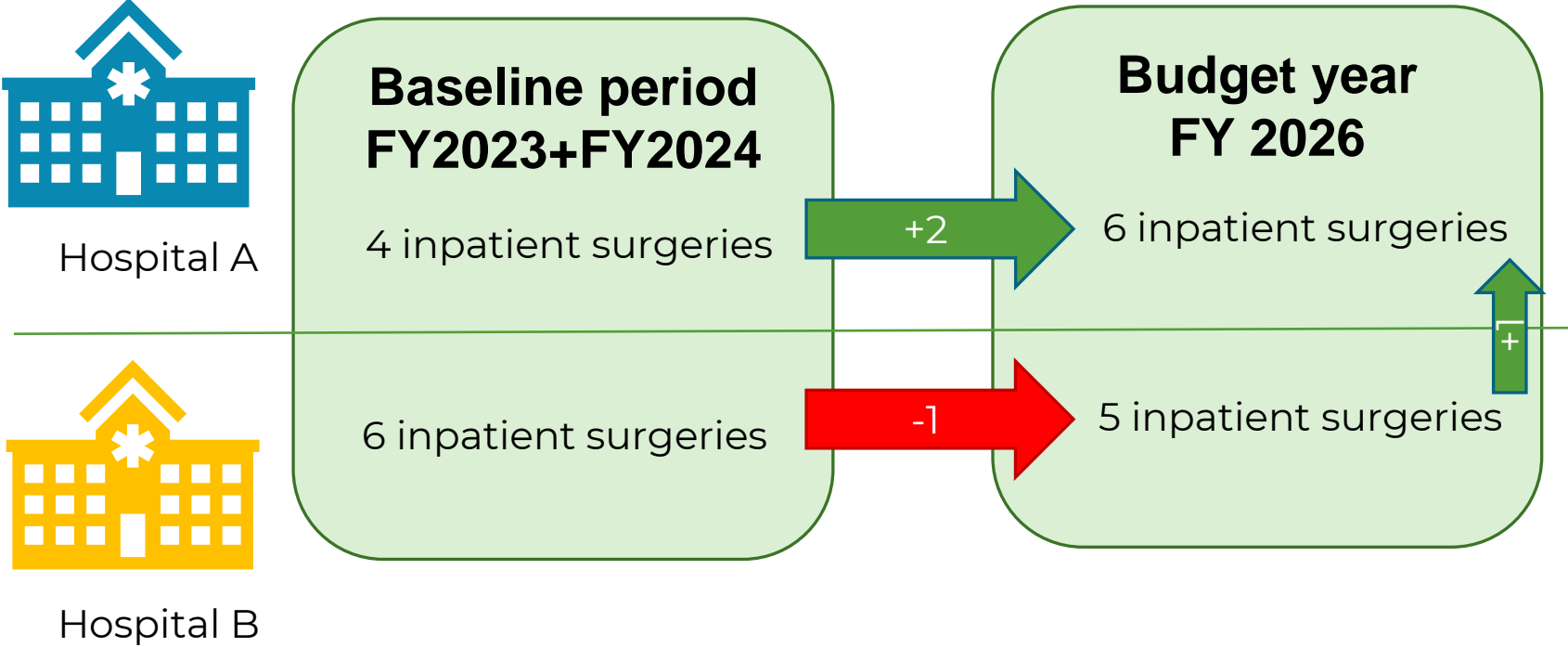
# Step 5: Calculation of year 2 prospective payment

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- a. Apply prospective adjustments (all Year 1 adjustments updated for one more year)
- b. Determine baseline: Year 1 prospective budget + volume adjustments compared to baseline at determined payment rate
  - Market shifts to / from other hospitals and other providers
- c. Special adjustments
  - Tertiary / quaternary services to actual utilization
  - Critical access hospital adjustments
- d. Performance adjustments in future cycles – examples could include...
  - Total cost adjustments in relation to the statewide savings target
  - Population health achievement bonus
  - Efficiency, financial health
  - Service access review (e.g., vacancies, service reductions, wait times, etc.)

# Step 5b. Assessing Market Shift

1. Determine the service lines with significant changes from baseline
2. Assess if utilization increased/decreased at other providers
3. Adjust prospective budget for the utilization shifted to other providers



# Step 5c. Special adjustments

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1. Tertiary care
2. Critical Access Hospital - TBD

# Step 5c. Tertiary care

- Working definition, more refinement needed for final specifications
- Selected tertiary service lines are the highest average weighted service lines (Table 1, bolded service lines)
- \*For hematology and neonatology service lines, highest DRG weights (Table 2) were selected

**Table 1. Tertiary care service lines**

Inpatient Service Lines	Average Weight
<b>Transplant Surgery</b>	<b>8.97</b>
<b>Ventilator Support</b>	<b>8.52</b>
<b>Cardiothoracic surgery</b>	<b>5.45</b>
<b>Hematology*</b>	<b>4.92</b>
<b>Burns and trauma</b>	<b>4.74</b>
<b>Neurological surgery</b>	<b>3.68</b>
<b>Invasive cardiology</b>	<b>3.48</b>
<b>Neonatology*</b>	<b>3.17</b>
Orthopedic surgery	2.82
Thoracic surgery	2.75
Vascular surgery	2.54

**Table 2. Selected DRGs for hematology and neonatology service lines**

MS-DRG	MS-DRG Description	FY 22 Weight
018	CHIMERIC ANTIGEN RECEPTOR (CAR) T-CELL IMMUNOTHERAPY	37.45
790	EXTREME IMMATURITY OR RESPIRATORY DISTRESS SYNDROME, NEONATE	5.67
791	PREMATURITY W MAJOR PROBLEMS	3.87
793	FULL TERM NEONATE W MAJOR PROBLEMS	3.97

Source: VHCURES, VT residents only, excludes some self-insured plans

# Step 5c. Tertiary care prevalence in VT and non-VT hospitals, allowed amounts, all payers

- Based on working definition, tertiary services constitute 10 percent (about \$55M) of all claim-allowed amounts for UVMHC.
- 16 percent of utilization for Vermont residents at Dartmouth is for tertiary care.
- Tertiary adjustment for global payments will reconcile the global payment made for tertiary care to the actual FFS amounts.

Hospital	2019 Tertiary	2020 Tertiary	2021 Tertiary	Change in percent of tertiary 2019 -2020	Change in percent of tertiary 2020 - 2021
UVMHC	10.8%	10.5%	10.1%	-0.4%	-0.3%
Dartmouth	15.9%	17.5%	16.3%	1.5%	-1.2%
Other Non-VT	10.4%	10.1%	10.2%	-0.2%	0.1%
Rutland	0.5%	0.6%	0.1%	0.1%	-0.5%
Northwestern	0.0%	0.5%	0.3%	0.5%	-0.1%
Southwestern	0.3%	0.6%	0.0%	0.3%	-0.6%
Northeastern	0.3%	0.2%	0.0%	-0.1%	-0.2%
North Country	1.1%	0.5%	0.3%	-0.6%	-0.2%
Brattleboro	0.5%	0.4%	0.0%	-0.1%	-0.4%
<b>Grand Total</b>	<b>9.1%</b>	<b>9.2%</b>	<b>8.8%</b>	<b>0.1%</b>	<b>-0.4%</b>

# 5d. Additional policy adjustments

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Performance adjustments in future cycles – examples could include:

- Total cost adjustments in relation to the statewide savings target
- Population health achievement bonus
- Efficiency, financial health
- Service access review (e.g., vacancies, service reductions, wait times, etc.)

# TAG Meeting 8: Rationale for TCOOC Accountability

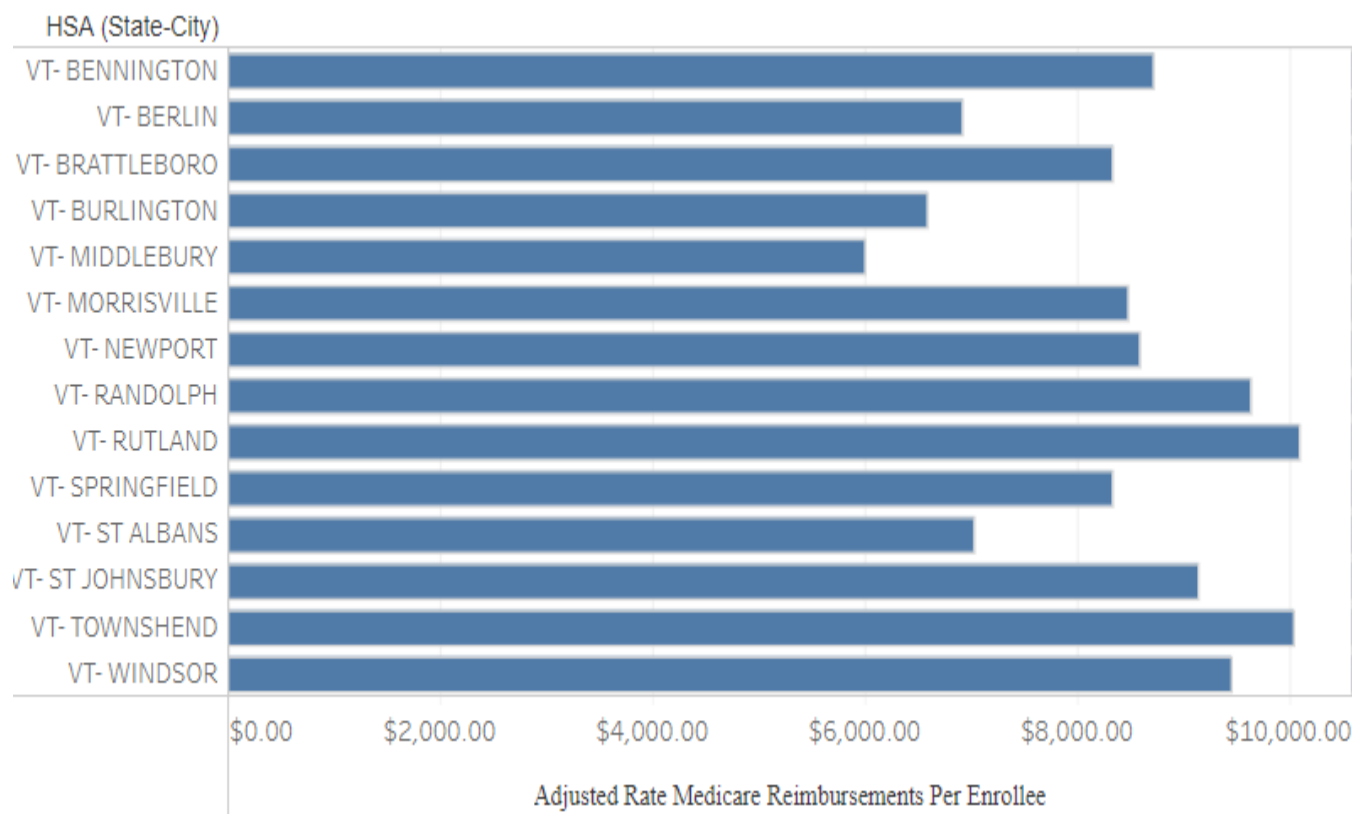


- Provides financial accountability for services outside of global budget payments, and protects against shifting hospital costs to community providers
  - Incentivizes improvements in population health
  - Can align incentives across provider types & payment models
  - Results in APM incentive payment & exclusions from MIPS
- Hospitals would be held accountable for costs they cannot fully control
  - Could add further complexity to the model



# 5d. Total Cost of Care Accountability

**Total Medicare Reimbursements per Enrollee, Parts A and B, by HAS, 2019**  
(Price, Age, Sex, and Race adjusted)



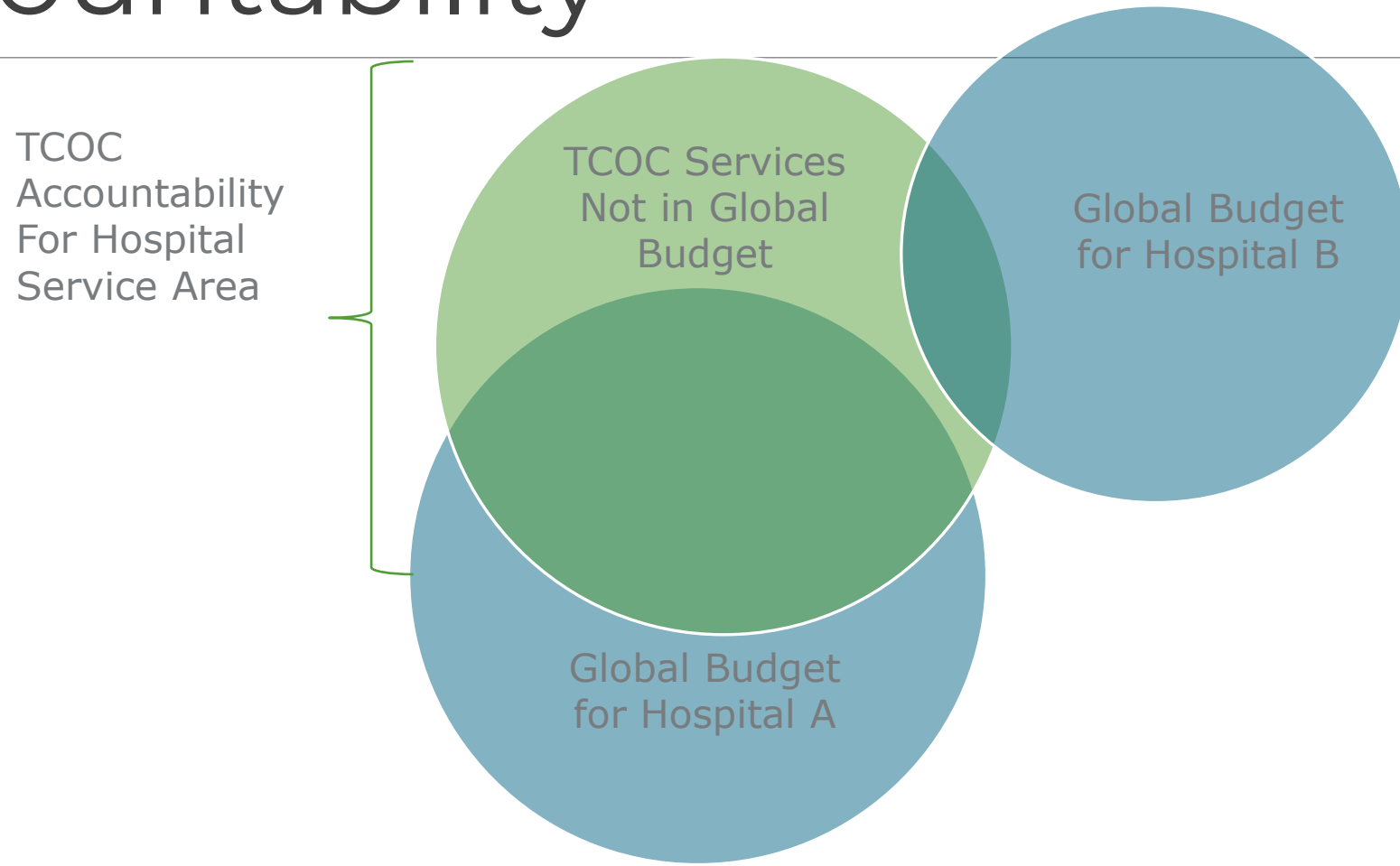
- State level accountability - Budget neutrality discussions with CMMI
- Hospital level accountability - Area-based total cost growth benchmarking

**Next steps:**

1. Align definition of TCOC with state-wide accountability. Part A and Part B services (currently does not include Part D which pays for retail pharmacy).
2. Determine geographies to attribute to hospitals. Hospital service areas (HSAs) or smaller geographies if a hospital does not have significant market share.

# Geographic definition of total cost accountability

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# 5d. Total Cost of Care Accountability

Questions to develop the methodology:

1. Geographic level assessment of rate of growth in total cost of care
2. Adjustments (demographic and other adjustments)
3. Implementation timeline

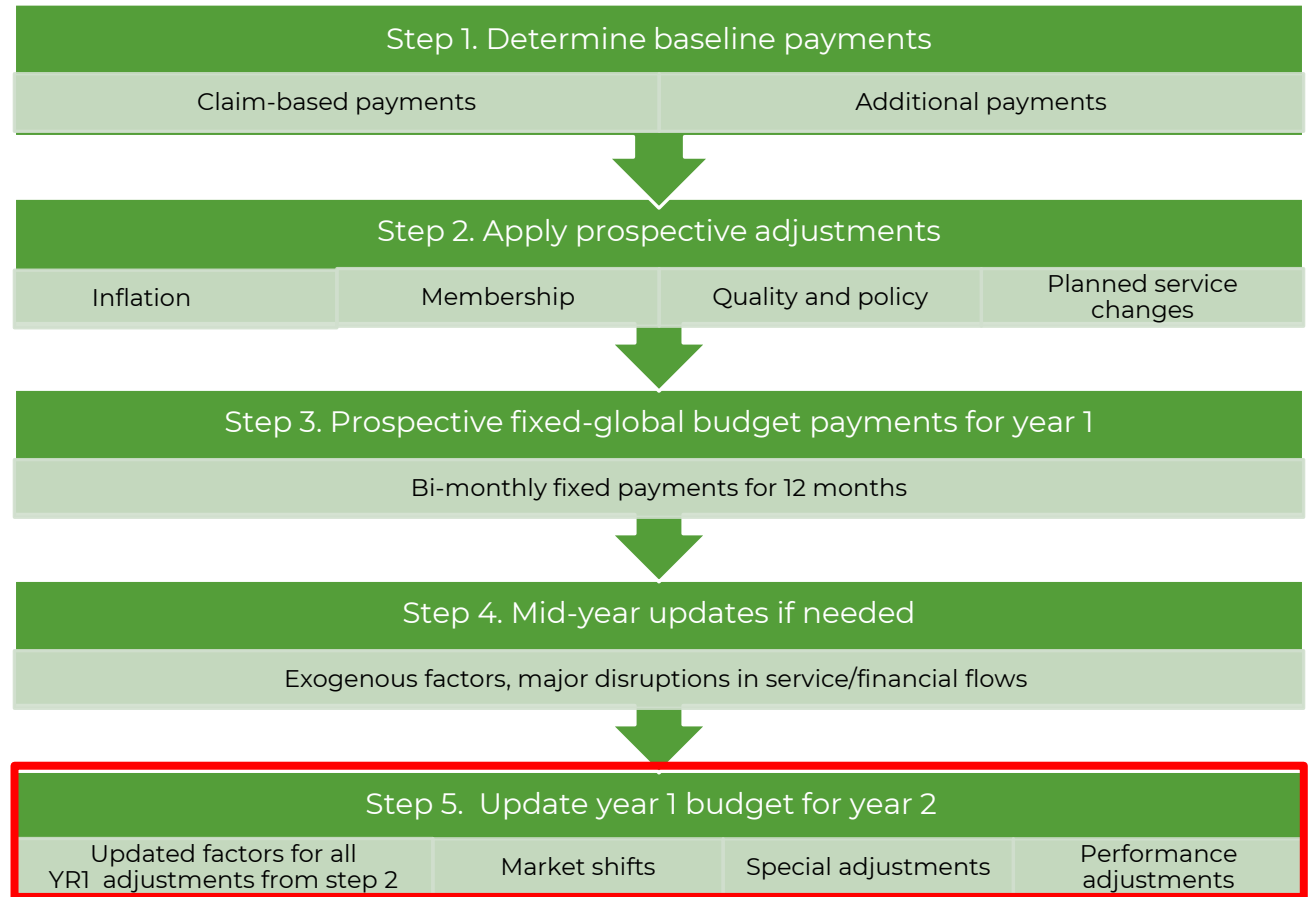
**Question for TAG:**  
Should we use HSAs for TCOC accountability?  
Should we build smaller geographies for smaller hospitals, e.g., Grace Cottage, Porter?

Proportion of Medicare Allowed Amounts by Hospital

HSA	Brattleboro	Central Vermont	Copley	Gifford	Grace Cottage	Mt. Ascutney	North Country	Northeastern	Northwestern	Porter	Rutland	Southwestern	UVMHC	Grand Total
Brattleboro	85%	0%	0%	0%	13%	0%	0%	0%	0%	0%	1%	1%	0%	100%
Bennington	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	85%	0%	100%
Springfield	10%	0%	0%	0%	10%	39%	0%	0%	0%	0%	38%	3%	0%	100%
Rutland	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	87%	0%	11%	100%
Burlington	0%	0%	5%	0%	0%	0%	0%	0%	3%	1%	0%	0%	91%	100%
White River Jct	0%	3%	0%	16%	0%	69%	0%	6%	0%	0%	3%	0%	3%	100%
Middlebury	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	7%	0%	43%	100%
Barre	0%	65%	3%	4%	0%	0%	0%	1%	0%	0%	0%	0%	26%	100%
Randolph	0%	11%	0%	82%	0%	1%	0%	0%	0%	1%	3%	0%	3%	100%
St. Albans	0%	0%	1%	0%	0%	0%	0%	0%	64%	0%	0%	0%	35%	100%
St. Johnsbury	0%	2%	0%	0%	0%	0%	1%	93%	0%	0%	0%	0%	3%	100%
Morrisville	0%	4%	65%	0%	0%	0%	1%	1%	0%	0%	0%	0%	28%	100%
Newport	0%	0%	3%	0%	0%	0%	81%	8%	0%	0%	0%	0%	7%	100%

# Step 5: Payment updates in future years

1. Inflation, membership and planned service changes will be implemented using similar methods from year 1
2. Additional adjustments will be calculated starting year 2
  - Market shifts
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  - Performance adjustments



# Begin developing monitoring plan

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- Discussion of monitoring and evaluation plan is scheduled to be in December TAG meeting
  - Create a plan for monitoring and reporting on progress
  - Include ongoing monitoring for unintended consequences on patients, hospitals and payers
  - Create a plan for program evaluation

# Monitoring /ad-hoc adjustments vs. regular adjustments to global budget payments

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Previously mentioned topics that are not included in the annual adjustments

## ➤ Transfers

1. Monitor changes in transfer patterns and draft language for potential adjustments
2. Validate transfer indicators and develop an algorithm

## ➤ High-cost patients/visits

1. Monitor changes over time and link with overall global budget methodology
2. Defining high-cost TBD

## ➤ Exogenous circumstances

1. Policy to be written to account for exogenous factors.

# Topic to monitor – interhospital transfers

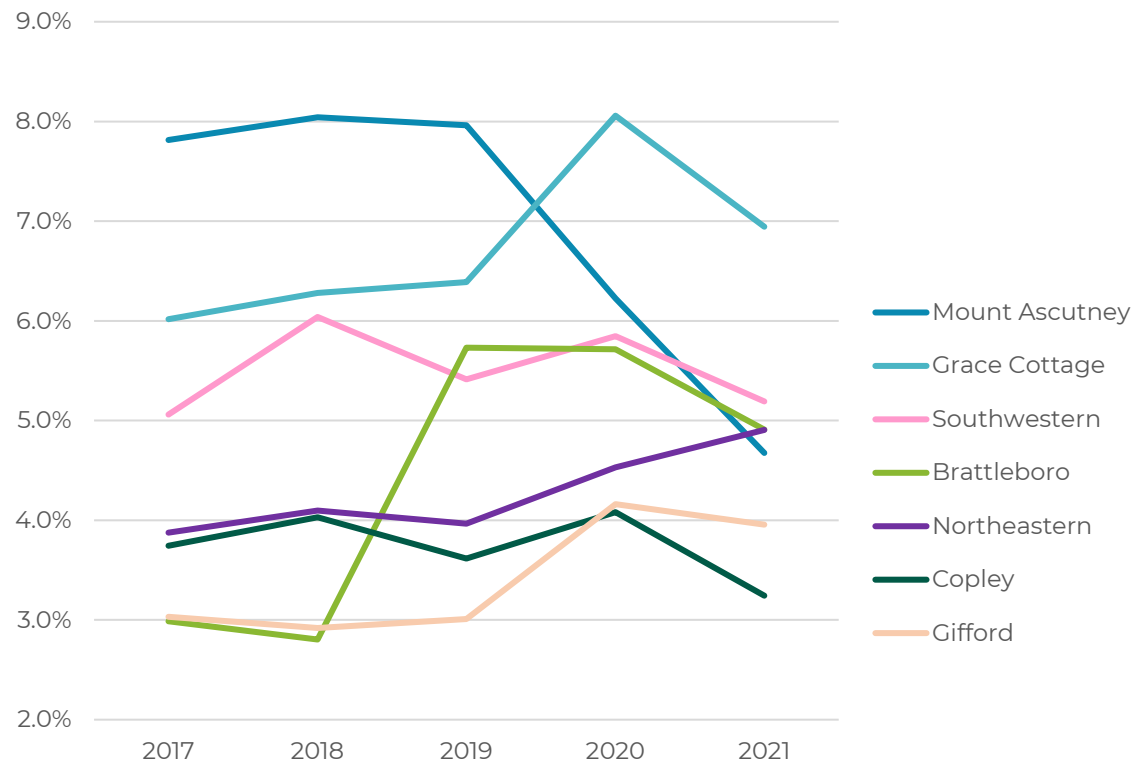
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- Maryland's transfer policy:

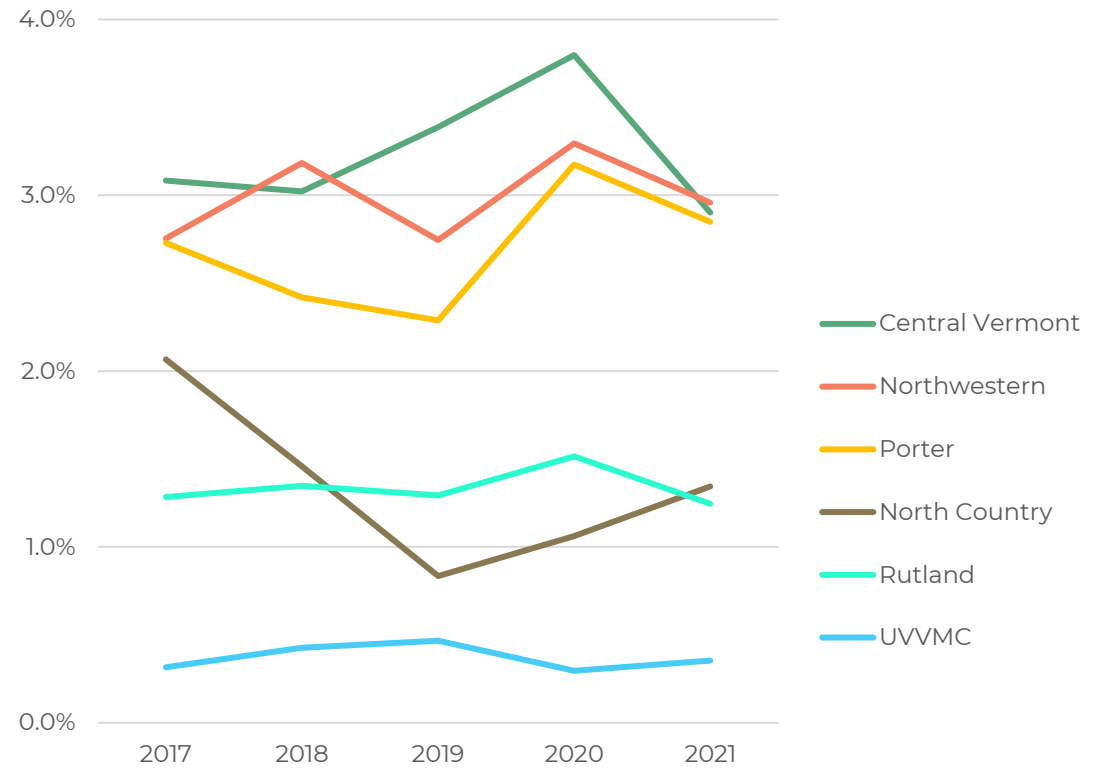
- Defined transfers as same or next-day inpatient or ED transfers to the AMC.
- Established a baseline for level and pattern of transfers, with subsequent revenue adjustments, based on changes in transfer levels above determined thresholds.
- Levels of transfers monitored on a quarterly basis.
  - *“On a quarterly basis, academic medical center (AMC) GBR budgets are adjusted by the increase or decrease in transfer cases net of population adjustment weighted by the standard transfer cost. The standard cost is calculated at the base year AMC average charge \* Price Update \* Variable Cost Factor.”*
  - *“Sending hospital transfer rates will be monitored on a quarterly basis and the GBR revenues will be reduced on an annual basis by the increase in transfer cases weighted by the transfer standard cost. The standard transfer cost will be determined according to the formula stated in the AMC adjustment section above.”*

# Trends in transfers, 2017-2021

Discharges as transfers (% of IP + ED)



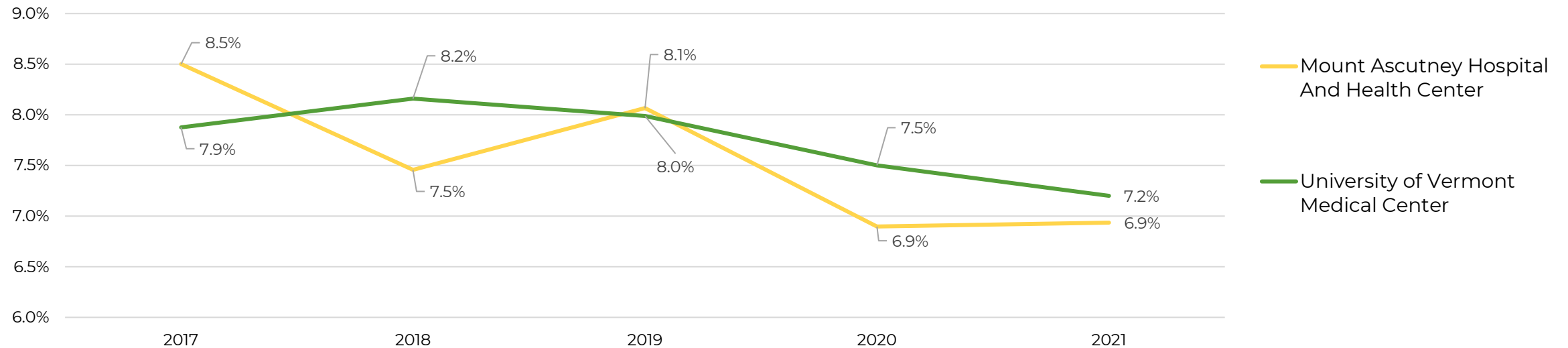
Discharges as transfers (% of IP + ED), cont.





# Trends in admissions from transfers, 2017-2021

Admissions from transfers (% of IP + ED), Hospitals with highest percentage



# Appendix

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# Potential data sources

Data need	Potential data source	Notes
Baseline paid amount	Hospital and payer claim data CAH Medicare cost reports	Compare data and verify paid amounts/included excluded services
Membership counts	Payer enrollment data	VHCURES can be used for verification
Planned service line, tertiary care utilization	Hospital data	Payer data can be used for verification
Market shifts	VHCURES/Payer claims	Hospital data can be used to verify
Total cost	Payer claims	N/A
Population health outcomes and quality measures	Claims, survey and/or clinical data	Measure selection will determine data source

# Additional data needs for global budget modeling

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## Hospital data:

1. Hospital NPI list for professional and other facility services
2. Insurance plan detail (names/ids/market segments) and paid amounts
3. CAH Medicare rate letters
4. Final cost settlements

## Payer data:

1. Membership counts by age and gender and market segment
2. Total paid amounts by HSA (breakdown by VT hospitals, other services, and pharmacy)