



maryland  
**health services**  
cost review commission

---

## Total Cost of Care Workgroup Meeting

January 22, 2024

# Agenda

- AHEAD All-Payer Financial Targets Discussion
- New Paradigms & High Value Care Plans
- Survey Results
- Savings Drivers Presentation
- Benchmarking
- Next Steps & Upcoming Meetings

# AHEAD All-Payer Financial Targets

# Statewide Targets

The State is accountable for performance on **seven targets**.

*Similar to the TCOC Model, CMS may consider **exogenous factors** when determining if the State met these targets.*

Medicare FFS TCOC Target

All Payer TCOC Growth Target

Medicare FFS Primary Care Investment Target

All-Payer Primary Care Investment Target

Statewide Quality and Equity Targets

Statewide Population Health Targets

All-Payer Revenue Limit\*

Targets existed in this area under TCOC



Targets existed in this area under TCOC

# Major Milestones from the State Agreement

Milestone	Action Required	Due date
Draft process for all-payer TCOC targets	Maryland will submit the proposed language to CMS for review and approval	<b>July 1, 2025</b>
Codify process for determining all-payer TCOC targets via legislation, regulation, or EO	Legislation, regulation, or EO must be codified prior to PY1 – this can be focused on process and does not need to include methodology or targets	<b>NLT December 31, 2025</b>
Proposed methodology and draft all-payer TCOC targets	Maryland will submit the proposed methodology and proposed targets (beginning with PY2, CY 2027) to CMS for review and approval	July 1, 2026
Final methodology and targets memorialized in state agreement	Maryland and CMS to update SA	NLT October 1, 2026
All-Payer target in effect		2027

# New Paradigms & High Value Care Plans

# New Paradigms in Care Delivery (NPCD) Program

- HSCRC approved \$20M for investment in innovative clinical solutions via a Transformation Fund included in the RY 2025 Update Factor.
- Goal: Provide funding to hospitals and other entities to test and implement innovative solutions that prevent the need for traditional hospitalization.
- Eligibility: MD hospitals that have global budgets established under the rate-setting authority of the HSCRC
- Timeline:
  - RFI Announcement: January 2025
  - Q&A Opportunity: February 26 TCOC workgroup meeting
  - RFI Deadline: March 31, 2025
  - Discuss and Refine Proposals: April/May 2025
  - Notify Hospitals: June 2025
  - Provision of Funding: July 2025 (input into rates)

# High Value Care Plans (HVCP)

- The FY 2025 Update Factor recommendation included a requirement for hospitals to submit population health management plans as part of efforts to reduce statewide potentially avoidable utilization (PAU).
  - 1<sup>st</sup> requirement (COMPLETED) – All hospitals submitted Population Health Inventories.
  - 2<sup>nd</sup> requirement – Hospitals must submit high value care plans that describe new and existing strategies. Plans must be specific to addressing priority areas of focus identified by the VBCI tool or an alternate tool. Hospitals must also include improvement targets and outcomes for the identified area of focus.
- Hospitals that do not submit plans or submit plans that do not meet passing criteria will be subject to a 0.19% clawback in their July rate orders.
- Timeline:
  - Templates Released: January 2025
  - CRISP Session: Mid-February 2025 (TBD)
  - Q&A Opportunity: February 26 TCOC workgroup meeting
  - Submission Deadline: March 28, 2025
  - Review and Notify Hospitals: Mid-June 2025
  - Penalties Applied in Rates: July 2025





# TCOC Workgroup Survey

---

# Member Survey Results

- Meeting schedule remains the 4<sup>th</sup> Wednesday of the month, 8-10AM.
- Meeting Topics Requested & Additional Feedback:
  - AHEAD Model
  - Advanced/Upstream planning discussions for MPA/AHEAD TCOC measure methodology
  - Understanding drivers of TCOC as a state, by region, by service, by price, by volume, and by mix
  - Monitor All-payer performance relative to the nation
  - Occasional/Quarterly in-person meetings
- TCOC Workgroup information (*Meeting dates, zoom links, slides, and meeting recordings*) updated regularly on our webpage):  
<https://hscrc.maryland.gov/Pages/hscrc-tcoc.aspx>



maryland  
**health services**  
cost review commission

---

## Drivers of Maryland FFS Medicare Savings

1<sup>st</sup> Half CY 2023 to 1<sup>st</sup> Half CY 2024 and Recap of Savings Since 2013

January 2025

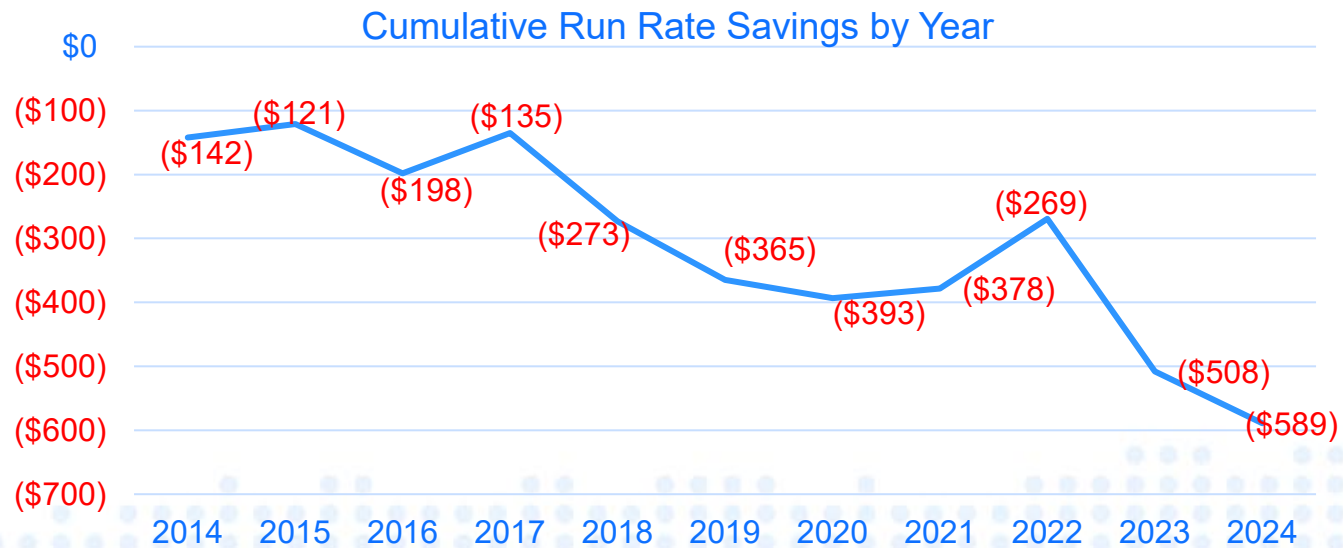
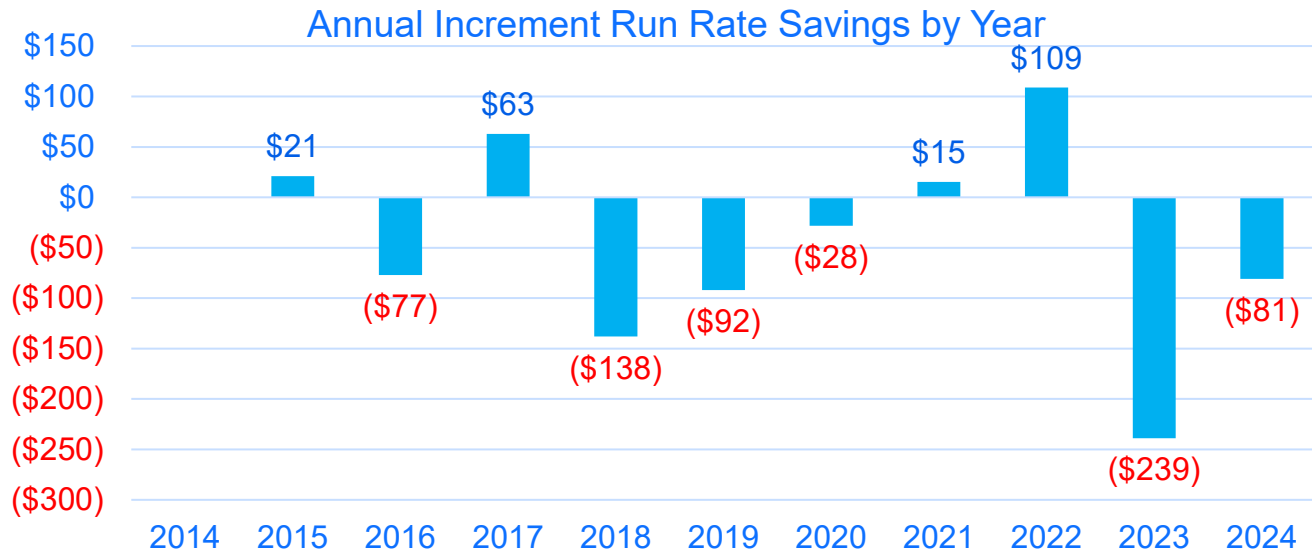
# Presentation Context

- Presentation displays update comparing the 1<sup>st</sup> half of previous years to the 1<sup>st</sup> half of 2024 Maryland Medicare Total Cost of Care.
- Presentation focuses on three periods 2013 to 2019, 2019 to 2023 and 2023 through 2024
  - TCOC in 2020 to 2023 showed considerable volatility, complicating the year over year comparisons.
    - 2020-2021: The unusual conditions of the COVID public health emergency
    - 2022: MD Hospital Costs had significant increases in Feb & March due to one-time recoupment of undercharges not expected to repeat in the second half of the year
    - 2023-2024: MD Hospital costs had several one-time reductions to the GBR as well as a 1% increase to the Public Payer Differential in April 2023 that ended in June 2024

# Background

- Analysis reflects 1<sup>st</sup> half of 2024 with 3 months run out
- Analysis compares Maryland trend to US trend using the 5% national Medicare sample in each cost bucket and thus differs from the savings disclosed in Commission reporting
  - Effects of differences in relative shares of cost buckets between MD and National data is not shown
  - 5% sample differs from CMMI true national numbers used in overall scorekeeping
  - Non-PCP Non-Claims Based Payments are not included in 5% sample analyses
- Comparison is to US total with no risk adjustment or modification - reflects overall scorekeeping approach
- Visit counts are based on a count of services and are intended as approximations
- Savings are reported as negative numbers – i.e. MD spending below the nation.

# Run Rate (Savings) by Year, Official Scorekeeping



- Maryland's results have typically fluctuated by year for the first 5 years. 2019 was the first two-year gain in savings. Then Covid-19 impacts to utilization led to further volatility
- We significantly exceeded our run rate requirement from CMS in 2023 of \$300M and 2024 appears to be trending toward continued savings.
- The source for the graphs are the CMMI national reporting data and will not tie to other slides in this presentation that use the 5% sample.

# TCOC Savings, 2013 to 2019 vs 2020 to 2023 vs 1<sup>st</sup> half 2023 to 2024

	2013 to 2019, Average		2020 to 2022 Average		2023		2024 1st half	
	Average Run Rate (Savings) Cost \$ M	% of Savings	Average Run Rate (Savings) Cost \$ M	% of Savings	Run Rate (Savings) Cost \$ M	% of Savings	Run Rate (Savings) Cost \$ M	% of Savings
Inpatient Hospital	(\$37)	59%	\$114	132%	(\$83)	41%	\$8	-8%
SNF	(\$6)	10%	\$2	3%	\$0	0%	(\$1)	1%
Home Health	\$8	-12%	\$1	1%	(\$11)	5%	(\$5)	5%
Hospice	\$3	-6%	(\$11)	-13%	(\$5)	2%	\$4	-4%
Total Part A	(\$31)	51%	\$106	122%	(\$98)	48%	\$7	-7%
Outpatient Hospital	(\$59)	95%	(\$65)	-76%	(\$119)	58%	(\$79)	75%
ESRD	(\$2)	4%	\$6	7%	\$6	-3%	\$11	-10%
Outpatient Other	(\$4)	6%	(\$2)	-3%	(\$3)	2%	(\$5)	5%
Clinic	\$0	0%	(\$1)	-2%	(\$2)	1%	(\$1)	1%
Professional Claims	\$34	-55%	\$43	50%	\$13	-6%	(\$38)	36%
Total Part B	(\$31)	49%	(\$19)	-22%	(\$105)	52%	(\$112)	107%
<b>Total</b>	<b>(\$62)</b>		<b>\$86</b>		<b>(\$204)</b>		<b>(\$105)</b>	

- Hospital Outpatient claims appear to be driving Total Savings thus far in 2024, with additional savings in Professional claims, and a notable shift back toward Part B
- Other AAPM Payments totaling ~ \$77M are excluded (e.g., MSSP, NGACO, AIPBP, etc...)

Note: amounts above reflect change in each individual bucket. Change in shares of total of each bucket would also impact overall savings. Amounts based on 5% sample data. CMMI total expenditure data show 2023 savings of \$235 million.

Amounts may not add up due to rounding.

# IP Savings, 2013 to 2019 vs 2020 to 2023 vs 2024

	2013 to 2019, Average		2020 to 2022, Average		2023		2024	
	Run Rate (Savings) Cost \$ M	Growth Rate, MD vs US	Run Rate (Savings) Cost \$ M	Growth Rate, MD vs US	Run Rate (Savings) Cost \$ M	Growth Rate, MD vs US	Run Rate (Savings) Cost \$ M	Growth Rate, MD vs US
Admits per K	(\$66)	-2.0%	\$17	0.5%	(\$11)	-0.8%	(\$7)	-0.4%
Avg Case Mix Index	\$44	0.2%	\$34	0.2%	\$20	1.3%	\$28	0.3%
Cost per Day	(\$26)	-0.7%	\$47	1.2%	(\$91)	-5.0%	(\$12)	-0.5%
ALOS (CMI Adj)	\$11	1.6%	\$10	0.9%	(\$3)	-0.1%	(\$1)	-0.1%
Mix Impact	\$1		\$6		\$1		\$1	
Total Inpatient	(\$37)		\$114		(\$83)		\$8	

- Cost per Day is driving savings fluctuations since 2022
- Admits per 1,000 reductions has come back to contribute to Savings in 2023 and 2024
- 2024 Case-Mix Adjusted Average Length of Stay no longer limits savings in 2023 and 2024

Note: amounts above reflect change in each individual bucket. Change in shares of total of each bucket would also impact overall savings. Amounts based on 5% sample data.

Amounts may not add up due to rounding.



# Outpatient Facility Savings, 1<sup>st</sup> half 2024

2023 to 2024

MD Above (Below) National Compound Annual Growth Rate

Cumulative (Savings) Costs \$M		% of US Spend	Utilization	Unit Cost	Total	1 <sup>st</sup> half 2024 (Savings) Cost, \$M	% of Savings
(\$154.03)	Part B Rx	26.74%	0.28%	-14.44%	-14.19%	(\$26.35)	33.54%
(\$22.78)	Imaging	11.72%	-3.33%	-10.60%	-13.58%	(\$12.74)	16.22%
(\$7.02)	Proc-Major Cardiology	9.04%	3.02%	-3.62%	-0.70%	(\$0.27)	0.35%
(\$25.87)	Proc-Minor	7.37%	-3.91%	-2.59%	-6.41%	(\$3.19)	4.06%
(\$42.19)	E&M - ER	7.14%	0.78%	-4.08%	-3.33%	(\$1.92)	2.44%
(\$7.06)	Proc-Major Orthopedic	7.84%	-1.59%	1.33%	-0.28%	(\$0.09)	0.11%
(\$2.24)	Proc-Major Other	5.90%	-0.90%	-1.16%	-2.05%	(\$0.68)	0.87%
(\$6.76)	Proc-Endocrinology	5.02%	-1.96%	-1.55%	-3.49%	(\$1.04)	1.32%
\$18.90	Lab	4.34%	-3.15%	-2.83%	-5.89%	(\$4.71)	5.99%
(\$35.20)	E&M - Other	4.78%	-1.15%	-16.00%	-16.97%	(\$13.13)	16.71%
(\$10.49)	Proc-Ambulatory	4.02%	-2.62%	6.56%	3.77%	\$1.11	-1.41%
(\$17.23)	Proc-Oncology	3.25%	-8.54%	5.16%	-3.82%	(\$1.78)	2.26%
(\$124.98)	Other Professional	1.18%	-0.73%	102.57%	101.09%	\$51.13	-65.08%
(\$4.49)	Proc-Eye	1.22%	-6.08%	0.50%	-5.61%	(\$0.32)	0.41%
(\$14.85)	DME	0.43%	6.98%	-2.53%	4.27%	\$2.11	-2.68%
\$0.24	Proc-Dialysis	0.01%	-16.83%	-48.14%	-56.87%	(\$0.36)	0.46%

- Year-over-year savings in most categories are generally due to unit cost and utilization decreases
- Part B Rx Savings in Outpatient Hospital and Professional

Note: amounts above reflect change in each individual bucket, mix impact of different shares of each bucket would also impact overall savings, also amounts represent 5% sample data.

# Professional Savings, 1<sup>st</sup> half 2024

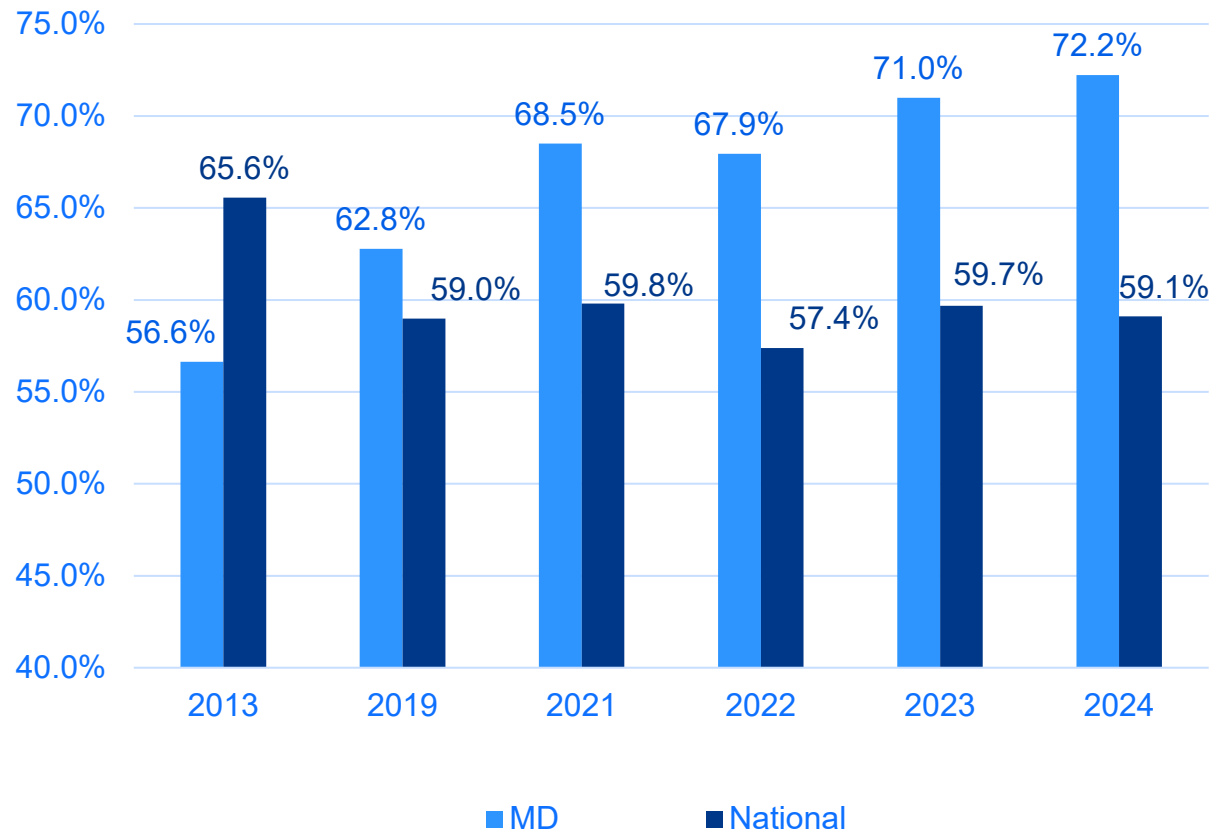
2023 to 2024		MD Above (Below) National CAGR						
Cumulative (Savings) Costs \$M	% of US Spend	Utilization	Unit Cost	Total	1 <sup>st</sup> half 2024 (Savings) Cost, \$M	% of Savings		
\$59.41	Part B Rx	23.17%	5.61%	-9.67%	-4.60%	(\$20.00)	52.06%	
\$4.68	E&M - Specialist	16.63%	-0.09%	-1.18%	-1.26%	(\$3.79)	9.87%	
\$6.34	E&M - PCP	10.00%	-0.04%	3.38%	3.34%	\$5.81	-15.13%	
\$7.65	Lab	9.26%	0.23%	-1.57%	-1.34%	(\$2.26)	5.90%	
\$5.79	Imaging	6.26%	0.87%	-3.05%	-2.21%	(\$3.07)	8.01%	
\$5.85	DME	7.51%	4.31%	-1.73%	2.51%	\$2.70	-7.04%	
\$43.97	Other Professional	5.66%	-2.40%	-18.76%	-20.70%	(\$19.55)	50.90%	
(\$0.33)	Proc-Minor	5.61%	-1.47%	-0.40%	-1.86%	(\$1.82)	4.74%	
(\$5.12)	ASC	4.78%	-3.64%	2.21%	-1.51%	(\$1.49)	3.89%	
(\$7.41)	Proc-Ambulatory	3.07%	1.59%	2.17%	3.79%	\$1.70	-4.42%	
\$0.76	Proc-Major Other	1.72%	-0.85%	0.81%	-0.05%	(\$0.01)	0.04%	
\$5.54	Proc-Major Cardiology	1.13%	3.74%	-4.81%	-1.25%	(\$0.36)	0.95%	
(\$2.06)	Proc-Eye	1.32%	-0.61%	-0.68%	-1.28%	(\$0.26)	0.67%	
(\$0.80)	Proc-Major Orthopedic	1.31%	-2.77%	0.55%	-2.23%	(\$0.45)	1.17%	
(\$1.23)	Proc-Endocrinology	1.00%	-0.77%	-3.25%	-4.00%	(\$0.58)	1.51%	
\$5.29	Proc-Oncology	1.16%	-3.96%	-1.31%	-5.22%	(\$1.18)	3.08%	
\$1.09	Proc-Dialysis	0.43%	-0.26%	0.34%	0.08%	\$0.01	-0.02%	

- DME has mostly returned to long term trend, with just some residual effect from January 2024
- Part B Rx Savings relative to US

Note: amounts above reflect change in each individual bucket, mix impact of different shares of each bucket would also impact overall savings, also amounts represent 5% sample data. Amounts may not add up due to rounding.

# % of Part B Rx Spending in a Professional Setting

## Maryland vs. National



- During the past decade, Maryland's use of the professional setting has increased by over 15% while the nation's decreased by about 6%. After a steady drop between 2013 and 2019, the nation seems to have leveled off between 59 and 60%.
- On a PMPY basis Maryland has gone down from 19% greater than the nation to almost 3% less\*. This is the intent of the model, higher hospital Medicare rates are maintained and covered by more efficient resource utilization.

\*See Appendix for detail

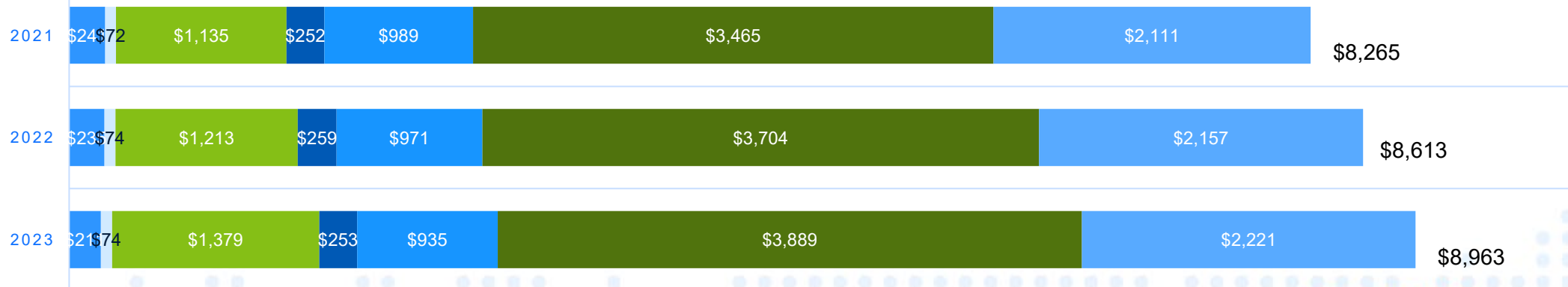
# 2021-2023 Per-User Medicare Post-acute Expenditures By Provider Type

- Mean Long Term Care Spend
- Mean Hospice Spend
- Mean Readmission Spend @ US Average Cost
- Mean ED Spend
- Mean HHA Spend
- Mean SNF Spend
- Mean Inpatient Rehabilitation Facility Spend
- Mean SNF Spend

Maryland

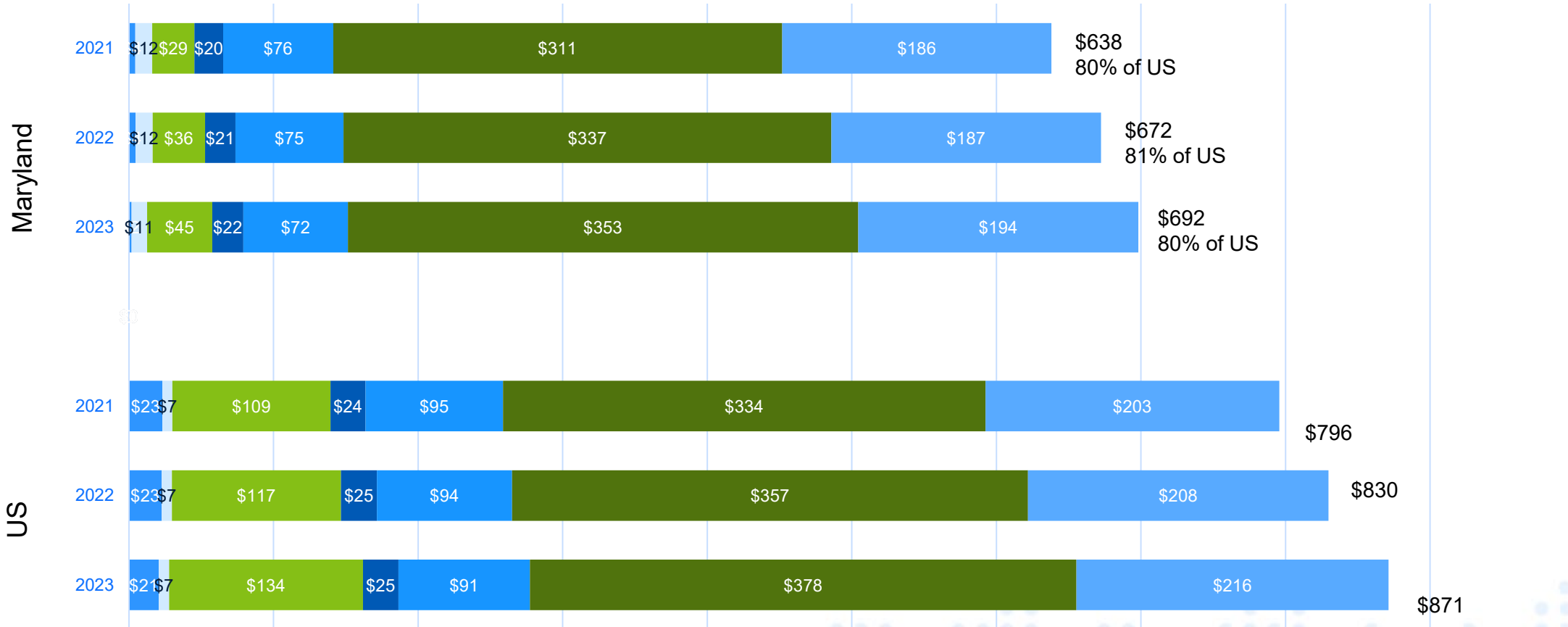


US



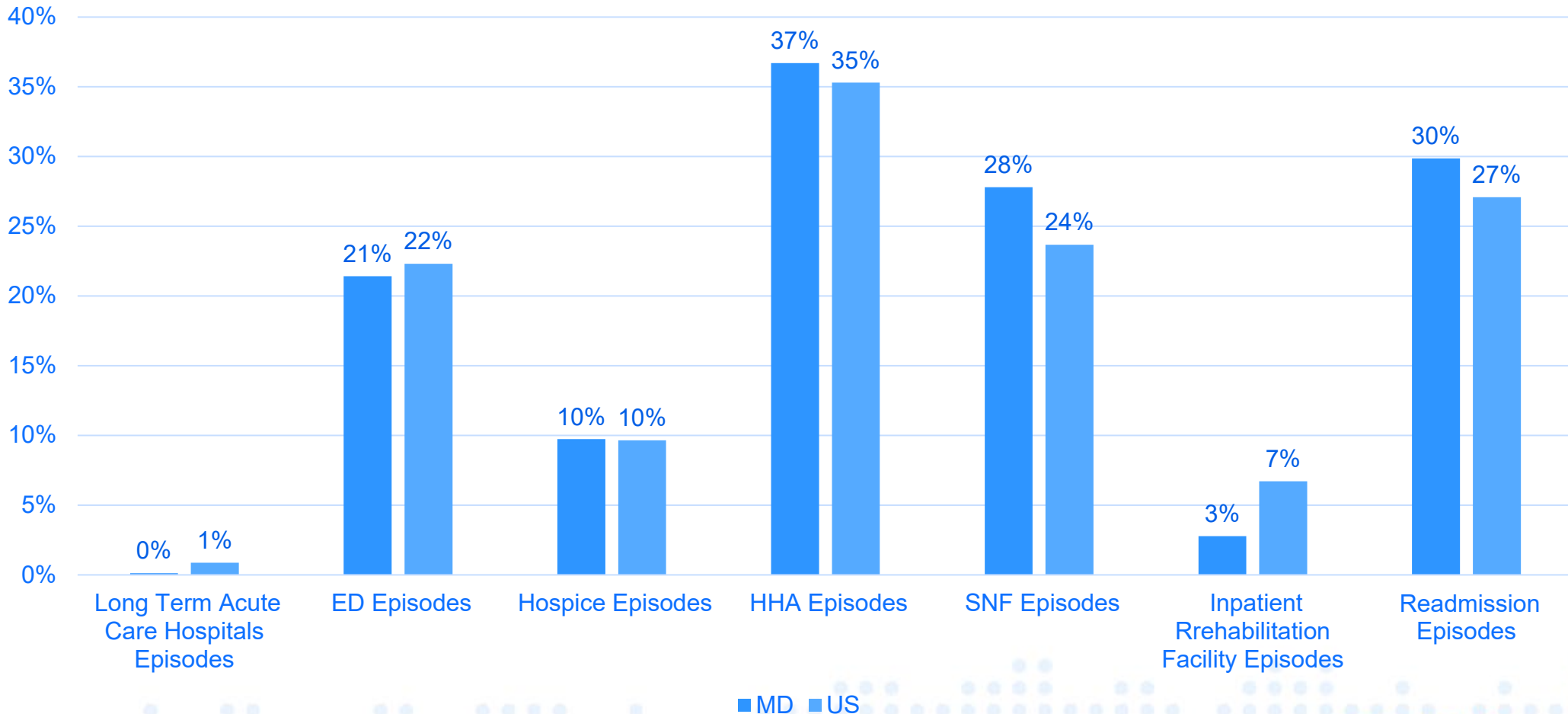
# Per Capita Post Acute Care Payments, MD and US, 2021-2023

- Per Capita Long Term Care Payment
- Per Capita Hospice Payment
- Per Capita Readmission Spend @ US Average Cost
- Per Capita ED Payment
- Per Capita HHA Payment
- Per Capita Inpatient Rehabilitation Facility Payment
- Per Capita SNF Payment



# Percentage of Users of Post Acute Care, MD and US, 2023

Share of 68k Maryland Part A Medicare by PAC Setting versus, National Rates  
(excludes ambulatory as it is effectively 100%).





# Benchmarking

## Method review

---

# Overall Approach

## Step 1. Select Benchmark Group

Select factors that are relevant

Run matching algorithm to find the closest match

Compare selected peer-counties to MD counties

- Original factors “data refresh”
- 11 new factors

- No change in methods
- “the k-nearest neighbor approach”, each county is matched to other counties within the same group most similar on county characteristics (e.g., deep poverty, median income).

Asses the results using several methods

- Distance: How similar is the selected peer-counties to MD county on selected factors.
- Balance: How similar is selected peer-counties to MD county on all factors at the state level.
- Complexity vs. magnitude of change.

## Step 2. Calculate Benchmark Results

1. Use the final selection of peer-counties

2. Run a regression to adjust for remaining factors that should be controlled

3. Allocate the peer-counties using PSAP\* distributions

Asses the regression results:

- Coefficient signs and statistical significance: if the factors in the regression are highly correlated (collinearity), regression will produce unreliable estimates for those factors
- Balance impact vs. complexity
- R-squared: How good is the model to explain the variation in TCOC.

\*PSAP: Primary Service Area Plus



# Step 1: Benchmark Selection Model Building

# Selection of factors used in benchmark county selection (i.e., matching)

Baseline model variables	Variables to test for inclusion in model
<ol style="list-style-type: none"> <li>1. Population density - population per square mile</li> <li>2. Rural/urban continuum code</li> <li>3. Total population estimate</li> <li>4. Median household income</li> <li>5. Percentage of population in deep poverty</li> <li>6. Regional purchasing parities</li> <li>7. Average Hierarchical Condition Category (HCC) Score for Medicare beneficiaries</li> </ol>	<p><b>Health Factors</b></p> <ol style="list-style-type: none"> <li>1. Percentage of adults aged 20 and above with diagnosed diabetes (age-adjusted).</li> <li>2. Percentage of adults who are current smokers (age-adjusted).</li> <li>3. Percentage of the adult population (age 18 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m<sup>2</sup> (age-adjusted).</li> <li>4. Food Environment Index</li> </ol> <p><b>Socioeconomic Factors</b></p> <ol style="list-style-type: none"> <li>1. Percentage of population identifying as non-Hispanic Black or African American.</li> <li>2. Percentage of population identifying as Hispanic</li> <li>3. Bureau of Labor Statistics wage for ambulatory healthcare service, private ownership type</li> <li>4. CDC/ATSDR Social Vulnerability Index, overall ranking variable</li> <li>5. Percentage of population aged under 65 with no insurance</li> </ol>

# Testing Factors in Matching Algorithm

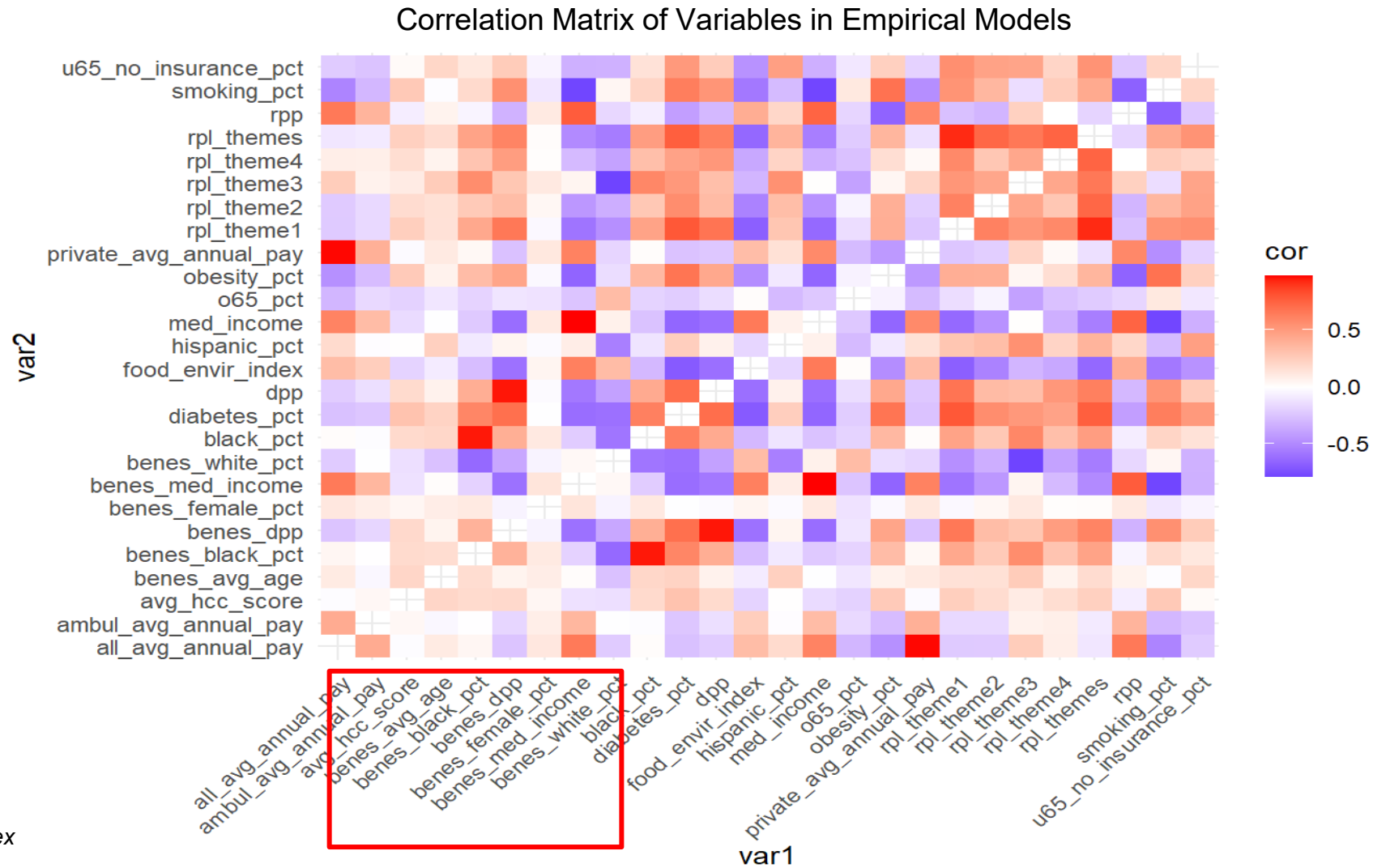
Model	Description	Rationale
Original	Original: Median household income (MIncome), % deep poverty (DPP), regional price parities (RPP), average HCC score (HCC)	
Refreshed	Refreshed: Same as Original, updated to 2022 data	Census updates
Model-2	Original + % Black or African American	Health equity and ability to analyze results by race
Model-4	Original + BLS health care wage index	Additional economic inputs (wage index)
Model-5	Original + BLS health care wage index -MIncome	
Model-6	Original + CDC Social Vulnerability Index (SVI)	Consider different measures of social-economic-demographic measures
Model-7	Original + CDC SVI - MIncome- % DPP	
Model-1	Original + % Diabetes	
Model -9	Original + % Adult smoking	Consider health factors
Model-10	Original + % Adult obesity	
Model-11	Original + Food Environment Index	
Model -13	Empirical	
Model-14	Replacement: Original+ % Black or African American + SVI – MIncome - % DPP	Test replacement of current factors
Model-16	Combined: Original+ % Black or African American + SVI	Test addition of new factors

# Empirical Approach for Model Building

- Step 1: Select wide range of variables considered to have a relationship with TCOC adjusted by HCC (kitchen sink)
- Step 2: Let a statistical technique called stepwise regression to chose final selection based on explanatory power of removing/or adding next variable
- Step 3: Review multicollinearity and revise step 1

# Initial List of Factors in Empirical Modeling

In addition to county level statistics, tested Medicare FFS beneficiary characteristics.



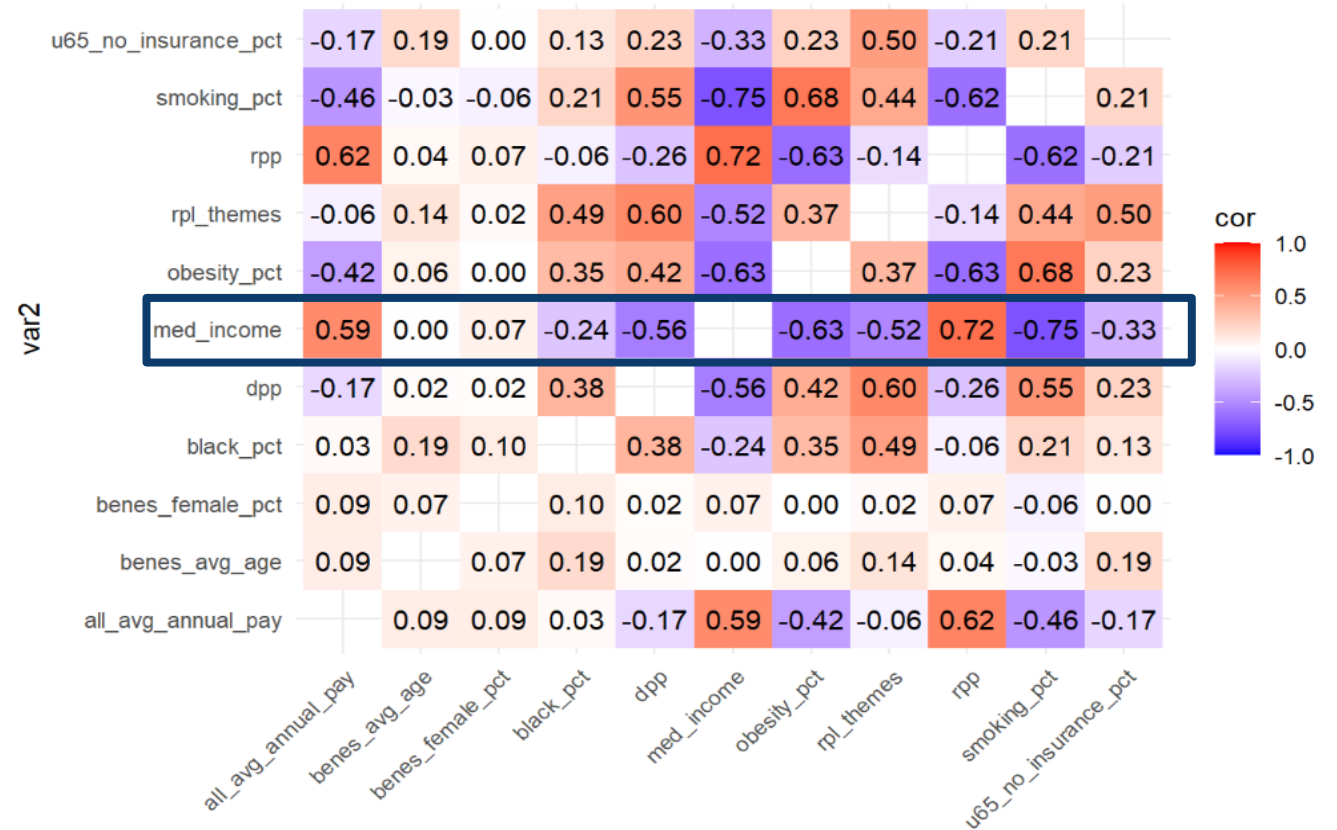
Rpl\_ = Social Vulnerability Index

# Model 13 includes the following factors

Factors used in initial pool for stepwise regression  
(Green color indicates final factors remained after regression)

Model 13
Median Income
% Deep Poverty (DPP)
Regional Price Parity (RPP)
% Black of African American
% of Uninsured under age 65
% Smoking
% Obesity
Social Vulnerability Index (SVI) (rpl_themes)
Average HCC Score (Medicare FFS beneficiaries)
Average age (Medicare FFS beneficiaries)
% of Female Beneficiaries (Medicare FFS Beneficiaries)
BLS wage for all industries, all ownership type

Correlation Coefficients of the Factors in the Initial Pool



# Comparing Models: Balance Statistic (Absolute Standard Deviation Difference)

## Original Benchmarks vs. Updated Benchmarks with Data Refresh

Balance Measures	Average Standardized Difference		
	MD vs. Nation	MD vs. Current Benchmarks	MD vs. Updated Benchmarks with Data Refresh
<b>Health Factors</b>			
Percentage of adults aged 20+ with diagnosed diabetes (age-adjusted)	0.43	0.32	0.45
Healthy food environment	1.04	0.19	0.20
Percentage of adults who are current smokers (age-adjusted)	1.25	0.19	0.16
Percentage of the adult population that reports overweight	0.16	0.55	0.58
<b>Outcomes</b>			
Rate of preventable premature deaths from the five leading causes of death (age-adjusted)	0.47	0.25	0.29
<b>Price</b>			
BLS wage for ambulatory healthcare service, private ownership type	0.92	0.07	0.11
BLS wage for all industries, all ownership type	0.77	0.20	0.07
Regional price parities	1.25	0.11	0.16
<b>Race and Ethnicity</b>			
Percentage of population identifying as Hispanic	0.66	1.54	1.08
Percentage of population identifying as non-Hispanic Black or African American	0.72	0.69	0.72
<b>Socio-economic</b>			
Median Household Income	1.05	0.24	0.23
Percent population in deep poverty	0.80	0.03	0.10
Social Vulnerability Index (SVI), overall	0.30	0.05	0.07
<b>Average</b>	<b>0.76</b>	<b>0.34</b>	<b>0.33</b>

- The goal is to minimize the difference by selecting different factors to use in matching algorithm.
- MD counties on average are very different from national counties in healthy food environment, smoking rates, regional price parities, and median income.
- In the first stage, we restrict possible matching for each MD county by population density and rurality.
- In the second stage, we use matching algorithm to find best statistical matches using selected factors.
- Current selection factors (Median Income, Deep Poverty, RPP, HCC) finds more similar matches on all factors, except for percent Hispanic, percent black and percent overweight.
- Data refresh with current factors improves similarity slightly on average.

Overall, 0.25 standard deviation is a general target among individual factors.

# Balance statistics is similar for scenarios.

Models	Average of Standardized Difference	Number of Factors with Difference <0.1	Number of Factors with Difference <0.25
Model 13: Empirical	0.27	3	6
Model 16: Original+ % Black + SVI	0.27	4	8
Model 2: Original + % Black or African American	0.28	3	8
Model 14: Original+ % Black + SVI minus MIncome and DPP	0.28	3	6
Model 10: Original + % Adult Obesity	0.29	4	6
Model 5: Original + BLS healthcare wage index - MIncome	0.30	4	6
Model 1: Original + % Diabetes	0.30	3	8
Model 7: Original + SVI - MIncome- DPP	0.32	3	7
Model 6: Original + SVI	0.32	2	8
Model 11: Original + Food Environment Index	0.32	3	8
Refreshed: Same as Original, updated to 2022 data	0.33	3	8
Model 9: Original + % Adult Current Smokers	0.33	4	8
Original: Median household income (MIncome), % deep poverty(DPP), regional price parities (RPP), average HCC score (HCC)	0.34	3	9

- Selecting different factors in matching algorithm does not change the balance statistics significantly.
- After initial analysis, we selected top four plus current model (refreshed)



# How similar are benchmarks to MD counties?

## Balance (All Factors)

County Name	Average Balance (All Factors)	Change in Average Balance Compared with Data Refresh Model			
	Refreshed: Org+2022Update	M2: Org + % Black	M13: Empirical	M14: Org+%Black+SVI- MIncome-DPP	M16: Org+%Black+SVI
Frederick County	0.24	0.01	0.05	0.06	0.02
Carroll County	0.36	-0.01	-0.03	-0.05	-0.05
Montgomery County	0.36	0.02	-0.03	0.01	0.00
Dorchester County	0.38	0.04	-0.07	0.19	0.07
Caroline County	0.40	0.00	0.02	0.46	0.16
Garrett County	0.41	0.01	-0.07	-0.06	0.01
Harford County	0.42	-0.01	-0.05	-0.04	-0.02
Kent County	0.44	-0.01	-0.08	-0.03	-0.02
Wicomico County	0.47	-0.19	-0.10	-0.07	-0.14
Worcester County	0.48	-0.04	-0.05	-0.04	-0.04
Cecil County	0.48	-0.05	-0.07	-0.05	-0.09
Talbot County	0.49	0.00	-0.12	-0.11	-0.10
Washington County	0.50	-0.03	-0.16	-0.07	-0.09
Allegany County	0.52	-0.01	-0.14	-0.01	-0.12
Calvert County	0.52	0.01	-0.08	-0.06	-0.05
<b>Maryland average</b>	<b>0.52</b>	<b>-0.04</b>	<b>-0.07</b>	<b>-0.01</b>	<b>-0.05</b>
Anne Arundel County	0.52	-0.01	-0.04	-0.09	-0.08
Queen Anne's County	0.53	0.01	-0.03	0.00	-0.02
Howard County	0.57	-0.03	-0.06	-0.04	-0.06
Baltimore County	0.58	-0.14	-0.11	-0.16	-0.15
St. Mary's County	0.60	-0.02	-0.08	-0.06	-0.03
Charles County	0.70	-0.04	-0.08	0.07	-0.04
Prince George's County	0.83	-0.09	-0.11	0.06	-0.07
Baltimore city	0.85	-0.05	0.05	-0.02	-0.05
Somerset County	0.87	-0.24	-0.19	-0.24	-0.26

- Models did not significantly change the similarity of benchmarks to Maryland counties.
- The largest impacts are with Caroline and Somerset counties, which are small counties with wide variations.

# How similar are benchmarks to MD counties?

## Distance (Model Factors)

County	Average Distance	Change in Average Distance Compared with Data Refresh Model			
	Refreshed: Org+2022Update	M2: Org + % Black	M13: Empirical	M14: Org+%Black+SVI- MIncome-DPP	M16: Org+%Black+SVI
Garrett County	0.23	(0.02)	0.28	(0.05)	0.03
Worcester County	0.26	0.10	0.16	0.07	0.13
Caroline County	0.28	0.14	0.28	0.12	0.19
Dorchester County	0.30	0.22	0.19	0.15	0.20
Allegany County	0.36	0.04	0.18	(0.01)	0.08
Washington County	0.36	0.04	0.19	0.05	0.08
Wicomico County	0.36	0.17	0.16	0.09	0.16
Baltimore County	0.37	0.19	0.29	0.23	0.22
Prince George's County	<b>0.39</b>	<b>0.93</b>	<b>0.55</b>	<b>0.91</b>	<b>0.87</b>
Somerset County	0.40	0.27	0.38	0.25	0.23
Anne Arundel County	0.48	0.07	0.18	0.16	0.11
Cecil County	0.54	(0.01)	0.16	(0.09)	0.01
Maryland average	0.57	0.14	0.09	0.09	0.13
Kent County	0.57	0.06	0.05	0.12	0.08
Carroll County	0.58	(0.02)	0.03	(0.07)	(0.02)
Montgomery County	0.59	0.07	0.13	0.10	0.07
Harford County	0.60	0.03	0.04	0.00	0.02
Frederick County	0.64	(0.02)	(0.04)	(0.09)	(0.04)
Charles County	0.71	0.76	0.13	0.73	0.67
Howard County	0.75	0.05	(0.06)	0.05	0.06
Talbot County	0.77	0.00	(0.02)	0.00	(0.00)
Calvert County	0.85	(0.03)	(0.28)	(0.25)	(0.07)
Baltimore city	0.89	0.45	0.04	0.41	0.34
St. Mary's County	1.08	(0.04)	(0.61)	(0.60)	(0.10)
Queen Anne's County	1.26	(0.11)	(0.27)	(0.21)	(0.15)

- Models with % Black has worsened similarity for PG county and Charles.

# Step 2: Calculate Adjusted TCOC results

Regression Adjustment

# TCOC adjustment regression coefficients

Factor	Original	Refreshed: Org+2022Update	M2: Org + % Black	M13: Org+%Black+SVI- Empirical	M14: MIncome-DPP	M16: Org+%Black+SVI
(Intercept)	7,560	6,139*	6,498*	2,367	11,297*	6,298*
Median Household Income	0.03	0.05*	0.04*			0.05*
% Deep Poverty	181.71	385.13*	309.81*	(208.47)*		57.37*
% Obesity				(9,286.57)*		
Social Vulnerability Index (SVI)				2,279.64*	1,350.48*	3,118.36*
% Uninsured under age 65				(3,086.36)		
% Smoking				(4,844.54)		
Average age (Medicare FFS beneficiaries)				144.10*		
% of Female Beneficiaries (Medicare FFS Beneficiaries)				3,540.92		
% Black or African American			685.79		(1,265.66)	(797.59)
<b>Adjusted R-Square</b>	<b>0.13</b>	<b>0.17</b>	<b>0.17</b>	<b>0.35</b>	<b>0.02</b>	<b>0.24</b>

\* Statistically significant ( $p < 0.05$ )

# Statewide results

All models except for Model 14, produced similar adjusted TCOC results.

## Unadjusted Results

	Original	Refreshed: Org+2022Update	M2: Org + % Black	M13: Empirical	M14: Org+%Black+SVI- MIncome-DPP	M16: Org+%Black+SVI
MD Statewide average	\$14,143.39	\$14,159.70	\$14,159.70	\$14,159.70	\$14,159.70	\$14,159.70
Benchmark average	\$13,024.95	\$12,330.87	\$12,362.36	\$12,404.64	\$12,373.09	\$12,272.78
<b>Difference</b>	<b>9%</b>	<b>15%</b>	<b>15%</b>	<b>14%</b>	<b>14%</b>	<b>15%</b>
<b>TCOC Regression Adjusted Results</b>						
Statewide average	\$12,746.36	\$13,543.31	\$13,730.12	\$13,521.44	\$14,156.74	\$13,482.32
Benchmark average	\$11,657.24	\$12,214.54	\$12,328.47	\$12,204.01	\$12,446.74	\$12,110.97
<b>Difference</b>	<b>9%</b>	<b>11%</b>	<b>11%</b>	<b>11%</b>	<b>14%</b>	<b>11%</b>
<b>Adjusted R-Square</b>	<b>0.13</b>	<b>0.17</b>	<b>0.17</b>	<b>0.35</b>	<b>0.02</b>	<b>0.24</b>

# Model correlations – TCOC adjusted benchmark difference at the county level

Models	Refreshed: Org + M2: Org + %		M13: Empirical	M14:	M16:	
	2022Update	Black		Org+%Black+SVI- MIncome-DPP	Org+%Black+SVI	
Original	0.76	0.78	0.81	0.81	0.87	
Refresh		0.97	0.80	0.69	0.87	
Scenario 2			0.80	0.71	0.90	
Scenario 13				0.90	0.93	
Scenario 14					0.87	

# County Results- Difference from Benchmarks-TCOC Adjusted

	Change in Adjusted TCOC Difference from Benchmark Compared to Data Refresh with Original Factors					
	Original	Refreshed: Org+2022Update	M2: Org + % Black	M13: Empirical	M14: Org+%Black+SVI- MIncome-DPP	M16: Org+%Black+SVI
Montgomery	-9%	-3%	-2%	-5%	3%	-2%
Garrett	-5%	-2%	1%	-3%	2%	-1%
Calvert	0%	-1%	-1%	11%	13%	3%
Charles	1%	2%	-4%	13%	14%	2%
Prince George's	1%	8%	-2%	-1%	5%	-6%
Howard	3%	-2%	-4%	8%	10%	1%
St. Mary's	4%	6%	0%	16%	16%	1%
Frederick	5%	6%	0%	8%	8%	2%
Dorchester	6%	21%	-7%	-1%	-10%	-10%
Anne Arundel	7%	8%	-1%	14%	9%	5%
Caroline	9%	28%	0%	-2%	-12%	-11%
Washington	9%	9%	-1%	0%	-2%	-5%
Kent	9%	23%	1%	7%	4%	-1%
Somerset	12%	12%	6%	8%	3%	2%
Queen Anne's	14%	13%	-1%	4%	10%	-2%
Cecil	15%	11%	-1%	13%	5%	2%
Carroll	16%	15%	0%	4%	7%	3%
Wicomico	17%	14%	-2%	4%	1%	-3%
Allegany	19%	24%	-1%	9%	-1%	5%
Harford	19%	16%	1%	11%	10%	6%
Worcester	23%	23%	0%	-5%	-3%	-5%
Talbot	23%	13%	1%	14%	14%	5%
Baltimore	24%	22%	-1%	7%	8%	2%
Baltimore City	26%	25%	0%	20%	9%	8%

# County Results- Ranking Based on the Difference from Benchmarks-TCOC Adjusted

			Change in Rankings Compared to Data Refresh with Original Factors			
	Original	Refreshed: Org+2022Update	M2: Org + % Black	M13: Empirical	M14: Org+%Black+SVI- MIncome-DPP	M16: Org+%Black+SVI
Montgomery	1	1	1	0	0	0
Garrett	2	3	2	-1	-1	-1
Calvert	3	4	0	2	2	0
Charles	4	5	-2	3	8	1
Prince George's	5	9	-1	-5	-2	-4
Howard	6	2	-1	1	2	1
St. Mary's	7	6	0	9	10	2
Frederick	8	7	0	0	1	2
Dorchester	9	18	-4	-4	-13	-8
Anne Arundel	10	8	1	8	6	6
Caroline	11	24	0	-6	-12	-8
Washington	12	10	0	-5	-7	-3
Kent	13	20	2	2	2	0
Somerset	14	12	6	1	-2	3
Queen Anne's	15	14	-1	-5	5	-2
Cecil	16	11	0	6	0	2
Carroll	17	16	0	-4	1	3
Wicomico	18	15	-3	-5	-6	-4
Allegany	19	22	-1	1	-4	1
Harford	20	17	0	3	4	4
Worcester	21	21	-1	-10	-6	-3
Talbot	22	13	2	6	7	4
Baltimore	23	19	0	2	4	3
Baltimore City	24	23	0	1	1	1



## Tentative Conclusions

- Focus on Model 2 and Model 16
- Consider Commercial model



# Next Steps

---

# TCOC Workplan for Upcoming Months

- Upcoming TCOC Workgroup Dates (Dates have changed)
  - February 26 – Minor TCOC updates/joint population health subgroup Q&A session
  - 2025 Meeting Dates (Tentative) posted on [TCOC Workgroup Webpage](#)
- Future meetings topics:
  - February
    - TCOC Topics TBD
    - High Value Care Plan Q&A Session for Submissions
  - March
    - Wrap-up benchmarking
    - Kickoff TCOC workgroup plan for 2026

Thank You  
Next Meeting February 26, 8-10 am



# Appendix

---

# Part B Drug Drill Down

- Through 2019 Maryland was successful in shifting Part B Rx to the professional setting going up from 57% professional to 63% professional while the nation dropped from 66% to 59%.
- 2021 continued the pattern, as MD went to 69% professional while national remained essentially flat.
- In 2022, MD dropped slightly to 68% while the Nation fell to 57% further widening the gap
- In 2023, MD % Professional was 71% versus the Nation at 59.7% (maintaining gap from 2022)
- In 2024, MD % Professional has continued its upward trend and the Nation appears to have leveled off.

