maryland
health services
cost review commission

# Total Cost of Care Workgroup Meeting

March 26, 2025

# Agenda

- AHEAD Update
- MPA and CTI Updates
- 2025 Program Workplan
- Benchmarking
  - Finalization of Medicare
  - Review of Commercial Results
- Next Steps & Upcoming Meetings

# AHEAD Update

# MPA and CTI Updates

# 2025 MPA Updates

- CMS provided a formal response on the MPA
  - Approved go forward revisions on the inclusion of NCBP in the savings target
  - Approved go forward tiering of Offset Stop Loss
  - Did not approve the retroactive one-sided application of the tiering based on the net neutral principles of CTIs
  - Final approval will be presented to Commissioners in April.
- hMetrix identified MPA may have been misapplied during the first half of January
  - hMetrix estimates total of ~$4.5 M under payment
  - CMS is investigating
  - Correction, if required would be included in the July 1 MPA update.
- Updated MPA adjustment files for all periods are uploaded to the TCOC webpage under resources.

# 2026 MPA Workplan Process

- Kick-Off MPA Attribution Review – March 2025 (Delayed)
- Finalize New Benchmarking Process – April 2025
- Semi-Annual TCOC Update – June 2025
- Frame MPA Attribution Options – July 2025 (Likely to be delayed)
- Draft 2026 MPA Recommendation to Commission – October 2025
- MPA CY 2026 Memo to CMS – December 2025

# CTI Updates

- No new pre-pandemic baselines
  - Starting in PY5, new CTIs will be limited to using CY 2022 or 2023, or FY 2023 or 2024 as their baseline periods.
  - Old CTIs are grandfathered in – any new change is a change, and the original baseline goes away.
- Offset Change / Stop Gain
  - Stop loss applied during the offset tiered in a way that mirrors the Traditional MPA Scaled Growth Adjustment.
  - Quintiles will be assigned based on CY2026 MPA quintiles. Tiers are as follows:  (currently all hospitals are subject to a 2.5% stop loss):

| Hospital Performance vs. Benchmark | Proposed Stop Loss |
|---|---|
| 1st Quintile (-15% to + 1% Relative to Benchmark) | 1.250% |
| 2nd Quintile (+1% to +10% Relative to Benchmark) | 1.875% |
| 3rd Quintile (+10% to +15% Relative to Benchmark) | 2.500% |
| 4th Quintile (+15% to +21% Relative to Benchmark) | 3.125% |
| 5th Quintile (+21% to +28% Relative to Benchmark) | 3.750% |

# CTI Updates

**Coefficient of Variation Across all Care-setting CTIs**

| CTI Type | Coefficient of Variation | |
|---|---|---|
| PAC Touch | 0.86 | Group 1 |
| Palliative Care | 0.86 | |
| Care Transitions | 0.94 | |
| Emergency Care | 1.31 | Group 2 |
| HOPD | 1.39 | |
| Community-Triggered | 1.71 | Group 3 |
| Episodic Primary Care | 1.77 | |

**MSR Regrouping**

Current Groupings
- **Group 1:** Community- Triggered
- **Group 2:** PAC Touch, Palliative Care, Care Transitions, Emergency Care, HOPD, Episodic Primary Care

New Grouping
- **Group 1:** PAC Touch, Palliative Care, Care Transitions
- **Group 2:** Emergency Care, HOPD
- **Group 3:** Panel Primary Care, Episodic Primary Care, and Geographic Community Care

There is now an option to include death in thematic areas

# New Group 1 - Care Setting CTI MSR Counts

| Percentage Change | Care Transitions | Palliative | PAC Touch Straight Average | Proposed N | Original N |
|---|---|---|---|---|---|
| 1.0 | 7487 | 4705 | 9086 | 7093 | 7100 | 8977 |
| 1.5 | 3327 | 2091 | 4038 | 3152 | 3150 | 3991 |
| 2.0 | 1872 | 1176 | 2272 | 1773 | 1770 | 2246 |
| 2.5 | 1198 | 753 | 1454 | 1135 | 1150 | 1441 |
| 3.0 | 832 | 523 | 1010 | 788 | 800 | 1001 |
| 3.5 | 611 | 384 | 742 | 579 | 600 | 731 |
| 4.0 | 468 | 294 | 568 | 443 | 450 | 561 |
| 4.5 | 370 | 232 | 449 | 350 | 350 | 441 |
| 5.0 | 299 | 188 | 363 | 283 | 280 | 361 |
| 5.5 | 247 | 156 | 300 | 234 | 230 | 301 |
| 6.0 | 208 | 131 | 252 | 197 | 200 | 251 |
| 6.5 | 177 | 111 | 215 | 168 | 170 | 210 |
| 7.0 | 153 | 96 | 185 | 145 | 145 | 181 |
| 7.5 | 133 | 84 | 162 | 126 | 125 | 161 |
| 8.0 | 117 | 74 | 142 | 111 | 110 | 141 |
| 8.5 | 104 | 65 | 126 | 98 | 100 | 126 |
| 9.0 | 92 | 58 | 112 | 87 | 90 | 111 |
| 9.5 | 83 | 52 | 101 | 79 | 80 | 101 |
| 10.0 | 75 | 47 | 91 | 71 | 70 | 91 |

# New Group 2 - Hospital Outpatient CTI MSR Counts

| Percentage Change | Emergency Care | HOPD | Straight Average | Proposed N |
|---|---|---|---|---|
| 1.0 | 14459 | 14434 | 14447 | 14450 |
| 1.5 | 6426 | 6415 | 6421 | 6425 |
| 2.0 | 3615 | 3608 | 3612 | 3600 |
| 2.5 | 2313 | 2309 | 2311 | 2300 |
| 3.0 | 1607 | 1604 | 1606 | 1600 |
| 3.5 | 1180 | 1178 | 1179 | 1180 |
| 4.0 | 904 | 902 | 903 | 900 |
| 4.5 | 714 | 713 | 714 | 715 |
| 5.0 | 578 | 577 | 578 | 580 |
| 5.5 | 478 | 477 | 478 | 480 |
| 6.0 | 402 | 401 | 402 | 400 |
| 6.5 | 342 | 342 | 342 | 350 |
| 7.0 | 295 | 295 | 295 | 300 |
| 7.5 | 257 | 257 | 257 | 250 |
| 8.0 | 226 | 226 | 226 | 225 |
| 8.5 | 200 | 200 | 200 | 200 |
| 9.0 | 179 | 178 | 179 | 180 |
| 9.5 | 160 | 160 | 160 | 160 |
| 10.0 | 145 | 144 | 145 | 145 |

# New Group 3 - Community Setting CTI MSR Counts

| Percentage Change | Panel Primary Care | Episodic Primary Care | Geographic Community Care | Straight Average | Proposed N | Original N |
|---|---|---|---|---|---|---|
| 1.0 | 24810 | 37081 | 28886 | 30259 | 30260 | 19655 |
| 1.5 | 11027 | 16480 | 12838 | 13448 | 13450 | 8736 |
| 2.0 | 6202 | 9270 | 7221 | 7564 | 7550 | 4916 |
| 2.5 | 3970 | 5933 | 4622 | 4842 | 4840 | 3146 |
| 3.0 | 2757 | 4120 | 3210 | 3362 | 3360 | 2186 |
| 3.5 | 2025 | 3027 | 2358 | 2470 | 2470 | 1606 |
| 4.0 | 1551 | 2318 | 1805 | 1891 | 1890 | 1231 |
| 4.5 | 1225 | 1831 | 1426 | 1494 | 1495 | 971 |
| 5.0 | 992 | 1483 | 1155 | 1210 | 1210 | 791 |
| 5.5 | 820 | 1226 | 955 | 1000 | 1000 | 651 |
| 6.0 | 689 | 1030 | 802 | 840 | 840 | 551 |
| 6.5 | 587 | 878 | 684 | 716 | 715 | 466 |
| 7.0 | 506 | 757 | 590 | 618 | 620 | 401 |
| 7.5 | 441 | 659 | 514 | 538 | 540 | 351 |
| 8.0 | 388 | 579 | 451 | 473 | 470 | 311 |
| 8.5 | 343 | 513 | 400 | 419 | 420 | 270 |
| 9.0 | 306 | 458 | 357 | 374 | 375 | 246 |
| 9.5 | 275 | 411 | 320 | 335 | 335 | 221 |
| 10.0 | 248 | 371 | 289 | 303 | 300 | 201 |

# 2025 Program Workplan

# CY 2025 Program Workplan

| Program | Task | Q3 | | Q4 | | | Q1 | | | Q2 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1/25 | 2/25 | 3/25 | 4/25 | 5/25 | 6/25 | 7/25 | 8/25 | 9/25 | 10/25 | 11/25 | 12/25 |
| Care Transformation Initiatives (Fiscal Year Operations) Owner: Christa Speicher | Commission Presentation – Year 2 Results | | X | | | | | | | | | | |
| | Finalize Program Changes for FY26 | | | X | | | | | | | | | |
| | CTI Enrollment | | | | X | | | | | | | | |
| | 2027 Program Change Discussion | | | | | | | | X | | | | |
| High Value Care Plans Owner: Christa Speicher | Template Released | X | | | | | | | | | | | |
| | CRISP Learning Session | | X | | | | | | | | | | |
| | TCOC/Population Health Innovations Workgroup | | X | | | | | | | | | | |
| | Hospital Plans Due | | | 3/28 | | | | | | | | | |
| | Plan Review by HSCRC | | | | X | | | | | | | | |
| | Hospital Revisions, if applicable | | | | | X | | | | | | | |
| | High Value Care Plan Rate Adjustments Due | | | | | | X | | | | | | |
| Revenue for Reform (Fiscal Year Operations) Owner: Erin Schurmann | Follow Up with Hospitals on Year 2 Measures | | | | | | | | | | | | |
| | Commission Presentation – Year 1 Activities, Year 2 Approvals | | | | 4/9 | | | | | | | | |
| | FY2025 Report Template Released | | | | | | | X | | | | | |
| | FY2026 Application Template Updates | | | | | | | | X | | | | |
| | FY2026 Hospital Applications Due | | | | | | | | | | X | | |
| | FY2026 Application Review Window | | | | | | | | | | | X | |
| | Hospital Revisions, if applicable | | | | | | | | | | | | |
| | FY2025 Reports Due | | | | | | | | | | | | X |
| | FY 2026 Rate Adjustments Due / FY 2024 Audit Adjustment | | | | | | | | | | | | X |
| Behavioral Health Regional Partnerships (Calendar Year Operations) Owner: Erin Schurmann | Hospital CY 2024 Reports Due | | | | X | | | | | | | | |
| | Commission Meeting Presentation | | | | | | | X | | | | | |
| | Mid-Year Check-Ins | | | | | | | | X | | | | |
| | CY 2024 Audits | | | | X | | | | | | | | |
| | CY 2025 Templates Released | | | | | | | | | | | X | |
| Medicare Performance Adjustment Owner: William Henderson | Final 2025 MPA Recommendation to Commission | | | X | | | | | | | | | |
| | Kick-Off MPA Attribution Review | | | X | | | | | | | | | |
| | Finalize New Benchmarking Process | | | | X | | | | | | | | |
| | Semi-Annual TCOC Update | | | | | | X | | | | | | |
| | Frame MPA Attribution Options (July TCOC Workgroup) | | | | | | | X | | | | | |
| | Draft 2025 MPA Recommendation to Commission | | | | | | | | | | | X | |
| Episode Quality Improvement Program Owner: Christa Speicher | Year 2 Results Commission Presentation | | 2/12 | | | | | | | | | | |
| | Activate New Episodes | | | X | | | | | | | | | |
| | 2026 Rebasing | | | X | | | | | | | | | |
| | 2026 Program Changes/Quality | | | | X | | | | | | | | |
| | Enrollment Period | | | | | | | X | | | | | |
| New Paradigms in Care Delivery Owner: Christa Speicher | Release RFI | X | | | | | | | | | | | |
| | Presentation to TCOC/Population Health Workgroup | | 2/26 | | | | | | | | | | |
| | RFI Responses Due | | | 3/31 | | | | | | | | | |
| | Review Process | | | | X | | | | | | | | |
| | Negotiate Implementation Plans with Hospitals | | | | | X | | | | | | | |
| | Notify Hospitals | | | | | | X | | | | | | |

*Quarters are on a Fiscal Year basis.

**All dates are subject to change.

- Workplan also located on TCOC webpage under resources

# 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*

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

| Baseline model variables | Variables to test for inclusion in model |
|---|---|
| 1. Population density - population per square mile<br>2. Rural/urban continuum code<br>3. Total population estimate<br>4. Median household income<br>5. Percentage of population in deep poverty<br>6. Regional purchasing parities<br>7. Average Hierarchical Condition Category (HCC) Score for Medicare beneficiaries | **Health Factors**<br>1. Percentage of adults aged 20 and above with diagnosed diabetes (age-adjusted).<br>2. Percentage of adults who are current smokers (age-adjusted).<br>3. Percentage of the adult population (age 18 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m2 (age-adjusted).<br>4. Food Environment Index<br>**Socioeconomic Factors**<br>1. Percentage of population identifying as non-Hispanic Black or African American.<br>2. Percentage of population identifying as Hispanic<br>3. Bureau of Labor Statistics wage for ambulatory healthcare service, private ownership type<br>4. CDC/ATSDR Social Vulnerability Index, overall ranking variable<br>5. Percentage of population aged under 65 with no insurance |

# Medicare recap: Build models to test each variable and combinations, as well as models using regression approach to select matching variables.

| 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 | Consider health factors |
| Model-9 | Original + % Adult smoking | |
| Model-10 | Original + % Adult obesity | |
| Model-11 | Original + Food Environment Index | |
| Model-13 | Empirical | Test parsimonious modes against the empirical selection of factors |
| 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 |

# Selected Models with Better Fit

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

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

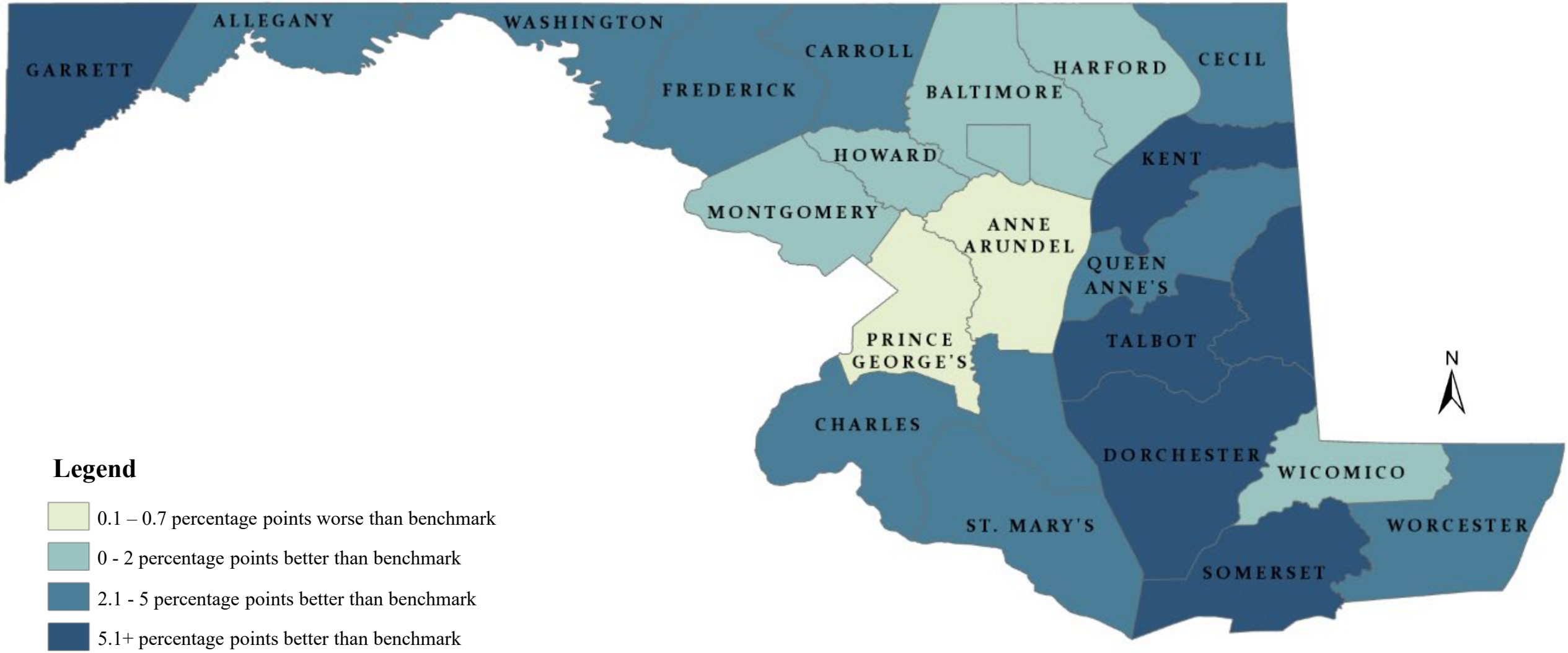
# Statewide results did not change much except for M14.

| | Original | Refreshed: Org+2022Update | M2: Org + % Black | M13: Empirical | M14: Org+%Black+SVI-MIncome-DPP | M16: Org+%Black+SVI |
|---|---|---|---|---|---|---|
| | | | **Unadjusted Results** | | | |
| 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 | $ 12,428.36 | $ 12,173.94 | $ 12,178.24 | $ 12,338.54 |
| **Difference** | **8.6%** | **14.8%** | **13.9%** | **16.3%** | **16.3%** | **14.8%** |
| | | | | | | |
| | | | **TCOC Regression Adjusted Results** | | | |
| Statewide average | $ 12,746.36 | $ 13,543.31 | $ 13,418.44 | $ 13,854.53 | $ 13,949.95 | $ 13,593.13 |
| Benchmark average | $ 11,657.24 | $ 12,214.54 | $ 12,232.40 | $ 11,849.76 | $ 11,933.49 | $ 12,158.11 |
| **Difference** | **9.3%** | **10.9%** | **9.7%** | **16.9%** | **16.9%** | **11.8%** |
| | | | | | | |
| **Adjusted R-Square** | **0.13** | **0.17** | **0.17** | **0.35** | **0.02** | **0.24** |

# County ranking changes were significant when model excludes median income (M13 and M14)

| | | | 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 |

**Proportion of Beneficiaries with No Primary Care Visits in the Previous 24 Months Relative to Benchmarks, by County**
**MARYLAND (Current Benchmarks, PG is performing worse)**



# NEW: Tested inclusion of RPP In the models

## Largest change in statewide results are with data updates (not methodology changes)

| | Final Models | | | | | |
|---|---|---|---|---|---|---|
| (MD/Benchmarks)-1 | Original | M0: Refreshed Org+2022Update | M2: Org + % Black | M13: Empirical | M16: Org+%Black+SVI | M18: Refreshed with RPP in TCOC regression |
| TCOC Adjusted by HCC | 8.6% | 14.8% | 13.9% | 16.3% | 14.8% | 14.8% |
| TCOC Adjusted by HCC and Demographics | 9.3% | 10.9% | 9.7% | 16.9% | 11.3% | 11.6% |
| **TCOC Regression Adjusted R-Square** | **0.13** | **0.17** | **0.17** | **0.35** | **0.24** | **0.20** |

# County Rank Correlations

## All models are highly correlated (Lowest correlation is M13)

| | Original (Org), MIncome, Deep Poverty, RPP, HCC | M0: Refreshed Org+2022Update | M2: Org + % Black | M13: Empirical | M16: Org+%Black+SVI | M18:Refresh+RPP in regression |
|---|---|---|---|---|---|---|
| Original | 1 | 0.78 | 0.79 | 0.74 | 0.89 | 0.74 |
| Refresh | | 1 | 0.96 | 0.77 | 0.87 | 0.97 |

# Final Considerations

- Largest impact of the update is due to changes in demographic variables between 2016- 2022.
- Adding RPP to the TCOC regression has a minimum impact but aligns with benchmark selection process and regression approach.
  - We will examine addition of RPP with commercial results
- Adding % Black did not change rankings significantly. However, it may have unintended consequence of lowering quality benchmarks for counties as we balance high income with minority status.

# Commercial Benchmarking

# Commercial methods

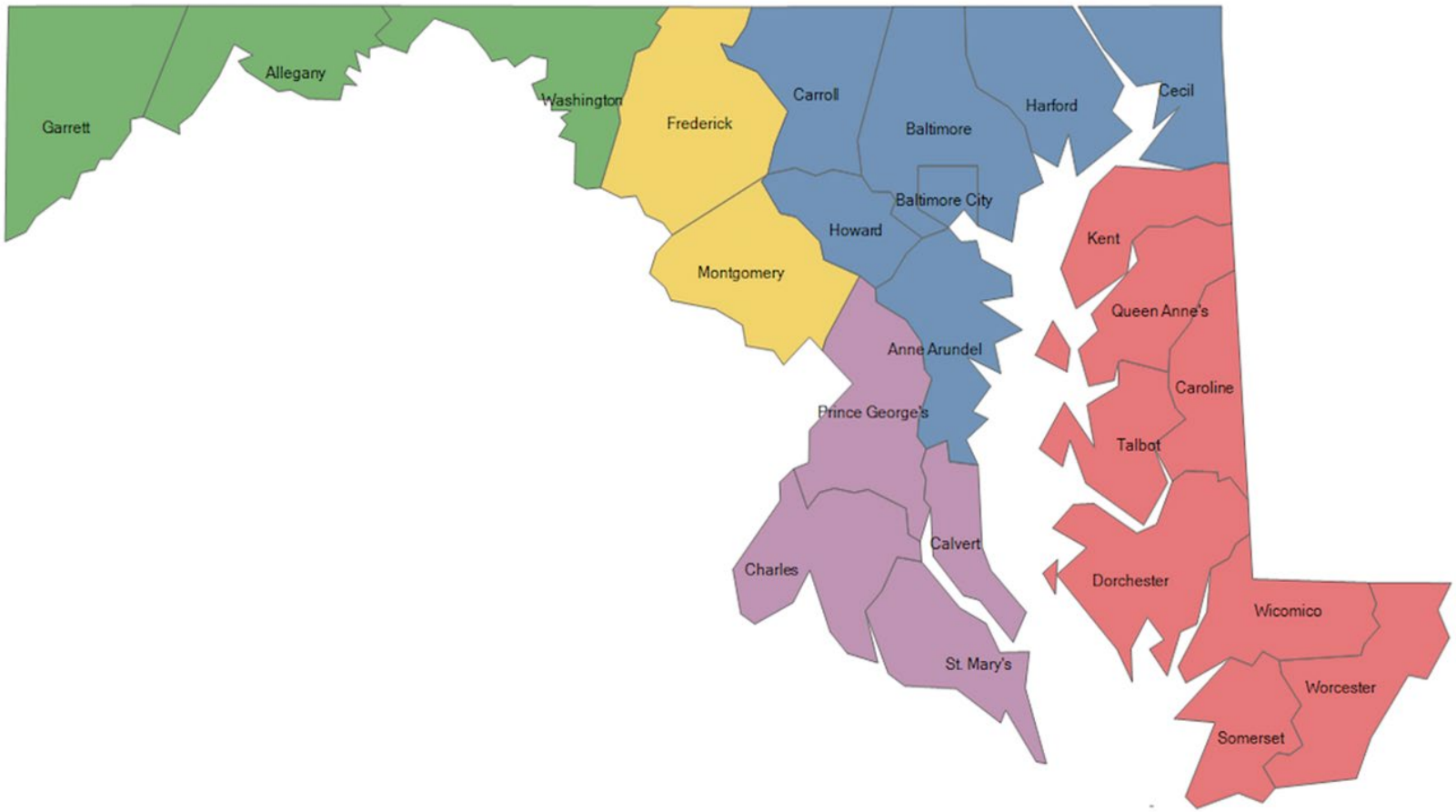
## Geographic Level

- Maryland counties are categorized into five regions.
- Each Maryland region is matched to the 20-peer group comparison (Metropolitan Statistical Areas (MSAs) in the same population density-total population category with the most similar values on the peer group selection variables.
- A Metropolitan Statistical Area (MSA) is a geographic region defined by the U.S. Office of Management and Budget (OMB) that consists of a core area with a large population nucleus and adjacent communities that are highly integrated economically and socially with the core.

# Maryland Regions For Commercial Benchmarks

## Keep the regional definitions same.

| MD Region ID | County Name |
|---|---|
| MD1 (PG and Southern MD) | St. Mary's County, MD<br>Calvert County, MD<br>Charles County, MD<br>Prince George's County, MD |
| MD2 (Western MD) | Allegany County, MD<br>Garrett, MD<br>Washington County, MD |
| MD3 (Eastern Shore) | Caroline, MD<br>Dorchester, MD<br>Kent, MD<br>Talbot, MD<br>Queen Anne's County, MD<br>Somerset County, MD<br>Wicomico County, MD<br>Worcester County, MD |
| MD4 (Northern DC Suburbs) | Frederick County, MD<br>Montgomery County, MD |
| MD5 (Baltimore Area) | Cecil<br>Baltimore County, MD<br>Harford County, MD<br>Baltimore City, MD<br>Anne Arundel County, MD<br>Carroll County, MD<br>Howard County, MD |



# Population Density and Total Population Categories

| | | Population Density | | | |
|---|---|---|---|---|---|
| | | First quartile | Second quartile | Third quartile | Fourth quartile |
| Total Population | <25% | 49 | 34 | -- | -- |
| | 25% to 75% | 40 (MD2) | 54 (MD3) | 72 | 20 |
| | >75% | -- | -- | 17 | 66 (MD1, MD4, MD5) |

- Non-Maryland MSAs and Maryland regions are categorized into population density – total population categories
  - (similar process is done for Medicare benchmarks at the county level)
- MD1, MD4, and MD5 have 66 MSAs to which they could be matched (same number of MSAs as current methodology)
- MD2 has 40 MSAs to which it could be matched (fewer than current methodology which has 69 MSAs)
- MD 3 has 54 MSAs to which it could be matched (fewer than current methodology which has 69 MSAs)

| MD Region ID | County Name |
|---|---|
| MD1 (PG and Southern MD) | St. Mary's County, MD<br>Calvert County, MD<br>Charles County, MD<br>Prince George's County, MD |
| MD2 (Western MD) | Allegany County, MD<br>Garrett, MD<br>Washington County, MD |
| MD3 (Eastern Shore) | Caroline, MD<br>Dorchester, MD<br>Kent, MD<br>Talbot, MD<br>Queen Anne's County, MD<br>Somerset County, MD<br>Wicomico County, MD<br>Worcester County, MD |
| MD4 (Northern DC Suburbs) | Frederick County, MD<br>Montgomery County, MD |
| MD5 (Baltimore Area) | Cecil<br>Baltimore County, MD<br>Harford County, MD<br>Baltimore City, MD<br>Anne Arundel County, MD<br>Carroll County, MD<br>Howard County, MD |

# Commercial methods

- In July 2023, the U.S. Census Bureau made updates to the Metropolitan/Micropolitan Statistical area delineations
- These updates resulted in changes to which counties map to MSAs and some MSA numbers
  - Makes it more difficult to assess differences in which MSAs map to Maryland regions when using the current versus the updated methodology
- These updates affect MSA values on peer group selection variables and have implications for which MSAs match to Maryland regions
- These updates do not affect Maryland regional values for peer group selection variables because they are a weighted average of Maryland **county** values

# Step 1: Benchmark Selection Model Building

# Testing Factors in Peer Group Selection Matching Algorithm

- Tested peer group selection models that emerged as promising during Medicare methodology testing

| Model | Description |
|---|---|
| **Original** | 1) HHS Platinum Risk Score, 2) Benefit Level, 3) Median Income, 4) Deep Poverty Percentage, 5) Regional Price Parity |
| **M2: Original +%Black** | Same as original + Percent Black |
| **M13: Medicare Empirical** | |
| **M14: SVI and %Black** | 1) HHS Platinum Risk Score, 2) Benefit Level, 3) Percent Black, 4) SVI, and 5) Regional Price Parity |
| **M16: Original +%Black + SVI** | Same as original + Percent Black + SVI |
| **M18: Original + RPP in normalization** | Same as original |

# 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

# Testing Factors in Peer Group Selection Matching Algorithm

- Conducted empirical stepwise regression of total risk score adjusted allowed charges on peer group selection variables

| Model | Variables included in stepwise regression | Variables selected by stepwise regression |
|---|---|---|
| **M20: Commercial Empirical_all** | Variables included in Medicare stepwise regression: 1) Median Income, 2) RPP, 3) Percent Diabetes, 4) Percent Black, 5) Percent Hispanic, 6) Ambulatory Average Pay, 7) SVI overall, 8) SVI_2, and 9) SVI_4, 10) Percent Female | 1) HHS Platinum Risk Score, 2) Benefit Level, 3) Median Income, 4) RPP, 5) Percent Diabetes, 6) Percent Black, 7) Percent Hispanic, 8) Ambulatory Average Pay, 9) SVI overall, 10)SVI_2, and 11) SVI_4 |
| **M21: Commercial Empirical_select** | Variables remaining after removing highly correlated variables: 1) Median Income, 2) RPP, 3) Percent Diabetes, 4) Percent Black, 5) Percent Hispanic, 6) Ambulatory Average Pay, 7) SVI overall | 1) Median Income, 2) Percent Black, 3) Ambulatory Average Pay, 4) Percent under 65 without insurance |

- Used variables selected by stepwise regression as peer group matching variables
- Included HHS platinum risk score and benefit level in all peer group selection algorithm because included in normalization

# Initial List of Factors in Empirical Modeling

Median Income has the highest correlation with TCOC and highly correlated with many other variables considered for matching.

| Variables | Correlation with TCOC |
|---|---|
| med_income | 0.40 |
| ambul_avg_annual_pay | 0.37 |
| food_envir_index | 0.36 |
| all_avg_annual_pay | 0.34 |
| private_avg_annual_pay | 0.34 |
| rpp | 0.33 |
| diabetes_pct | -0.32 |
| u65_no_insurance_pct | -0.32 |
| rpl_theme1 | -0.31 |
| dpp | -0.29 |
| rpl_themes | -0.27 |
| black_pct | -0.26 |
| rpl_theme2 | -0.25 |
| smoking_pct | -0.24 |
| rpl_theme3 | -0.12 |
| hispanic_pct | -0.08 |
| rpl_theme4 | -0.05 |

| Variables | Correlation with Median Income |
|---|---|
| rpp | 0.82 |
| all_avg_annual_pay | 0.80 |
| private_avg_annual_pay | 0.78 |
| food_envir_index | 0.72 |
| ambul_avg_annual_pay | 0.43 |
| rpl_theme3 | 0.22 |
| hispanic_pct | 0.06 |
| rpl_theme4 | -0.14 |
| black_pct | -0.18 |
| u65_no_insurance_pct | -0.37 |
| rpl_themes | -0.40 |
| rpl_theme1 | -0.49 |
| rpl_theme2 | -0.51 |
| diabetes_pct | -0.54 |
| dpp | -0.60 |
| smoking_pct | -0.79 |

*Rpl_= Social Vulnerability Index*

# Commercial Model Results Summary

- Similar to Medicare results, the largest impact appear to be due to demographic changes over time and (potentially revised MSA boundaries).
- Due to limited number of available MSAs to match MD regions, different models did not produce much variation in results.
- TCOC regression coefficients were not statistically significant, except for median income for most models.

# Next Steps

# TCOC Workplan for Upcoming Months

- Upcoming TCOC Workgroup Dates
  - April 23
  - 2025 Meeting Dates (Tentative) posted on TCOC Workgroup Webpage
- Upcoming Deadlines
  - High Value Care Plan Submission Deadline: March 28th, 2025
  - New Paradigms RFI Deadline: March 31st, 2025
  - Submit to hscrc.tcoc@maryland.gov
- Future Meetings Topics
  - April
    - Finalize Benchmarking

# Upcoming Important CTI and EQIP Dates

- CTI
  - CTI Enrollment
    - Enrollment Webinar: March 19th – Recording will be posted on CRISP Learning System
    - Open Enrollment: March 31st
    - Enrollment Close Date: May 31st
  - 2027 Program Change Discussion – August 2025
- EQIP
  - EQIP Enrollment (Tentative)
    - Enrollment Webinar: Mid June
    - Open Enrollment: Beginning of July
    - Enrollment Close Date: End of August
  - EQIP Subgroup Meetings
    - March 21st (Program Changes), May 16th, Jul 18th, Sep 19th, Nov 21st

# Thank You
# Next Meeting April 23, 8-10 am