maryland
health services
cost review commission

Total Cost of Care Workgroup

August 2020

Agenda

August TCOC Workgroup

1. Benchmarking Results
2. Preview of the MPA Recommendation
3. CTI Methodology Overview
4. Overview of the MDPCP Results
5. SIHIS Process

Benchmarking Results

2018 Medicare

Outline

- Benchmarking Overview
- Outcomes by County
- Further information
  - Webinars (same materials in each), invites sent last week
    - 8/31/2020, 3 pm
    - 9/10/2020, 11:30 pm
  - Materials distributed along with the Webinars

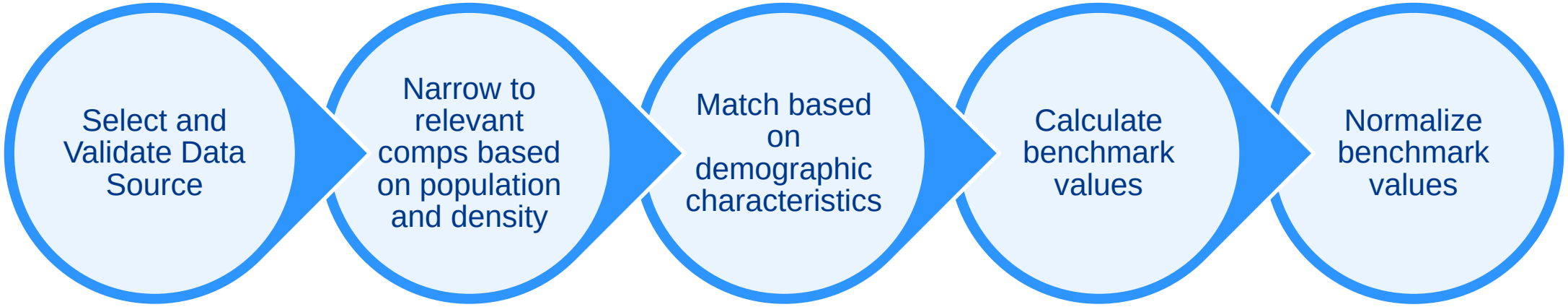
Benchmarking Overview

- Goal: Create a tool to allow the incorporation of TCOC benchmarks into appropriate methodologies at a granular level and guide the State on areas of strength and weakness in terms of cost and quality
- Focus on Medicare FFS and Commercial under 65, will explore Medicaid and other areas but likely to be limited to these two benchmarks in the next year

Update on Open Items from 12/2019

- Updated to 2018 data, plan is to release annual update in the Spring, but will always be one full year delayed.
- Medical Education stripped from both data sets
- Demographic adjustment applied to both data sets – Regression using Median Income and Deep Poverty
- Some detail data is included in the materials shared for this meeting.
  - A CRISP report on Commercial data targeted for 11/19 with additional Medicare reporting also under consideration
  - Accessing detail Commercial data requires hospital to sign a waiver
- Peer groups have not changed from those shared previously

Process Review



- **MC**: County Level, 100% Maryland claims, 5% US Sample (A+B)
- **CO**: MSA Level, APCD for Maryland, Milliman CSHD (See appendix 3) for national
- Remove estimated medical education costs from all data

- Limit to reasonable matches

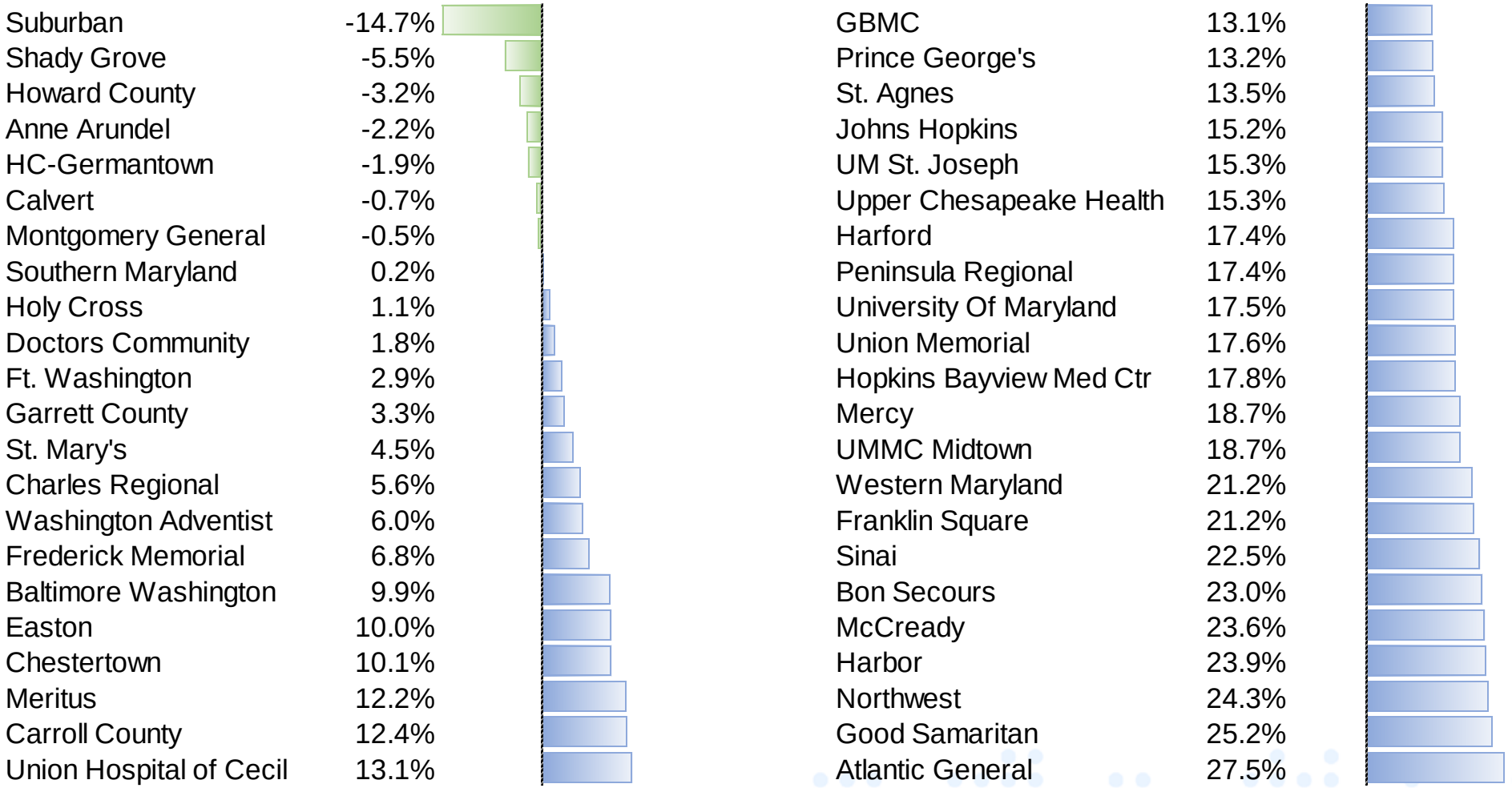
- **MC**: Median Income, Deep Poverty %, Regional Price Parity, Hierarchical Conditioning Categories
- **CO**: Same except add Government payer, share and Health and Human Services (Platinum risk scores instead of CMS-HCC (Medicare only)

- Simple average of benchmarks at MSA/County level.
- MC: 20 comps for 5 large urban counties, 50 for rest
- CO: 20 comps for all MSA'S
- Risk and Benefit (CO only) Adjustments

- Regression analysis on Median Income and Deep Poverty
- Use regression to adjust benchmarks to hospital level. MC: County to PSAP. CO: MSA to PSAP.

MC Benchmarking Results, % Above (Below) Benchmark

2018, Risk and Demographic Adjusted, Blended Statewide: 8.6%



Preview of the MPA Recommendation

Recap and Example

MPA Attainment Approach

Recap from July Meeting

- Given Maryland's high level of Medicare TCOC, Option 1 (pure attainment) would likely lead to most hospitals receiving the maximum penalty.
  - Hospitals would be unlikely to see any reward even if they reduced their TCOC from one year to the next.
  - This would likely discourage hospitals from trying.
- Option 2 (gradually phasing in the benchmarks), would give hospital achievable annual TCOC targets and set expectations for the long-run growth trajectory.
- Staff modeled at 10-year $800 M target
  - Based on state benchmarking finding of 8.6% variance in 2018 (~860 M less 2019 savings of $60M)
  - Larger/Smaller target and/or Faster/Slower Achievement could be implemented under equivalent approach
  - 1% revenue at risk does not force success. Overall achievement will be dictated by other policies.

Overview of the Revised MPA Approach

1. Create a hospital's TCOC per capita for their MPA attributed beneficiaries.
   A. The MPA beneficiaries are attributed based on the hospital's share of ECMADs in their PSAP zip codes.
   B. The same approach is used for the hospital benchmark analysis.
2. Determine the TCOC Growth Rate Adjustment for the hospital.
   A. Hospital's geographic TCOC is compared to their benchmark counties.
   B. The growth rate adjustment is determined by amount the hospital's geographic TCOC is greater / less than their benchmark counties.
3. Set the hospital's MPA Target based on their prior year target and a growth rate factor.
   A. For the 2021 MPA, the 'prior year MPA target' will be equal to the hospital's 2020 geographic TCOC.
   B. Going forward, the MPA target grows by the growth rate factor.
   C. Each year the growth rate factor is equal to the national growth rate – the TCOC growth rate adjustment.
4. Calculate the hospitals reward / penalty by taking the difference between their geographic TCOC and the MPA Target (limited by 3% min/max).
   A. Scale the difference based on quality and MPA revenue at risk.
   B. The MPA will be applied to the hospitals claims as a discount in the following fiscal year.

Attainment Adjusted MPA Growth Targets

Assuming $800 M over 10 years is the right target

- Hospitals' MPA performance target would be set so that hospital converge to their benchmark by 2030.
- The hospitals performance target for each year is equal to their 2020 TCOC times a compounded trend factor.
  - The compounded trend factor is equal to the national growth rate + the TCOC growth rate adjustment.
  - HSCRC will re-evaluate the hospitals' TCOC costs relative to the benchmark every 3 years.

Hospital Performance vs. Benchmark	TCOC Growth Rate Adjustment (Replaces 0.33% in current calculation)
<0%	-0.0%
0-5%	-0.5%
5-10%	-1.0%
10-15%	-1.4%
15-20%	-1.8%
20-25%	-2.2%
25-30%	-2.6%

Example of Calculation, Meritus

12.2% Above Benchmark, Growth Rate Adjustment = 1.4 % Below National

			2020	2021	2022	2023	2024
Calculate Target Growth	National Annual Actual Growth	A = Input		3.0%	2.0%	3.0%	BM refresh, see next slide
	Current Growth Rate Adjustment	C = From Growth Rate Adjustment Table		-1.4%	-1.4%	-1.4%	
	Current Target	D = A + C		1.6%	0.6%	1.6%	
	Target TCOC	E = Prior Year E x (1 + D)	$11,716	$11,904	$11,975	$12,167	
Calculate Meritus Performance	Meritus Attributed TCOC	F = Input	$11,716	$11,868	$12,023	$12,083	
	Annual Actual Growth	Current Year F / Prior Year F – 1		1.3%	1.3%	0.5%	
Calculate Reward (Penalty)	Achievement % Reward (Penalty)	H = (E - F) / E		0.3%	-0.4%	0.7%	
	Bonus % Reward (Penalty)*	I = H / 3% X 1% (max of +/- 1%)		0.1%	-0.1%	0.2%	

While Meritus fell 0.7% short of target in 2022, their penalty is only 0.4% due to the advantage built in 2021.Then the inverse occurs in 2023 where they first fill the gap from the end of 2022.

* Bonus (Penalty) is still applied to a hospitals delivered cost of care

Reassessing the Benchmarks

Staff anticipating repeating benchmarking every 3 years

Next round would be in 2023 based on 2021 results with any changes implemented for 2024 performance year. Growth Rate Adjustment will be reassessed based on updated benchmarking. Adjustment will consider

- Performance of the benchmark group relative to national.
- Performance of the benchmark group relative to the MD hospital

Details will be determined as the benchmarks are updated.

Recommendation on the MPA Redesign

Move to Geographic attribution & Attainment + CTI “buy-out”

Staff intended to present a draft recommendation to the Commission in October and a final recommendation in November. This recommendation will likely include:

1. Move the MPA to a geographic attribution model for all hospitals except for the academic medical centers.
2. Set an attainment target instead of an annual year-over-year growth rate target.
3. Allow hospitals to “buy-out” of a negative MPA adjustment by increasing their participation in CTIs.

Physician based attribution will be maintained for the purpose of PHI-data sharing.

CTI Methodology Update

Risk Adjustment, Minimum Savings Rate, and Revenue at Risk

Risk-Adjustment for CTI

Comparison of Different Risk Adjustment Models

- Beneficiaries will be risk adjusted using the APR-DRGs weights and/or the beneficiaries HCC score.
  - A beneficiary with a risk adjustment score of 1.10 would have a target price that is 10% higher than an average beneficiary.
  - The risk adjustment is based on the average risk score of all beneficiaries in the hospital's CTI.
- Hospitals will receive two risk scores:
  - A “preliminary risk score” that is based on the risk score during the baseline period.
  - A “final risk score” that is based on the risk score during the performance periods.
  - Participants should recognize that their final target price will not be known until the end of the year when the final risk scores are known.

Risk-Adjustment Analysis

Considerations for the CTI population

The relationship between risk scores and cost is likely one-to-one, e.g. a 0.01 increase in the HCC correlates with 1 percent increase in total cost of care. However, the relationship may be non-linear for some CTI population.

Therefore, our actuaries analyzed:

1. Whether there are structural breaks in the relationship between APR-DRG / HCC and the total cost of care.
2. Whether there are non-linear relationships between the APR-DRG / HCC score and the total cost of care.
3. Whether there are interactions between the APR-DRG & HCC score.

If there are any unusual relationships, the HSCRC will adjust the final risk score.

Risk-Adjustment Validation

Initial Assessment of the Care Transitions Risk-Adjustment

HSCRC assessed the effectiveness of the risk adjustment methodology by examining "winners and losers" in the baseline period. A perfect risk adjustment would have two characteristics:

1. Half of hospitals would be above and half of hospitals would be below the risk adjusted target price in the baseline period; and
2. The absolute error between historical performance and the target price would be low.

The straightforward risk-adjustment process using APR-DRG and HCC works well for the initial CTI thematic areas.

- 49.7% of episodes were above the risk adjusted target price; 50.3% were below the risk adjusted target price.
- The net deviation from the target price by hospital was 0.1%.

Minimum Savings Rate

Overview and Approach

- CTIs should only reward hospitals that achieve statistically meaningful savings and should not reward hospitals that benefit only from statistical variation. Therefore:
  - HSCRC will exclude CTIs that have fewer than 30 episodes. These episodes are not large enough to accurately measure the TCOC savings.
  - For all other CTI, HSCRC will set a minimum savings rate (MSR) that is based on the number of CTI episodes that the hospital participates in.
- HSCRC calculated the MSR for CTI episode using an actuarial analysis.
  - Our actuaries calculated the MSR based on the mean and standard deviation of the CTIs.
  - The MSR set to at the 85% critical value for the CTI.
  - Monte Carlo cross-validation was used to validate the MSR using historical data.

PRELIMINARY: Minimum Savings Rate

MSR decreases as the number of CTI episodes increases

- The MSR will be set based on the number of CTI episodes that the hospital is participating in.
- The number of episodes will be summed across ALL CTI thematic areas.
- E.g. HSCRC will count the number of Care Transition episodes, Palliative Care episodes, etc. when determining the MSR.
- Some CTI Thematic Areas may have a separate MSR if the variation in their episodes is substantially different.

Number of CTI Episodes	Minimum Savings Rate
< 30	n/a
31 - 150	10.0%
151 – 250	6.0%
251 – 350	5.0%
351 - 750	4.0%
751 – 3500	2.5%
3500+	1.5%

Example of the Minimum Savings Rate

The MSR is a threshold and not a discount

Hospital A beats the MSR	
Number of CTI Episodes	450
Minimum Savings Rate	4%
Aggregate Benchmark	$10 million
Threshold	$400k
TCOC Performance	$9.5 million
Savings	$500k
MPA Payment	**$500k**

Hospital B does not beat the MSR	
Number of CTI Episodes	450
Minimum Savings Rate	4%
Aggregate Benchmark	$10 million
Threshold	$400k
TCOC Performance	$9.7 million
Savings	$300k
MPA Payment	**$0**

Overview of Current CTI Submissions

Preliminary Submissions for the CTI

- Initial submissions (across all Thematic Areas) cover 120k episodes and $2.3 billion in TCOC.
- The size of the initial CTI submissions varies substantially.
  - HSCRC has been working with hospitals to revise their submissions.
  - Please reach out to hscrc.care-transformation@maryland.gov with any questions.
- Final intake template submissions will be due in October 2020.

Care Transitions Episode Count			
Episode Threshold	*Too Low (<30 Episodes)*	*Potentially Problematic* (30 - 150 Episodes)*	*Sufficient (> 150 Episodes)*
# of Care Transitions CTIs	12 of 47 CTIs (26%)	7 of 47 CTIs (15%)	28 of 47 CTIs (59%)

Revenue at Risk Under CTIs

Preliminary Submissions for the Care Transitions Thematic Area

- The Hospital's Revenue at Risk is equal to their share of statewide hospital revenues x statewide CTI Savings.
  - Ex. If statewide savings is $100 mil and the hospital's share of revenue is 10% then their revenue at risk is $10 mil.
  - Reminder: The hospital can earn positive CTI payments. Their revenue at risk is only $10 mil. if they do not participate in the CTI and/or they do not achieve any savings.
- The hospitals "real" revenue at risk is based on the difference between their savings and the average savings by hospital.

		Average Savings Rate				
		0.50%	1.00%	1.50%	2.00%	2.50%
Dollars under the CTI	$5 Billion	$25 Million	$50 Million	$75 Million	$100 Million	$125 Million
	$4 Billion	$20 Million	$40 Million	$60 Million	$80 Million	$100 Million
	$3 Billion	$15 Million	$30 Million	$45 Million	$60 Million	$75 Million
	$2 Billion	$10 Million	$20 Million	$30 Million	$40 Million	$50 Million
	$1 Billion	$5 Million	$10 Million	$15 Million	$20 Million	$25 Million

Maryland Primary Care Program

Trend Growth Rate and CTI Policies

Analysis of MDPCP Costs

Two approaches to analyzing the MDPCP costs

At the last TCOC workgroup meeting, participants expressed interest in better understanding the cost growth in MDPCP. HSCRC analyzed the MDPCP costs using two approaches:

1. Static Attribution: This approach compares beneficiaries attributed by CMMI in 2019 to themselves in a prior period.
   A. These are the beneficiaries with the close clinical relationship to the practice.
   B. The 'raw' cost trends will look high because this includes significant age & 2018 death exclusions.
2. Dynamic Attribution: This approach compares the beneficiaries attributed to practices in 2019 to those beneficiaries attributed in 2018.
   A. HSCRC is only able to match about 85% of the CMMI attributed population.
   B. This approach includes significant churn from year to year.
   C. This approach will be used for CTI and (likely) the evaluation contractor.

The analysis compares practices participating in MDPCP (the Par group) to practices not participating in MDPCP (the Non-Par group) but to whom beneficiaries would have been attributed under MDPCP attribution rules.

Assessment of Year 1 Outcomes

Summary Results

Overall results support MDPCP Year 1 impact +/- 1%, before fees, which is expected for the first year of the program.

- Dynamic Attribution reflects Par and Non-Par as roughly equal while Static gives small advantage to Non-Par.
- Unadjusted and risk-adjusted static results shows high absolute trends but Par vs Non-Par comparison is similar.

Attribution Approach	Metric	2019 Par Beneficiaries	Par Trend, 2018 to 2019	Non-Par Trend, 2018 to 2019	Par Trend Advantage (Disadvantage), before fees	Par Advantage (Disadvantage) with MDPCP Fees
Static	Unadjusted	206,589	16.18%	14.86%	-1.32%	-4.05%
	Risk Adjusted	206,589	8.88%	7.70%	-1.18%	-4.25%
	Risk Adjusted without Deaths	202,316	2.34%	0.97%	-1.36%	-4.63%
Dynamic	Risk Adjusted	246,936	2.71%	3.55%	0.84%	-1.59%
	Risk Adjusted without Deaths	246,936	2.42%	2.47%	0.05%	-2.69%

Notes:

- See supplemental detail for these calculations in the separate excel file.
- Supplemental data also contains CTO-level data

Increased TCOC Accountability for Hospital-Owned Practices

Penalties will be assessed on hospitals that do not participate in a CTI

HSCRC will require that hospital owned MDPCP practices participate in a CTI.

- If hospital run CTOs do not participate in the CTI then HSCRC will assess an MPA penalty equal to the amount of the care management fees their practices receive.
- The CTI will reward hospitals for reducing the TCOC on MDPCP beneficiaries. Hospitals that success at reducing the TCOC will receive a positive MPA adjustment equal to the savings.

Hospitals in the CTI will be at risk for reducing the TCOC of their attributed beneficiaries. This is intended to create competition between hospitals to maximize the impact that they have on the TCOC.

- The rewards and penalties in the CTI program are zero-sum. Thus hospitals will “pay” the savings earned by another hospital. I.e. if a hospital earns a $10 mil. MPA adjustment, all other hospital’s payments will be reduced by a total of $10 mil.
- Hospitals that outperform their peers will receive a net positive MPA adjustment while hospitals that do worse than their peers receive a net negative MPA adjustment.

Reminder: Nonparticipating and achieving negative savings are equivalent in the CTI process. A hospital is not penalized for negative savings in the CTI. This means there is no disincentive to participating in MDPCP. But under this policy non-participation will be penalized.

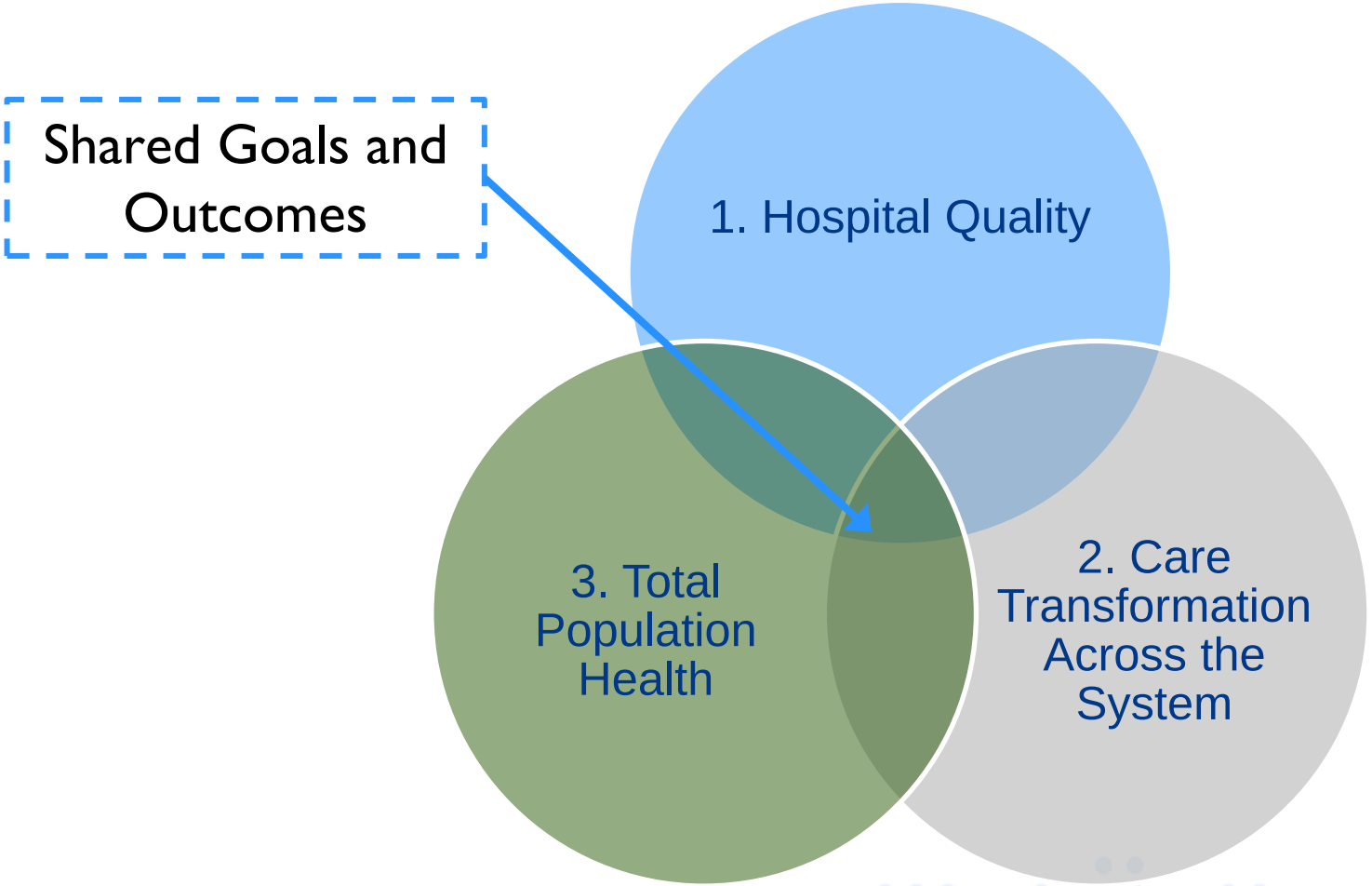
State Integrated Health Improvement Strategy

Care Transformation Requirements

Statewide Integrated Health Improvement Strategy

- In December 2019, Maryland & CMS signed a Memorandum of Understanding (MOU) agreeing to establish a Statewide Integrated Health Improvement Strategy.
- This initiative is designed to engage more state agencies and private-sector partners than ever before to collaborate and invest in improving health, addressing disparities, and reducing costs for Marylanders.
- **The MOU requires the State to propose goals, measures, milestone and targets in three domains by the end of 2020.**
- CMMI insists that for the Maryland TCOC Model to be made permanent, the State must:
  - Sustain and improve high quality care under the hospital finance model
  - Achieve annual cost saving targets
  - **Set goals, targets, milestones and achieve progress on the Statewide Integrated Health Improvement Strategy**

Domains of Maryland's Statewide Integrated Health Improvement Strategy



Care Transformation Targets

Measuring Care Transformation Activities Across the State

The SIHIS requires the State to identify system-wide care transformation goals that reflect activities under:

- The Care Redesign Program.
- The Maryland Primary Care Program.
- Other care transformation activities measured by the State.

The State's Statewide Integrated Health Improvement Strategy Proposal must include:

- A “goal.”
- A measure and the State’s baseline performance on that measure.
- A Model Year 3 milestone, a Model Year 5 interim target, and a Model Year 8 final target.

CMMI has stated that the measure must include some element of TCOC risk (thus MDPCP Tracks 1 and 2 will not count).

Potential Care Transformation Goals for the SIHIS

Using CTI to measure Care Transformation Across the State

HSCRC Staff recommend setting at care transformation ‘goal’ based on the number of beneficiaries or TCOC covered by a Care Transformation Initiative.

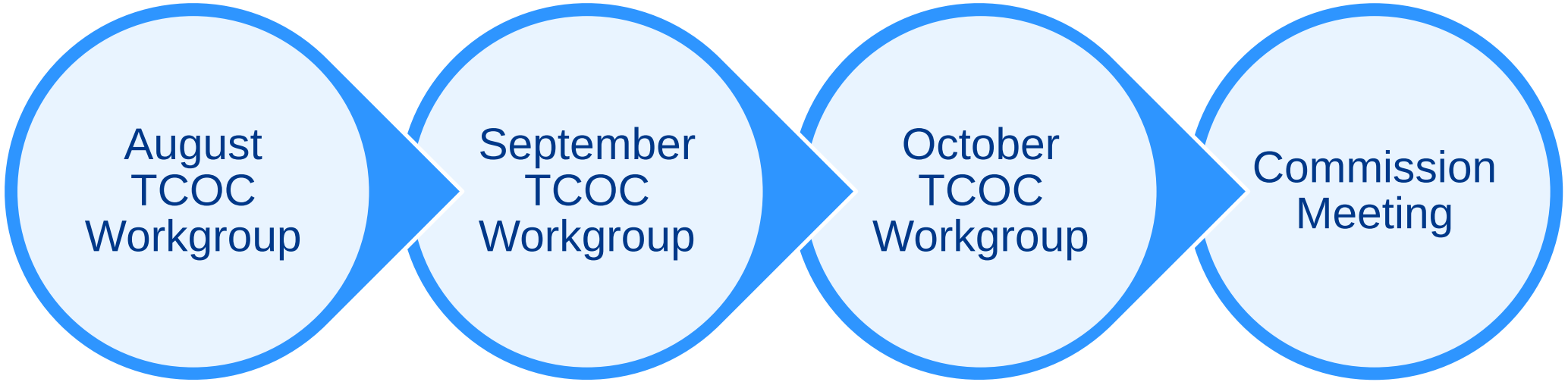
- The CTI process is already underway.
- The initial purpose of the CTI is to catalogue interventions and quantify savings under the CTI.
- The State should encourage CMMI to evaluate both CTI and CRP Tracks together, since CRP Tracks serve a narrow purpose and thus have low participation.

For example, a CTI goal could include:

- Attributing X% of Medicare beneficiaries to some CTI.
- Attributing X% of Medicare TCOC to some CTI.

Other options include: Adding EQIP, number of practices under a possible MDPCP Track 3, etc.

SIHIS Development Timeline



Discuss Goals
- Overview of SIHIS Goals & Process
- Potential Targets for Care Transformation Domain

Draft Targets:
- Staff to present options for Goals and Measures
- Discuss potential targets for each measure

Finalize Targets:
- Staff to present Interim and Final targets

Recommendation:
- Includes the final care transformation targets
- Other SIHIS Targets

Next Steps

September TCOC Workgroup Agenda

1. SIHIS Care Transformation Measures
2. Implications of the 2030 MPA Attainment Targets
   A. Medicare Hospital Prices
   B. Utilization Reductions
3. MPA Attribution for Academic Medical Centers
4. Draft Recommendation of the 2021 MPA