



maryland  
**health services**  
cost review commission

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# Care Transformation Steering Committee Meeting

May 21, 2020

# Agenda

1. Review of Timelines
2. Review of CTI Savings Methodology
  1. Identification of Baseline Period Costs
  2. Setting a Target Price
  3. Calculating Savings
3. Next Steps

# Review of Timelines

# Administrative Updates

- May 14, 2021 – Hospitals finalized their CTI submissions on. HSCRC is reviewing these submissions.
  - HSCRC will reach out regarding any necessary changes to the hospitals new CTI submissions.
  - New CTI definitions may require some adjustments to the overlaps hierarchy between different CTI.
- July 1, 2021 – The CTI program goes live.
  - Episodes that meet the CTI triggering criteria will be attributed to the hospital.
  - The CTP will be updated with the first performance period CTI beginning on or about July 9.
- July 1, 2022 – The first performance year ends on June 30, 2022. The second performance year begins on July 1, 2022.
- July 1, 2023 – The first MPA adjustment (including both the hospital's reconciliation and the statewide offset) is implemented.

# Overview of CTI Savings Methodology

# Overview of CTI Savings Calculation

The CTI savings includes three major steps:

1. Identification of Baseline Period Costs
  - A. Determining the CTI Eligible Population
  - B. Identifying the Selected CTI Beneficiaries
  - C. Exclude Overlaps
  - D. Determining Baseline CTI Costs
2. Setting a Target Price
  - A. Inflation
  - B. Risk Adjustment
3. Calculating Savings
  - A. Comparing Target Prices to Performance Period Costs
  - B. Minimum Savings Rate
  - C. Calculating Statewide Offset

# Step 1. Determining Baseline Period Costs

## Step 1.A. Determining the CTI Eligible Population

In order to be included in a CTI, the beneficiary must be enrolled in both Medicare Parts A and B during the year AND the beneficiary must have a Medicare as a primary payer.

Additionally, beneficiaries will be removed if:

- The beneficiary is receiving services for End-Stage Renal Disease
- The beneficiary has a hospital stay lasting 60 days or more
- The beneficiary dies during the CTI episode
- The beneficiary is diagnosed with COVID

These criteria are optional. Hospitals may request to include those beneficiaries in their CTI population.



## Step 1.B. Identifying Selected CTI Beneficiaries

### CTI Eligible Population

- CTI eligible beneficiaries must be in Medicare parts A and B.
- Beneficiaries with ESRD, 60+ LOS hospital stay, COVID, or death are excluded.

### Apply CTI Trigger

- Each thematic area has a claims-based “triggering condition.”
- Any beneficiary that has a service meeting the triggering condition is eligible to be included in the CTI.

### Hospital Selected Criteria

- The hospital may select beneficiary criteria that are included in the CTI.
- Beneficiaries that do not meet the hospital-selected criteria will be excluded.

# Step 1.B. Identifying Selected CTI Beneficiaries

Each CTI “Thematic Area” has a claims-based triggering condition. Any beneficiary meeting the triggering conditions may be included in the CTI.

The triggering conditions are:

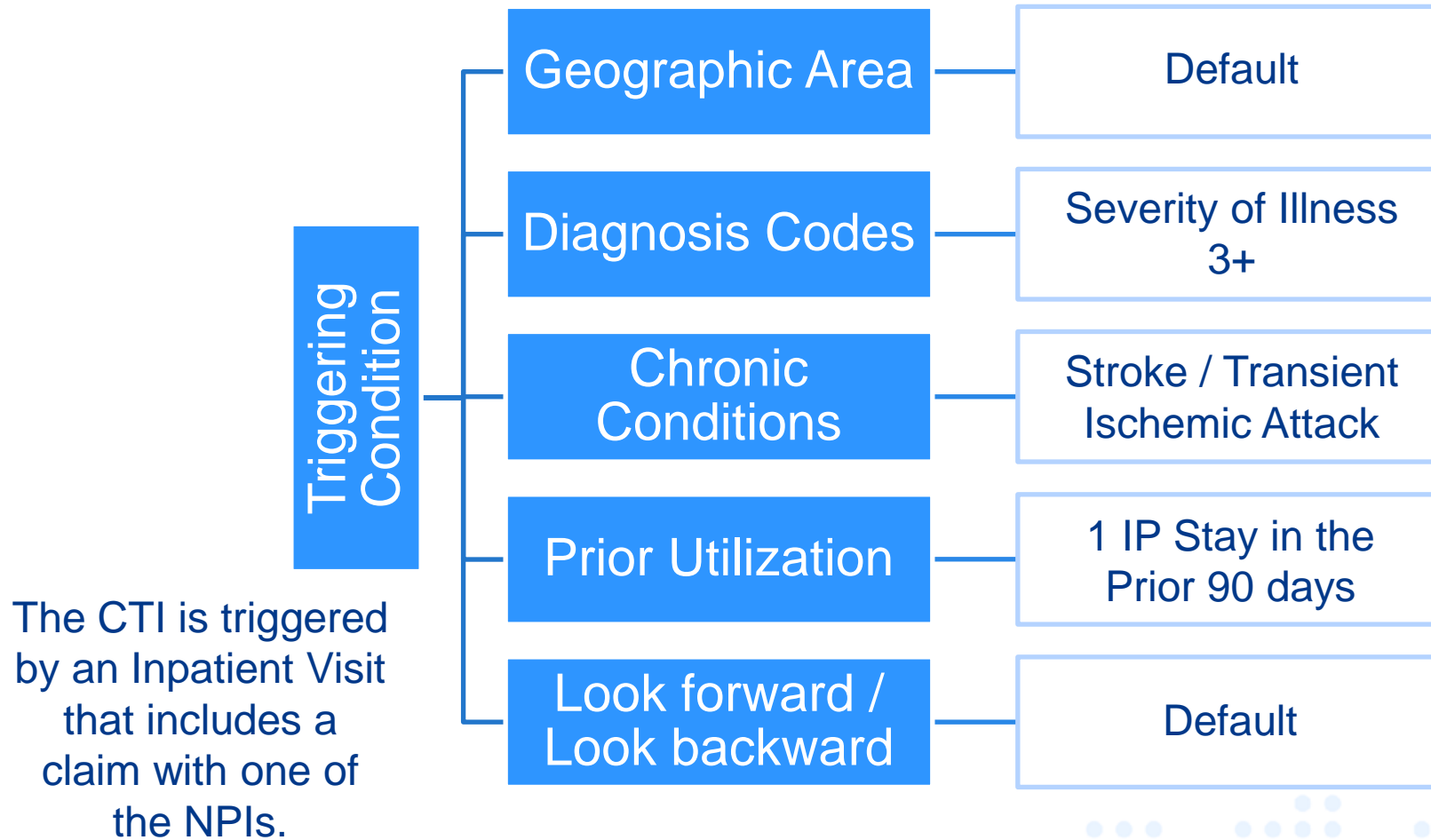
Care Transitions	Emergency Care CTI	Palliative Care CTI	Episodic Primary Care	Panel-Based Primary Care	SNF Based Primary Care	Geographic Primary Care
<ul style="list-style-type: none"><li>Triggered when a beneficiary is discharged from an Acute Care Hospital.</li></ul>	<ul style="list-style-type: none"><li>Triggered with a beneficiary is admitted to the ED.</li><li>Hospitals can choose: A) only ED events leading to a hospitalization; B) only ED events leading to an Inpatient Stay; C) any inpatient visit.</li></ul>	<ul style="list-style-type: none"><li>Triggered when a beneficiary is discharged from an Acute Care Hospital <b>AND</b> the beneficiary had a claim submitted by the listed NPIs.</li><li>Requires the hospital to identify the NPIs.</li></ul>	<ul style="list-style-type: none"><li>Triggered when the beneficiary has a claim with the primary care NPI.</li><li>Requires the hospital to identify the NPIs.</li></ul>	<ul style="list-style-type: none"><li>Triggered when the beneficiary received the plurality of their primary care services <b>over the prior two years</b> from the listed NPIs.</li><li>Requires the hospital to identify the NPIs.</li></ul>	<ul style="list-style-type: none"><li>Triggered when the beneficiary receives a service with the facility NPI.</li><li>Requires the hospital to identify the NPIs.</li></ul>	<ul style="list-style-type: none"><li>Triggered <b>at the start of the year</b> when the beneficiary resides in the zip codes.</li><li>Requires the hospital to identify the zip codes.</li></ul>

## Step 1.B. Identifying Selected CTI Beneficiaries

Hospitals can select a subset of the eligible population by choosing the CTI selection parameters. A beneficiary will be included in the CTI if they meet **both** the triggering condition and the selection parameters.

Age	Service Area	Diagnosis	Chronic Conditions	Prior Utilization	Look Forward / Look Backward
<ul style="list-style-type: none"><li>The hospital may indicate an age range for the included beneficiaries. All beneficiaries outside of this range will be excluded.</li></ul>	<ul style="list-style-type: none"><li>The hospital may submit zip codes as a residency requirement. Only beneficiaries that reside in these zip codes are included.</li></ul>	<ul style="list-style-type: none"><li>The hospital may submit DRGs or ICD diagnosis codes. Only beneficiaries with one of those codes are included.</li></ul>	<ul style="list-style-type: none"><li>The hospital may submit a list of chronic conditions. Only beneficiaries with those conditions will be included.</li></ul>	<ul style="list-style-type: none"><li>The hospital may specify a number of prior hospitalizations. Only beneficiaries that have received that number of hospitalizations will be included.</li></ul>	<ul style="list-style-type: none"><li>The hospital may specify events that happen before or after the triggering event (such as being discharge to a SNF). Only beneficiaries that have those events will be included.</li></ul>

## Step 1.B. Identifying Selected CTI Beneficiaries



This CTI is triggered by an inpatient stay with a SOI of 3 or 4 and a claim with one of the NPIs.

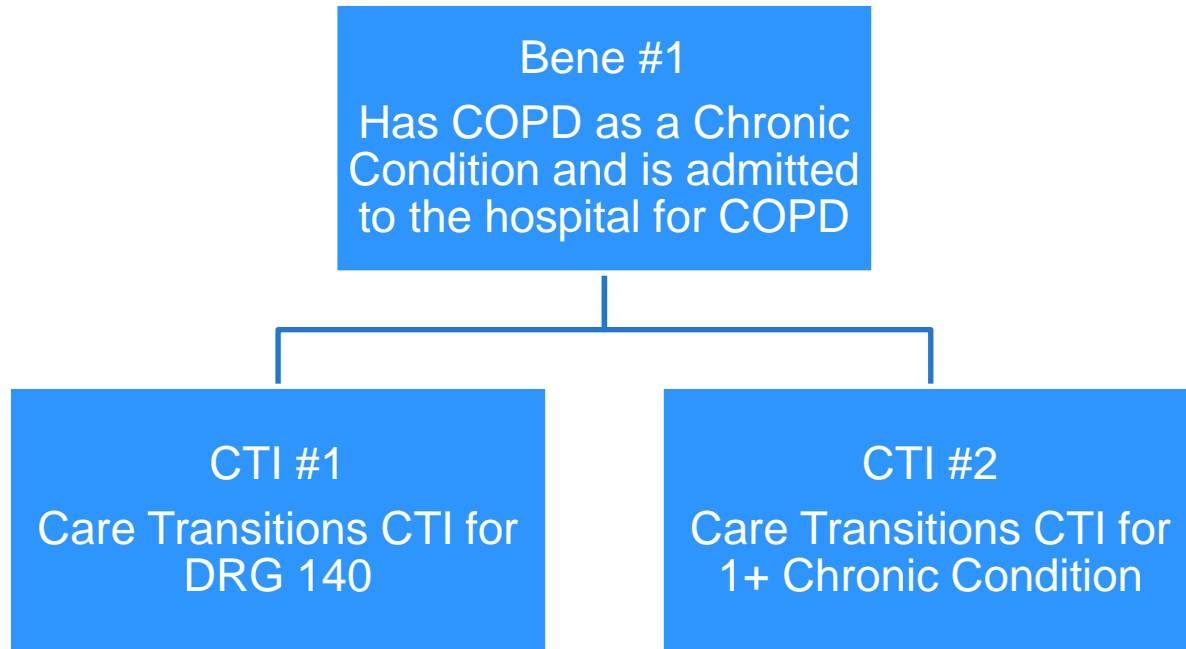
Only beneficiaries with chronic conditions flag for Stroke / Transient Ischemic Attack, and at least one hospitalization in the prior 90 days.

## Step 1.C. Exclude Overlaps

Certain CTI episodes that overlap with another CTI will be excluded. The treatment of the overlaps depends on where and when the CTI is triggered.

- **Definitional Overlaps** – CTI episodes that meet two different triggering conditions **at the same hospital & on the same day** will be assigned to only one of the CTI, depending on the hospital's preferences.
- **Episodic Overlaps** – CTI episodes that meet two different triggering conditions **at the same hospital on different days** will be assigned to the CTI that occurred first.
- **Inter-hospital Overlaps** – **Any CTI that overlaps between two different hospitals will be allowed.** The CTI will be counted towards both hospital's CTI.

## Step 1.C. Exclude Overlaps



This is a case of definitional overlap.

- Both CTI #1 and CTI #2 are triggered by an inpatient stay and the beneficiary meets the selection criteria for both CTI.
- The beneficiary will be attributed to one of the two CTI based on the hospital's preference.
- Hospitals can set a hierarchy for which CTI will be prioritized. E.g. if CTI #1 is prioritized then it will receive the bene and CTI #2 will not.

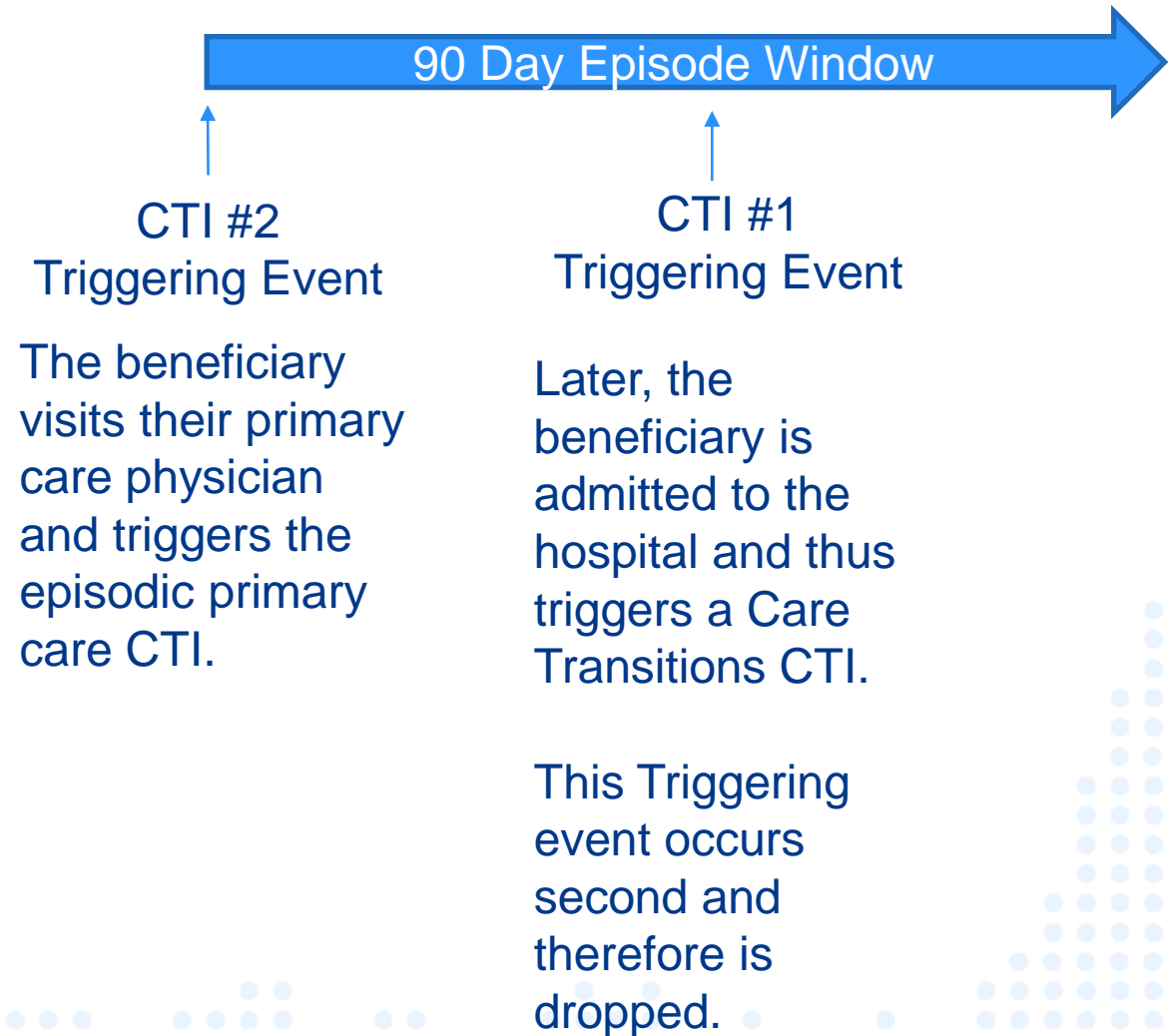
## Step 1.C. Exclude Overlaps

The hospital is participating in two CTIs.

- CTI #1: Care Transitions for any beneficiary with COPD.
- CTI #2: Episodic Primary Care for any beneficiary with COPD.

A beneficiary with a COPD who has both an IP stay and an PCP visit would be eligible for both CTI.

The beneficiary will be attributed to the first CTI that occurs.



## Step 1.D. Determining Baseline Costs

Each beneficiary that is included in the CTI triggers an episode lasting for some number of days after the triggering event. The length of the episode is determined by the hospital.

- All Parts A and B costs that occur within the episode are included in the CTI, except for the noted exclusions.
- Any claim that meets the following condition will be excluded:
  - Part B payments for drugs on the average sales price (ASP) list
  - Blood clotting factor, identified by HCPCS J7199
  - Inpatient claims for hemophilia and clotting factors
  - Pass-through payments for medical devices in OPPS hospital claims
  - Claims that represent per-beneficiary-per-month (PBPM) payments for hospice claims
- Some claims have service dates that last for multiple days.
  - These claims are prorated based the proportion of the claim that falls inside of the episode window.
  - For example, a 60-day SNF claim where 20 of the days fall within the episode window would contribute 33% of the cost to the episode.



# Step 1.D. Determining Baseline Costs

## CTI Report

Participant: All  
 Thematic Area / CTI: 01-001 - Care Transition-Readmission CTI - C...

Baseline Time Period: 2018 - 07

[View population in MADE \(requires PHI access for this facility\)](#)

Participant Hospital  
 Greater Baltimore Medical Center

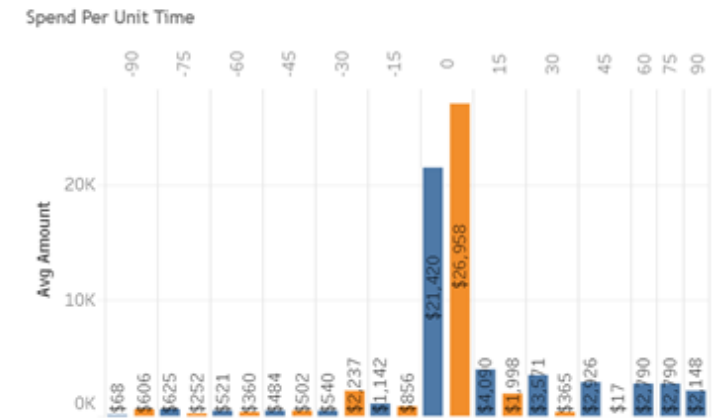
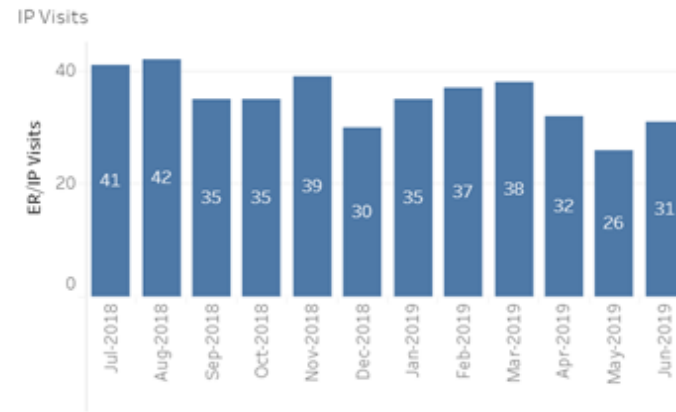
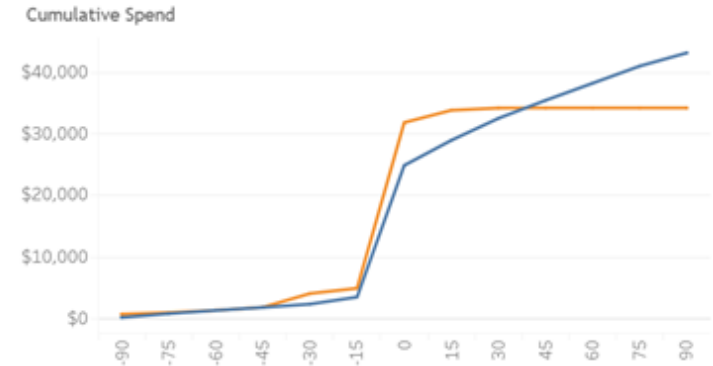
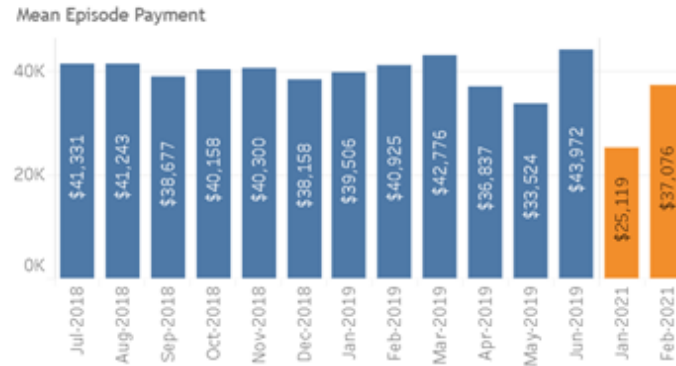
Baseline costs & number of episodes are shown here.

### Beneficiary Summary

	Baseline	Performance
Beneficiaries	897	17
Beneficiary Episodes	1,005	17
Total Payments	\$39,934,699	\$498,764
PMPE	\$39,736	\$29,339

	Baseline	Performance
ER Visits	296	<11
IP Visits	421	

■ Baseline  
 ■ Performance



\* Note that costs are shown in current year dollars after inflation (described in the next step) is applied.

## Step 2. Setting a Target Price

## Step 2.A. Inflation

The baseline costs will be inflated to make them comparable to current year costs. All data in the CTP are shown in current year dollars. The inflation process takes one of two forms:

- Unregulated costs are inflated using the CMS update factors for the appropriate settings. For example, physician costs are increased by the growth rate in the Physician Fee Schedule between the baseline costs and the performance year.
- Regulated costs are inflated using a three-step process:
  - Regulated charges are standardized using standard CMS methodology
  - Standardized charges increased by the HSCRC Annual Update Factors between the baseline and performance period.
  - The updated charges are translated back into actual dollars using the original ratio of actual charges to standardized charges.

The inflation process for the regulated costs is designed to hold hospitals harmless for any price fluctuations caused by utilization changes under the GBR.

\*Note: The inflation update for regulated costs is in progress and note reflected in the CTP. The regular inflation process was used that includes the GBR price effect.

## Step 2.B. Risk Adjustment

All costs in the CTI are adjusted based on the risk of the population. The risk adjustment process involves two steps:

- Regression Analysis
- Risk Adjustment

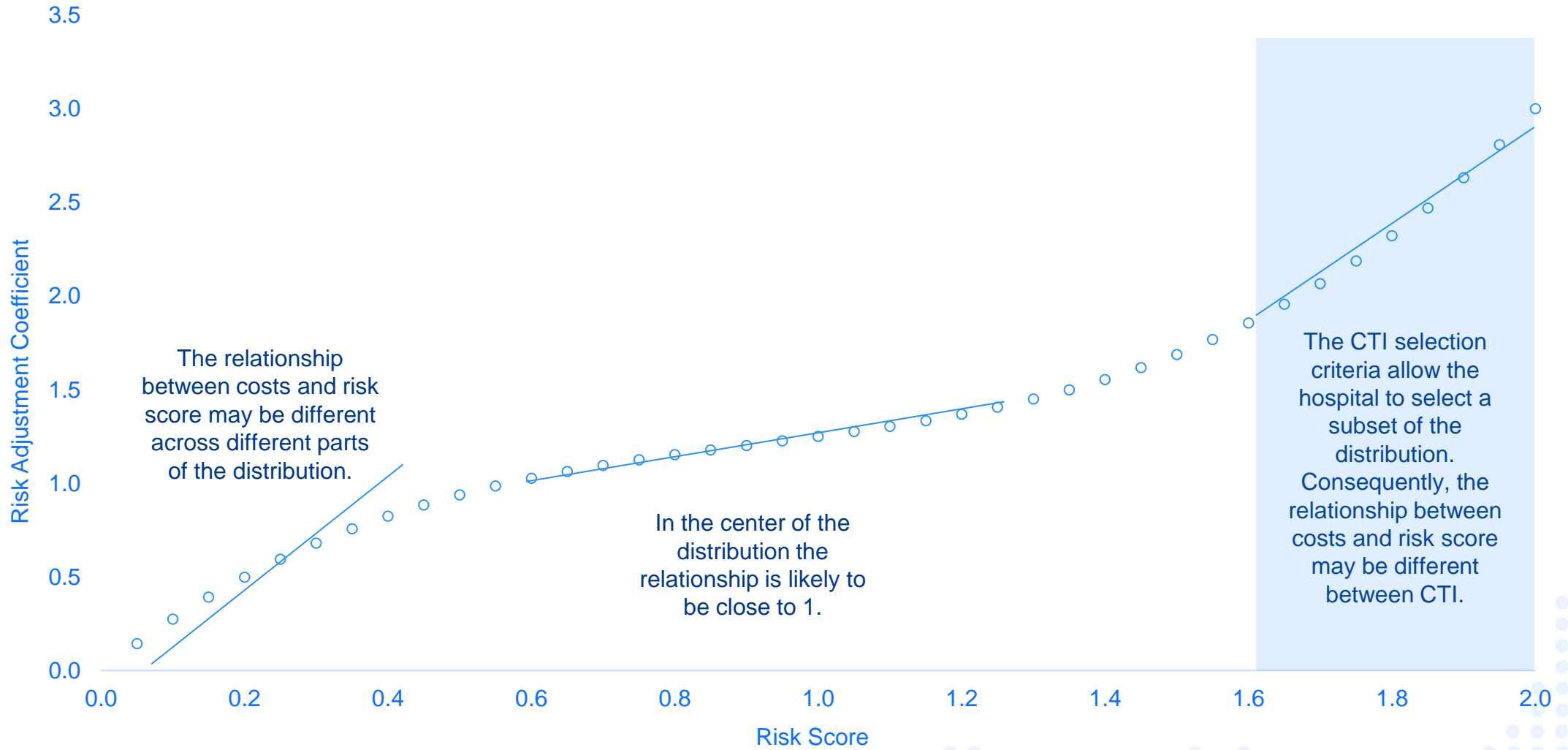
In the regression analysis, we determine the relationship between the CTI episode costs and the risk score.

- This is necessary because the CTI population tends to cluster towards the tails of the risk distribution (see more on the next slide).
- The regression analysis uses the statewide population that meet the selection criteria applied by the hospital for that CTI.

The risk adjustment regression is used to set a preliminary target price for the hospitals CTI:

- The average risk score for the CTI population is multiplied by the coefficient from the regression analysis.
- The preliminary target price is thus equal to hospitals baseline costs restated using the statewide relationship between the CTI episode costs and the risk score.

# Step 2.B. Risk Adjustment



## Step 2.B. Risk Adjustment

The preliminary target price **will change** by the end of the performance period.

- The final target price will be updated based on the final risk score of the CTI population in the performance period.
- The risk score of the population in early months of the performance period may have different risk profiles. Hospitals are encouraged to be cautious about comparing early performance data to the target price.

Convening Entity	Thematic Area	CTI Name	Baseline			Performance				
			Episodes Initiated	Total Payments	Preliminary Target Price	Preliminary Aggregate Target Price	Episodes Initiated	Total Payments	Preliminary Target Price	Preliminary Aggregate Target Price
Greater Baltimore Medical Center	Care Transitions	01-001:Care Transition-Readmission CTI - Chronic Conditions	1,005	\$39,934,699	\$39,555	\$39,753,133	17	\$498,764	\$39,555	\$672,441
Grand Total			1,005	\$39,934,699	\$39,555	\$39,753,133	17	\$498,764	\$39,555	\$672,441

Note: Early performance data will have incomplete claims runoff.

## Step 3. Calculating CTI Savings

# Step 3.A. Comparing the Target Price with Performance Costs

CTI savings will be calculated by comparing the target price with the performance period costs.

- The savings can be calculated by simple subtraction (see the example below).
- Note that the final target price will be restated using the risk score in the performance period population.
- The final target price will not be known until after the performance period is over.

Convening Entity	Thematic Area	CTI Name	Baseline				Performance			
			Episodes Initiated	Total Payments	Preliminary Target Price	Preliminary Aggregate Target Price	Episodes Initiated	Total Payments	Preliminary Target Price	Preliminary Aggregate Target Price
Greater Baltimore Medical Center	Care Transitions	01-001:Care Transition-Readmission CTI - Chronic Conditions	1,005	\$39,934,699	\$39,555	\$39,753,133	17	\$498,764	\$39,555	\$672,441
Grand Total			1,005	\$39,934,699	\$39,555	\$39,753,133	17	\$498,764	\$39,555	\$672,441

Note: Early performance data will have incomplete claims runoff.



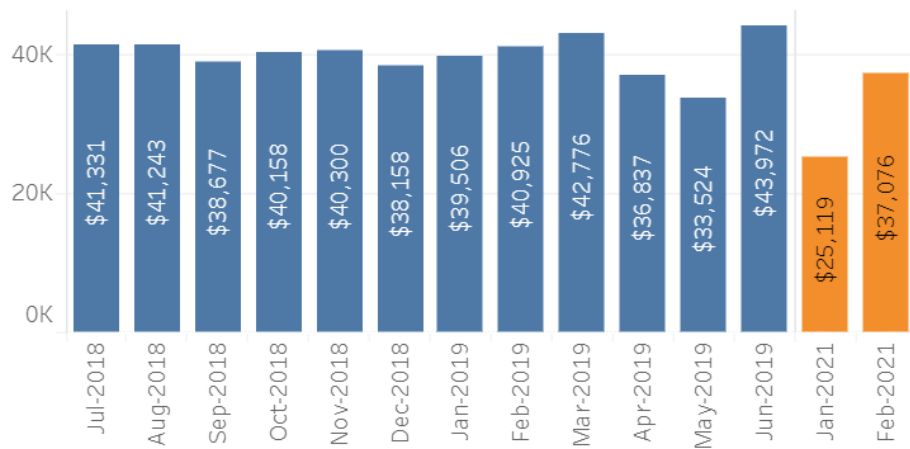
# Step 3.A. Comparing the Target Price with Performance Costs

The data hospitals receive is “real time.” This means that the data hospitals receive is affected by two types of runout:

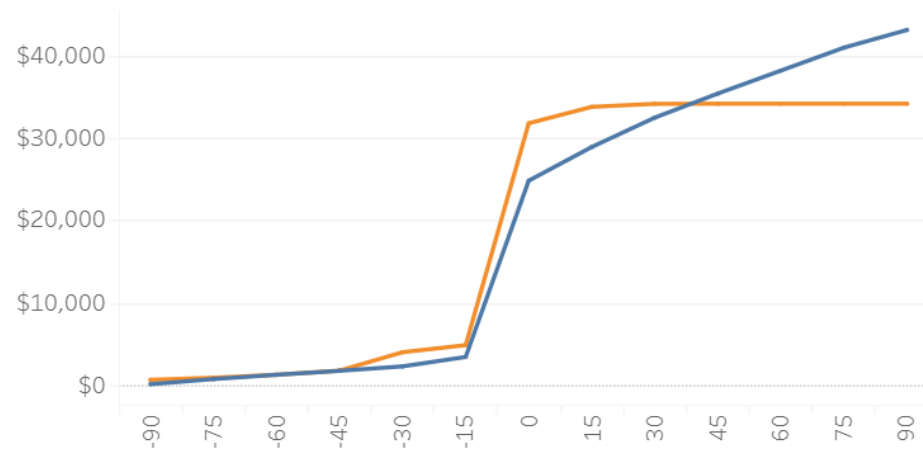
- Episode runout – Hospitals begin receiving data before the episode is over so costs will increase as the episode completes.
- Claims runout – Claims take some time to be submitted and processed. Costs will increase over time as a result.

The CTP will include the option to view only completed episodes / view all episodes. This will be added once there are completed episodes.

Mean Episode Payment



Cumulative Spend



This chart shows time since the episode triggering event. The line is flat there is no data that far beyond the triggering event.

## Step 3.B. Minimum Savings Rate

In order to receive a CTI payment, the hospital's CTI savings must be greater than the minimum savings rate.

- The CTI savings percentage are equal to the performance period costs / final target price.
- The minimum savings rate is based on the number of episodes in the CTI.
- The CTI savings differ based for hospital-based CTI versus all other CTI.

Minimum Savings Rate	Setting Specific CTI	Community Triggered CTI
1.0	> 8977	> 19655
1.5	3991 - 8977	8736 - 19655
2.0	2246 - 3990	4916 - 8735
2.5	1441 - 2245	3146 - 4915
3.0	1001 - 1440	1286 - 3145
3.5	731 - 1000	1606 - 2185
4.0	561 - 730	1231 - 1605
4.5	441 - 560	971 - 1230
5.0	361 - 440	791 - 970
5.5	301 - 360	651 - 790
6.0	251 - 300	551 - 650
6.5	210 - 250	466 - 550
7.0	181 - 210	401 - 465
7.5	161 - 180	351 - 400
8.0	141 - 160	311 - 350
8.5	126 - 140	270 - 310
9.0	111 - 125	246 - 270
9.5	101 - 110	221 - 245
10.0	91 - 100	201 - 220
15.0	< 90	< 200

## Step 3.B. Minimum Savings Rate

The minimum savings rate for the CTIs will be evaluated sequentially using the following algorithm:

1. CTI will be ranked according to how much they exceeded the required savings
2. Starting from the highest saving CTI:
  1. The total savings will be added together and compared to the sum of the required savings
  2. If the total savings exceeds the total required savings, then another CTI will be added
  3. If not, the hospital earns the total savings from all the combined CTI

This allows the savings from one CTI to roll over to another CTI. In other words, a CTI that ‘saved big’ can boast a CTI that barely missed the minimum savings rate.

## Step 3.B. Minimum Savings Rate

CTI	# Episodes	TCOC	MSR	Required Savings	Actual Savings	Difference	Cumulative TCOC	Required Savings	Cumulative Savings
CTI #3	275	\$6,300,000	6.0%	\$378,000	\$485,000	\$107,000	\$6,300,000	\$378,000	\$485,000
CTI #6	315	\$600,000	5.5%	\$33,000	\$35,000	\$2,000	\$6,900,000	\$411,000	\$520,000
CTI #1	260	\$5,000,000	6.0%	\$300,000	\$292,000	-\$8,000	\$11,900,000	\$711,000	\$812,000
CTI #4	500	\$10,500,000	4.5%	\$472,500	\$375,000	-\$97,500	\$22,400,000	\$1,183,500	\$1,187,000
CTI #5	260	\$3,000,000	6.0%	\$180,000	\$50,000	-\$130,000	\$25,400,000	\$1,363,500	\$1,237,000
CTI #2	400	\$9,800,000	5.0%	\$490,000	-\$200,000	-\$690,000			

## Step 3.C. Determining the Statewide Offset

Hospitals will earn an adjustment to their MPA based on their performance relative to their peers.

- Hospitals earn savings equal to the amount by which their CTI performance exceeds the MSR.
- The sum of statewide CTI savings will be multiplied by the hospital's share of statewide hospital revenue.
- Hospitals earn the net of the two adjustments.

Example: Hospital A is 10% of the overall hospital revenue. It earns \$12 million in CTI savings. Statewide savings are \$100 million. Hospital A earns an MPA adjustment equal to  $\$12 \text{ million} - \$10 \text{ million} = \$2 \text{ million}$ .

# Step 3.C. Determining the Statewide Offset

All performance data is released in real time through the CTP.

- Hospitals can track how each other are doing in order to assess the excepted magnitude of the statewide offset.
- Caveats about the claims runout and final target prices apply.

State Summary

Convening Entity	Thematic Area	CTI Name	Baseline				Performance			
			Episodes Initiated	Total Payments	Preliminary Target Price	Preliminary Aggregate Target Price	Episodes Initiated	Total Payments	Preliminary Target Price	Preliminary Aggregate Target Price
Adventist Shady Grove Hospital	Care Transitions	01-015:60-day Post-Acute TCOC Population Discharged to Home	2,169	\$21,124,402	\$9,539	\$20,689,049	303	\$1,687,305	\$9,539	\$2,890,171
	Palliative Care	02-003:Improved Management of Chronic Pain	107	\$3,566,582	\$31,946	\$3,418,260	12	\$501,004	\$31,946	\$383,356
Adventist White Oak Hospital	Care Transitions	01-015:60-day Post-Acute TCOC Population Discharged to Home	1,216	\$13,009,677	\$10,436	\$12,689,800	360	\$1,918,089	\$10,436	\$3,756,849
	Palliative Care	02-003:Improved Management of Chronic Pain	43	\$1,565,146	\$35,051	\$1,507,195	12	\$253,013	\$35,051	\$420,612
Ascension Saint Agnes Hospital	Care Transitions	01-055:SAH Transitional Care Management	114	\$5,111,131	\$43,539	\$4,963,471	<11	\$129,143	\$43,539	\$130,618
	Palliative Care	02-023:Palliative Care Program	635	\$30,870,581	\$47,480	\$30,150,030	76	\$2,422,661	\$47,480	\$3,608,508

## Step 3.C. Determining the Statewide Offset

Hospitals can estimate their performance relative to the statewide average.

- Hospitals can sum the difference between the target price and the actual costs for every hospital in the state.
- The preliminary offset is equal to the state total time their hospital revenue share.

Staff ran a retrospective analysis of the CTI in 2019.

- This analysis used the hospitals episodic (non-panel CTI) that were submitted in the fall of 2020.
- The analysis compared the 2019 target prices to the costs that the hospitals incurred in 2019.
- The total magnitude of savings in excess of the MSR was approximately \$120 mil.



# Next Steps

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# Upcoming CT Steering Committee Meetings

- Staff may cancel the June Steering Committee Meeting in order to focus on administrative issues finalizing the CTI definitions.
- July CT Steering Committee – We will discuss options for two potential modifications for the base CTI methodology:
  - Options for setting a target price that does not rely on a baseline period
  - Options for setting a target price that does not require a NPI in the baseline period
- August CT Steering Committee – We will begin discussing new CTI proposals from hospitals.