



maryland
health services
cost review commission

Total Cost of Care Workgroup Meeting

November 2023

Agenda

1. Administrative Update
2. Update on Population Health Measure
3. Review of MPA Recommendation
4. Review of Data on CTI Beneficiary Selection



Administrative Update

Changes to Management Structure/ MPA Update

- Welcome to Christa Speicher – Deputy Director
- MPA calculations for MPA-SC Reversal and Standard 1/1 MPA update were distributed with these materials
 - MPA-SC reversal is currently scheduled to be implemented 12/15. Final approval from CMS is still pending as of 11/22/23
 - January 1, 2023 includes standard updates and reset of MPA-SC to zero.

Update on Population Health Measure

Introduction

- CMMI required staff to include in the MPA one or more measures to enhance hospital accountability for population health progress
- During a series of subgroup meetings in CY22, staff proposed assessing population diabetes screening and/or DPP participation
- MHA and others had concerns regarding attribution
- Staff and some workgroup participants developed an approach to incentivizing diabetes screening for ED patients
- JHHS/MedStar/UMMS recommended focusing measure on inpatients due to concerns about ED throughput, follow-up

Current Status

- HSCRC implemented IP monitoring program beginning in April 2023
- Staff will put forward a potential payment policy in December for inclusion in MPA
- Two options:
 - Include IP diabetes screening in MPA
 - Include PQI performance as currently measured in MPA

Background

- More than 8 million people in the United States were estimated to have undiagnosed Type 2 diabetes in 2019
 - 23% of U.S. adults living with diabetes
 - 3.4% of all adults in the United States
 - Prevalence of undiagnosed diabetes for those with IP stay in previous year is 10% higher than in non-IP population
- Late diagnosis of diabetes results in 2x higher mortality

Prior Screening Efforts

- Program modelled on successful development of opportunistic HIV screening policies
- Running since 1980s
- Based on CDC recommendation to screen inpatients in areas with elevated HIV seroprevalence, including inpatient services
- By design, screening is not intended to address the clinical need related to patient's admitting diagnosis
- The visit is an opportunity to screen patients who meet general population screening requirements and might not otherwise have an opportunity to be screened

Why Maryland Needs an Inpatient Diabetes Policy

- American Diabetes Association (ADA) guidelines call for testing inpatients with a prior diagnosis of diabetes if they have not been tested in the prior three months
- MD hospitals fail to test more than half of eligible Medicare inpatients
 - Staff suspects test rate is even lower in younger patients
 - There is a significant quality gap in inpatient diabetes testing
- ADA guidelines specify screening for those >34 and no prior diagnosis every three years
- Only half of Americans are screened in accordance with this guideline
- Using the hospital inpatient stay as an opportunity to close the screening gap could significantly reduce prevalence of undiagnosed diabetes (more on this later)

IP Screening Has Strong Track Record

Mass General: ~700 inpatients with no prior T2DM were screened. 18% had probable diabetes.

“Screening with HbA1c levels at the time of admission to an acute care hospital may represent an opportunity to identify a high-risk group of patients with unrecognized diabetes and, if coupled with effective follow-up, to promote prevention of subsequent diabetes-related complications.”

Wexler, Deborah J., et al. "Prevalence of elevated hemoglobin A1c among patients admitted to the hospital without a diagnosis of diabetes." *The Journal of Clinical Endocrinology & Metabolism* 93.11 (2008): 4238-4244.

IP Screening Has Strong Track Record

Jacobi Medical Center (public hospital, Bronx, NY): screened ~1,000 inpatients with no prior T2DM diagnosis. 24% had A1c \geq 6.5.

“Our study supports the hypothesis that HbA1c testing on the in-patient service of a public hospital in a high-risk community can help to identify patients at risk for diabetes”

Mazurek, Jeremy A., et al. "Prevalence of hemoglobin A1c greater than 6.5% and 7.0% among hospitalized patients without known diagnosis of diabetes at an urban inner city hospital." *The Journal of Clinical Endocrinology & Metabolism* 95.3 (2010): 1344-1348.

IP Screening Has Strong Track Record

Tertiary care hospital in Ottawa screened ~500 patients admitted for heart treatment or joint replacement. 10% of those with no history of diabetes had dysglycemia.

“Undiagnosed [dysglycemia] in hospitalized patients has been well documented in the literature as a common inpatient problem that is associated with poor inpatient outcomes. [Screening] affords the possibility of early diagnosis of [dysglycemia] and application of risk-reduction strategies in previously unscreened high-risk individuals.”

Malcolm, Janine C., et al. "Implementation of a screening program to detect previously undiagnosed dysglycemia in hospitalized patients." Canadian journal of diabetes 38.2 (2014): 79-84.

IP Screening Has Strong Track Record

Tertiary care hospital in Melbourne, Australia screened 5,082 adults ≥ 54 , identified 5% with undiagnosed diabetes.⁴

“Routine inpatient HbA1c testing to measure glycaemic status utilises a currently missed opportunity to identify patients with newly diagnosed diabetes and poor glycemic control. We demonstrate a feasible method of conducting such an initiative, utilising electronic health infrastructure to identify patients at greatest risk for prioritisation for review.”

Ekinci, E.I. et al. (2017) ‘Using Automated HbA1c Testing to Detect Diabetes Mellitus in Orthopedic Inpatients and Its Effect on Outcomes’, PloS one, 12(1), p. e0168471.

HSCRC Screening Policy Supported by ADA



“This policy is important because making the diagnosis earlier is critical for early treatment, preventing prediabetes from progressing to a diabetes diagnosis, reducing associated damaging and sometimes fatal conditions, and lowering the cost of care and undue burden diabetes places on those affected and their families.”

“We support the Commission’s efforts to increase access to diabetes screening in concordance with ADA screening guidelines, and are confident this policy will result in reduced prevalence of undiagnosed diabetes.”

Measuring Potential Impact in Maryland

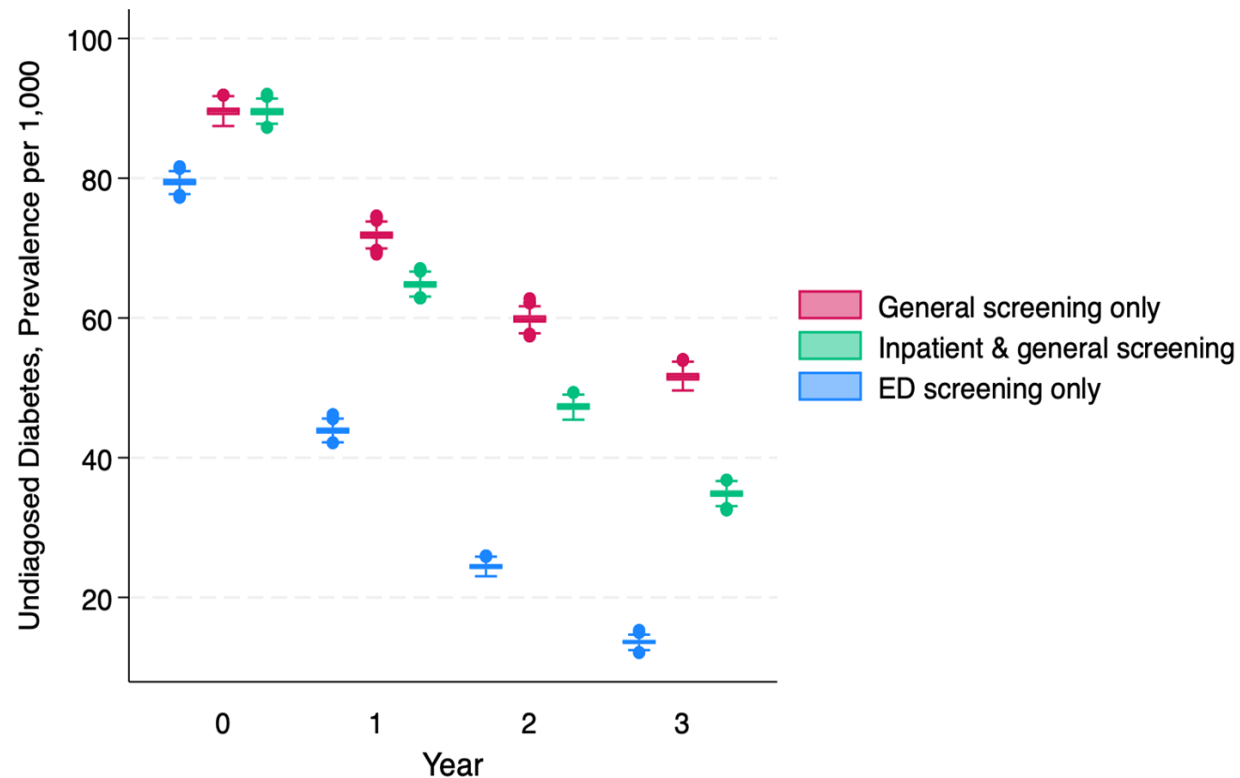
- Staff developed a simulation model that included the entire population of a representative hospital service area in Maryland.
- The model accounted for the probability of residents visiting the hospital, the chance that they would meet diabetes screening criteria, and the chance that they would have undiagnosed diabetes.

Data derived from CDC National Health And Nutrition Examination Survey

- Compared changes over three years in the prevalence of undiagnosed diabetes under three screening approaches:
 - Current situation (outpatient screening in general population)
 - Inpatient screening
 - ED screening

Policy Could Significantly Reduce Undiagnosed Diabetes

A statewide inpatient screening policy would yield a reduction in prevalence of undiagnosed diabetes of 32.5% over three years



Inpatient Screening is Effacious

- Test efficacy can be measured by calculating the number of subjects screened to yield one positive test result
- Number needed to test for:
 - Opportunistic HIV screening: 670
 - Mammography in women over 50: 540
 - Pap smear :1,100
- Estimated number needed to test to identify one person with undiagnosed diabetes: 8.96.
- Number needed to test to identify one patient requiring intervention (undiagnosed/uncontrolled diabetes, prediabetes): 3.19

Results of Monitoring Program

- Beginning in April 2023, staff received access to hospital lab feed data from CRISP
- Beginning in July 2023, staff began providing hospital-level data on A1c screening prevalence through the CRISP portal
- For the 12 months ending Aug. 31, screening prevalence ranged from 5% to 35% across Maryland hospitals
- Data quality checks demonstrated no issues with lab feeds
- Stakeholders reported no concerns to HSCRC regarding data quality or usability of CRISP reporting

Draft Measure Specification

- Denominator: Inpatient claims with a discharge date in the performance period
 - Exclusions: <35 years old, died in hospital, transferred, AMA, tested < 3 months ago (diabetics) / 3 years ago (others)
- Numerator: Claims in the denominator with an A1c lab result in the CRISP hospital lab feed
 - Lab service data occurs on or after admit date and on or prior to discharge date
 - Lab and IP data matched on CRISP EID, hospital ID

Data Challenged Around Patient Eligibility

- Hospitals currently do not have a way to convey whether a patient was ineligible for screening due to a recent test
- Staff expects to begin requiring hospitals to submit this information via casemix in the near future
- Prior to that point, staff will provide interim performance reporting as follows:
 - Using existing all-setting claims data (APCD or Medicare), calculate proportion of patients in screening population that were ineligible because of recent test
 - Multiply that proportion by the hospital denominator to derive an adjusted denominator. Calculate performance by dividing the numerator by the adjusted denominator

Potential Draft Recommendation for RY26 Policy

- Establish the threshold for performance reward at 40% screening prevalence, and the benchmark at 70%. Reward hospitals for screening prevalence as follows:
 - CY24 screening rate of 40-55%: 0.1% of inpatient revenue
 - CY24 screening rate of 56-70%: 0.2% of inpatient revenue
 - Payment based on cost estimates for test/counseling
- Develop reporting on follow up for those testing positive
- Ensure the screening program does not further existing disparities in diabetes detection and treatment
 - Monitor screening prevalence by race, payer, gender, Area Deprivation Index, and age group
- Ensure screening is efficacious
 - Monitor number needed to test

Next Steps

- Final recommendations for RY 2026 QBR will be presented at December Commission meeting
- RY 2026 MHAC draft recommendations will be presented at December Commission Meeting
- December and January PMWG will focus on RY 2026 RRIP
- Diabetes screening and Multi-Visit ED policy will be presented at December Commission Meeting

Review of MPA Recommendation

Draft Released to Workgroup 11/17/23
Final Comments to Staff due by 12/1/23

Recap of Proposal - MPA Revenue At Risk

- Increase revenue at risk to 2%
 - In its 2023 MPA Approval Letter, CMS indicated that it expected the State to increase the Revenue at Risk under the MPA in 2024.
 - Staff believe that CMS expects an increasing the revenue at risk to at least 2% of Medicare revenue in 2024 and potentially further increases in the future.
 - The expectation that the State shift to 2% was cited in CMS' letter waiving the need for a corrective action plan based on 2022 guardrail miss.
 - Increasing the revenue at risk to 2% would double the revenue at risk under the traditional portion of the MPA.
 - The MPA has a 33% marginal savings rate. This means that in order to realize the maximum revenue at risk, a hospital would have to exceed the national growth rate by 6 percentage points.
 - Staff believe that increasing the revenue at risk is reasonable but will propose to re-institute the CTI buy out at the same time.
- Add Population Health Measure with weight of 4% of bonus/penalty
 - Consistent with prior recommendation
 - Quality values are doubled so total quality risk to 16% of penalty/bonus (total risk = $\pm 2.32\%$)

Population Health Quality Calculation

TCOC results x 1/3 (capped at 2% of Medicare revenue) x (1 + 2 x (RRIP + MHAC Reward/Penalty + Population Health Quality Measure) where the Population Health Quality Measure is scaled to generate a result of ±4%.

Proposed Scaling

- All Payer Reward = 2% = +4% MPA
- All Payer Reward = 1% = +2% MPA
- All Payer Penalty (established for MPA policy only) = -1% = -2% MPA

Recap of Proposal - Revisions to CTI Program

- Cap downside risk at 2.5%
 - Consistent with MPA the quality adjustment would be applied after the cap.
 - Spread impact across all hospitals in order to maintain revenue neutrality
 - Effective impact would be max risk before quality at slightly over 2.5% (as hospital at max loss of 2.5% would receive allocation of the offset)
 - Reduce total risk with MPA by re-introducing CTI Buy Out
- Reintroduce CTI Buy Out
 - Under prior buy out a hospital's MPA risk was reduced based on the ratio of CTI impacted beneficiaries to total MPA attributed beneficiaries
 - Recognizes hospital's greater ability to impact CTI populations
 - Combined with higher MPA at risk it focuses relief on hospitals pursuing Care Transformation through CTI while leaving inactive hospitals fully exposed.
 - CMS previously did not sign off on the CTI buy out
 - Combination of high MPA exposure and data on actual CTI risk may help reverse that decision.
 - If CMS does not change their position, HSCRC would eliminate the provision of the MPA policy, no other changes would be made.

Adjusted to 2.5% CTI Downside Risk Cap

CTI Penalties by % for CTI Y1

%	% of hospital below X%
-1.0%	48.8%
-1.5%	27.9%
-2.0%	20.9%
-2.5%	7.0%
-3.0%	2.3%

Cap interpretation:

- A cap of -3.0% would equate to a hospital with no CTI savings reaching the maximum penalty at a statewide gross CTI savings of \$150 M, based on Statewide hospital spending of \$5.0 Bn.
- Any excess would be redistributed across all hospitals to achieve neutrality, resulting in a practical cap slightly above 3%
- Prior complete calendar year is used in setting the actual amount.

- Lowered from 3% in prior proposal
- Staff believes a maximum of 2.5% may be appropriate shielding the bottom 7% of hospitals in 2023
- Maximum could be revisited after Y2 data is complete and does not have to be fixed for all future years at this time

Arguments in Support of CTI-Buy Out

- MPA and CTI attributions are complementary in practice – examples?
- Rewards and penalties under CTIs are now quantified and material.
 - For the first completed CTI period (Fiscal Year 2022) the \$130 Million of scored savings resulted in \$56 Million being shifted from hospitals with negative results to those with positive results.
 - In comparison total penalties of \$42 Million were levied under the Traditional MPA for Calendar Year 2022.
- When compared to all Maryland Medicare Part A+B beneficiaries, beneficiaries attributed under active CTIs compared are statistically similar across multiple equity-related metrics
- Total cost of care risk across CTIs and traditional MPA is well above historic levels (see later slides)

TCOC Risk Exposure (Assuming Maximum buy-out)

	Integrated Efficiency	MPA	CTI's
Evaluation	50% ICC, 25% Medicare TCOC Assessment, 25% Commercial TCOC Assessment	Cumulative TCOC Growth compared to TCOC Target that accounts for historical TCOC effectiveness	Attributed TCOC compared to historical TCOC updated for inflation.
One-time or Permanent	Permanent	One-time	One-time
Potential At-Risk (%)	~75% of Inflation in Update Factor	2% of Medicare Revenue, less CTI buy-out (assume 100%)	Share of Statewide CTI Savings less Hospital-specific savings, capped at 2.5%
Potential At-Risk Assuming Average GBR Size of \$300M (\$)	\$300M X 3% UF X 75% Reduction from IE = \$6.75M	\$300M X 33% Med FFS Share X 2% MPA Reduction X 100% buyout = \$0	\$300M X 33% Med FFS Share x 2.5% = \$2.5M
Requirements to Have Potential At-Risk = Realized At Risk	Assuming hospital had worst TCOC performance in the State, it would also need to be at least worse than 20th percentile of ICC performance (rank of 35 out of 43)	The hospital must exceed its Medicare TCOC Target by 6%.	The hospital must have produced no savings in any CTI and the State must have produced at least 3% average.

\$9.25M Total Potential All-Payer Revenue At-Risk is equivalent to 3.1%

TCOC Risk Exposure (Assuming 50% buy-out)

	Integrated Efficiency	MPA	CTI's
Evaluation	50% ICC, 25% Medicare TCOC Assessment, 25% Commercial TCOC Assessment	Cumulative TCOC Growth compared to TCOC Target that accounts for historical TCOC effectiveness	Attributed TCOC compared to historical TCOC updated for inflation.
One-time or Permanent	Permanent	One-time	One-time
Potential At-Risk (%)	~75% of Inflation in Update Factor	2% of Medicare Revenue, less CTI buy-out (assume 50%)	Share of Statewide CTI Savings less Hospital-specific savings, capped at 2.5%
Potential At-Risk Assuming Average GBR Size of \$300M (\$)	\$300M X 3% UF X 75% Reduction from IE = \$6.75M	\$300M X 33% Med FFS Share X 2% MPA Reduction X 50% buyout = \$1M	\$300M X 33% Med FFS Share x 2.5% = \$2.5M
Requirements to Have Potential At-Risk = Realized At Risk	Assuming hospital had worst TCOC performance in the State, it would also need to be at least worse than 20th percentile of ICC performance (rank of 35 out of 43)	The hospital must exceed its Medicare TCOC Target by 6%.	The hospital must have produced no savings in any CTI and the State must have produced at least 3% average.

\$10.25M Total Potential All-Payer Revenue At-Risk is equivalent to 3.4%

Review of Data on CTI Beneficiary Selection

Assessing the Representation of Underserved Populations in CTI

Research Question and Methods

- **Primary Research Question:** Are episodes attributed to the CTI initiatives representative of underserved populations receiving the same type of care?
 - We identified beneficiary- and geographic-level factors to identify populations currently or historically underserved
 - Identified population distributions at three levels:
 - All fee-for-service (FFS) beneficiaries in Maryland
 - MD FFS beneficiaries receiving the type of care covered by CTI (e.g., all beneficiaries receiving a lower-extremity joint replacement)
 - MD FFS beneficiaries attributed to CTI
 - CTIs are stratified by thematic area

Data

- PY2 CTI participants
- Baseline data
 - CTI results are based on baseline data (FY17–FY19)
 - Statewide CTI episodes not available for performance years
- CCLF data limited to beneficiaries with at least one month of residence in Maryland during year
- Geographic flags limited to beneficiaries whose listed address was in Maryland

Variables

Population	Definition/Source
Beneficiary-level	
<ul style="list-style-type: none"> Black or African American Hispanic Asian/Pacific Islander; American Indian/Alaska Native; Other/Unknown 	<ul style="list-style-type: none"> RTI Race Code from Medicare enrollment data
<ul style="list-style-type: none"> Dual Medicaid eligibility 	<ul style="list-style-type: none"> At least one month of dual eligibility in FY based on Medicare enrollment data
<ul style="list-style-type: none"> Originally qualified for Medicare due to disability 	<ul style="list-style-type: none"> Original reason for entitlement due to disability as listed in Medicare enrollment data
Geographic-level	
<ul style="list-style-type: none"> Rural^[a], ^[b] 	<ul style="list-style-type: none"> Resides in rural census tract or county as designated by Federal Office of Rural Health Policy
<ul style="list-style-type: none"> High Neighborhood Deprivation 	<ul style="list-style-type: none"> Area Deprivation Index (ADI) of beneficiary's census block in top quintile in state based on ADI data in CCLF extract
<ul style="list-style-type: none"> Primary Care Health Professional Shortage Area (HPSA)^[a] 	<ul style="list-style-type: none"> Resides in 5-digit ZIP Code designated a HPSA based on CMS physician payment data

^[a] Roughly 2.4% of beneficiaries with Maryland residency in the last year did not have a current Maryland address listed and were excluded from assessment of geographic measures.

^[b] Roughly 7.0% of beneficiaries with a current Maryland address could not be linked to Census tracts and were excluded from assessment of rurality.

CTI Thematic Areas

Thematic Area	Description
Care Transitions	<ul style="list-style-type: none"> Interventions focusing on transitional care management (e.g., home assessments, hospital screenings, discharge coordination, telehealth transition services).
Palliative Care	<ul style="list-style-type: none"> Interventions to manage and direct the care of chronic pain patients (e.g., advanced care planning, goals of care discussion, and coordination with home health, hospice, and SNFs).
Primary Care (Episode- or Panel-Based)	<ul style="list-style-type: none"> Interventions to improve primary care services (e.g., clinics established at primary care practices to deploy wraparound services, completion of social, behavioral, and home safety assessments, referrals to community resources).
Community-Based Care ("PAC Touch" or "Geographic")	<ul style="list-style-type: none"> Interventions targeting the broader health community (e.g., health coaches assigned to senior living buildings, care coordination for patients transitioning to or from SNFs/ALFs).
Emergency Care	<ul style="list-style-type: none"> Interventions to improve access to clinical and social services for users of the emergency department (e.g., deployment of community-based teams, nurse home visits, connection to resources to address SDOH).

Results - Representativeness of CTI Episodes Relative to all Maryland Fee-For-Service Beneficiaries, Stratified by Thematic Area

- Representation of all CTI-qualifying episodes relative to statewide FFS beneficiaries.
- CTI episodes appropriately represent the historically underserved populations we analyzed, and may over-represent those with dual eligibility

CTI Thematic Area	Care Transitions, Emergency Care, Palliative Care			Community Care			Primary Care		
	Population	Statewide	MSD	Population	Statewide	MSD	Population	Statewide	MSD
N	1,114,872	1,772,089	cti	1,114,872	2,281,973	-	1,114,872	12,666,191	-
Black or African American	26.7%	26.5%	-0.004	26.7%	26.5%	-0.005	26.7%	26.5%	-0.006
Hispanic	1.3%	1.3%	0.004	1.3%	1.3%	0.003	1.3%	1.3%	0.002
Asian/Pacific Islander, American Indian/Alaska Native, Other/Unknown	7.6%	7.3%	-0.014	7.6%	7.4%	-0.009	7.6%	7.5%	-0.007
Dual Medicaid Eligibility	15.3%	26.8%	0.275	15.3%	24.6%	0.225	15.3%	15.2%	-0.005
Disabled	19.1%	19.5%	0.010	19.1%	19.4%	0.008	19.1%	19.3%	0.006
High-Deprivation Neighborhood	12.9%	17.1%	0.116	12.9%	13.7%	0.024	12.9%	13.2%	0.010
Rural Census Tract	6.0%	6.9%	0.034	6.0%	7.2%	0.046	6.0%	7.2%	0.046
Health Professional Shortage area	2.1%	2.3%	0.008	2.1%	2.0%	-0.013	2.1%	1.6%	-0.040

Results - Representativeness of Attributed CTI Episodes Relative to Unattributed CTI Episodes, Stratified by Thematic Area

- Representation of attributed CTI episodes relative to un-attributed, stratified by thematic area
 - Few notable differences
 - Rural beneficiaries under-represented by primary care and community-based care CTIs
 - Beneficiaries in high-deprivation neighborhoods over-represented in community-based care CTIs, and under-represented among the care transitions, emergency, and palliative care CTIs.

CTI Thematic Area	Care Transitions, Emergency Care, Palliative Care			Community Care			Primary Care		
	Attributed	Unattributed	MSD	Attributed	Unattributed	MSD	Attributed	Unattributed	MSD
Population									
N	48,161	1,723,928	-	85,193	2,196,780	-	212,003	12,454,188	-
Black or African American	26.6%	26.5%	0.001	26.7%	26.5%	0.004	26.3%	26.5%	-0.004
Hispanic	1.3%	1.3%	0.005	1.3%	1.3%	-0.002	1.2%	1.3%	-0.002
Asian/Pacific Islander, American Indian/Alaska Native, Other/Unknown	7.0%	7.3%	-0.011	7.4%	7.4%	-0.001	7.5%	7.5%	0.003
Dual Medicaid Eligibility	27.3%	26.8%	0.012	28.6%	24.4%	0.097	15.3%	15.2%	0.004
Disabled	19.7%	19.5%	0.006	19.6%	19.4%	0.006	19.2%	19.4%	-0.004
High-Deprivation Neighborhood	11.2%	17.2%	-0.159	18.6%	13.5%	0.149	10.5%	13.2%	-0.080
Rural Census Tract	7.4%	6.8%	0.022	0.3%	7.5%	-0.278	3.9%	7.3%	-0.131
Health Professional Shortage area	1.9%	2.3%	-0.023	8.1%	1.7%	0.464	1.6%	1.6%	-0.005

Results - Representativeness of Attributed CTI Episodes Relative to Unattributed CTI Episodes, Pooled Across Thematic Areas

CTI Thematic Area	All Potential CTI Episodes			
	Population	Attributed	Unattributed	MSD
N	345,357	16,374,896	-	-
Black or African American	26.4%	26.5%	-0.001	-0.001
Hispanic	1.3%	1.3%	-0.001	-0.001
Asian/Pacific Islander, American Indian/Alaska Native, Other/Unknown	7.4%	7.4%	0.000	0.000
Dual Medicaid Eligibility	20.3%	17.7%	0.069	0.069
Disabled	19.4%	19.4%	0.000	0.000
High-Deprivation Neighborhood	12.6%	13.7%	-0.031	-0.031
Rural Census Tract	3.4%	7.3%	-0.148	-0.148
Health Professional Shortage area	3.2%	1.7%	0.117	0.117

Conclusion

- **Our results are not consistent with systematic underrepresentation among the underserved populations that we analyzed**
- Some CTIs may under-represent beneficiaries living in rural or high-deprivation neighborhoods
 - Community-based Care CTIs over-represent beneficiaries in health professional shortage areas and high-deprivation neighborhoods
 - Distributions of race and ethnicity nearly identical



Next Steps

Next Steps

- No meeting in December
- MPA timing, Staff expects:
 - Any further comments to Staff from stakeholders due by December 1.
 - Draft MPA CY24 recommendation to go to the Commission (Dec 6 release, Dec 13 meeting).
 - MPA proposal to CMS by the end of December with a response in January.
 - Final recommendation to go to Commission in February or March.
- January 24th workgroup agenda:
 - Review of TCOC results through June 2023 (consistent with prior reviews).
 - Review of analysis on site of service shifts from 2018 to 2022.

Thank You
Next Meeting: January 24th, 8-10 am