Expanding Equity in Children's Special Health Care Services

Measure Year CY2023

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– MDHHS-Pub-2007 (10-24).

Contents

Introduction

Health is a fundamental component of quality of life and a crucial measure of societal well-being. Despite the United States' unparalleled investment in health care, it lags other advanced countries in terms of health outcomes and life expectancy. This discrepancy is particularly evident in the significant health disparities affecting people of color, who experience worse health outcomes and receive lower-quality care across nearly all health conditions. These disparities begin at birth and extend throughout life, contributing to $93 billion annually in excess medical costs and $42 billion in lost productivity, according to the "Business Case for Equity" by the Kellogg Foundation (issuelab.org).

Even when financial and geographic barriers to care are addressed, systemic issues persist. Studies by the Agency for Healthcare Research and Quality and other organizations highlight that people of color are often less likely to receive the recommended standard of care. This ongoing inequality underscores the urgent need for racial equity—ensuring that all individuals, regardless of race or ethnicity, have equal opportunities for health and well-being in a just society.

Efforts to address these disparities are reflected in both federal and state regulations. For example, Michigan's Medicaid program and the Affordable Care Act emphasize the importance of culturally competent care and the reduction of racial and ethnic disparities in health care. The 2018 report "The Business Case for Racial Equity: Michigan" from the Kellogg Foundation reveals that addressing these disparities could save $2.5 billion in medical costs, reduce lost productivity by $2.6 billion, and save 170,000 life years by 2050. Achieving health equity will require comprehensive strategies to improve access to care, the quality of services, and address social and environmental determinants of health. The commitment to these goals is evident in Michigan's public health initiatives and strategic plans aimed at reducing disparities and improving health outcomes for all.

Background

Michigan Public Act 653 of 2006 directs the Michigan Department of Health and Human Services (MDHHS) to develop strategies to reduce racial and ethnic disparities, including the compilation of racial and ethnic specific data including, but not limited to, morbidity and mortality. The Michigan Department of Health and Human Services included racial equity in its vision and identified it as a key goal in the new Strategic Plan for 2023-2027. In response to this goal, the Behavioral and Physical Health and Aging Services Administration (BPHASA) initiated a project to identify disparities.

In January of 2022, Children's Special Health Care Services (CSHCS) launched the "Expanding Health Equity in CSHCS" project. The goal of this project is to support MDHHS in eliminating racial and ethnic disparities in health care. The project has created a valid/reliable system to quantify and monitor racial/ethnic disparities and identify gaps in care experienced by CSHCS clients, initially focusing on clients in Medicaid Health Plans (MHPs). The initial data analysis identifying disparities in health care is presented in this report.

Children's Special Health Care Services (CSHCS)

Children's Special Health Care Services (CSHCS) is a program within MDHHS. It is for children and some adults with special health care needs and their families. CSHCS is part of Title V of the Federal Social Security Act.

CSHCS strives to enable individuals with special health care needs to have improved health outcomes and an enhanced quality of life through the appropriate use of the CSHCS system of care.

The goals of CSHCS are to:

- Assist individuals with special health care needs in accessing the broadest possible range of appropriate medical care, health education and support.
- Ensure delivery of these services and supports in an accessible, family centered, culturally competent, community based and coordinated manner.
- Promote and incorporate parent/professional collaboration in all aspects of the program.
- Remove barriers that prevent individuals with special health care needs from achieving these goals.

CSHCS helps persons with chronic health problems by providing:

- Coverage and referral for specialty services based on the person's health problems.
- Family centered services to support the child's primary caretaker.
- Community-based services to help the child at home and maintain normal routines.
- Culturally competent services which demonstrate awareness of cultural differences.
- Coordinated services to pull together the services of many different providers who work within different agencies.

Several factors determine if a person is eligible for CSHCS:

Qualifying Medical condition: CSHCS covers more than 2,700 physical conditions when certain criteria are met. NOTE: CSHCS does not cover developmental, behavioral or intellectual conditions.

Age: Clients must be under the age of 26. Clients aged 26 and above with cystic fibrosis, hereditary coagulation defects commonly known as hemophilia, or hereditary red blood cell disorders commonly known as sickle cell disease may also qualify.

Citizenship: The client, or parent of the minor client, or court appointed guardian must be one of the following:

- A US citizen; or,
- A documented non-citizen who has been admitted for permanent residence; or,
- A non-citizen legally admitted migrant farm worker (i.e., seasonal agricultural worker).

Residency:

- Must be a Michigan resident.

Eligibility:

- Is not based on income. Families with any income are eligible if the previous criteria are met.
- There is a fee to join CSHCS. This fee is waived if the client has Medicaid, MIChild, a court-appointed guardian or lives in a foster home. The fee is determined on a sliding scale based upon family income and family size.

Project Team

The Expanding Equity in Children's Special Health Care Services project was a collaboration between the following individuals and organizations.

Children's Special Health Care Services

Lonnie Barnett, Craig Boyce, Karrie Butler, Caitlyn Conroy, Terra Depew, Mic Depew, Dave Miller, Jane Pilditch, Danielle Pitchford, LaToya Scott, Tanisha Wilson

Office of Medical Affairs

Dr. Colleen Barry, Dr. Tim Conroy, Dr. Ashweena Gonuguntla

Organizational participation

Michigan Public Health Institute, Optum

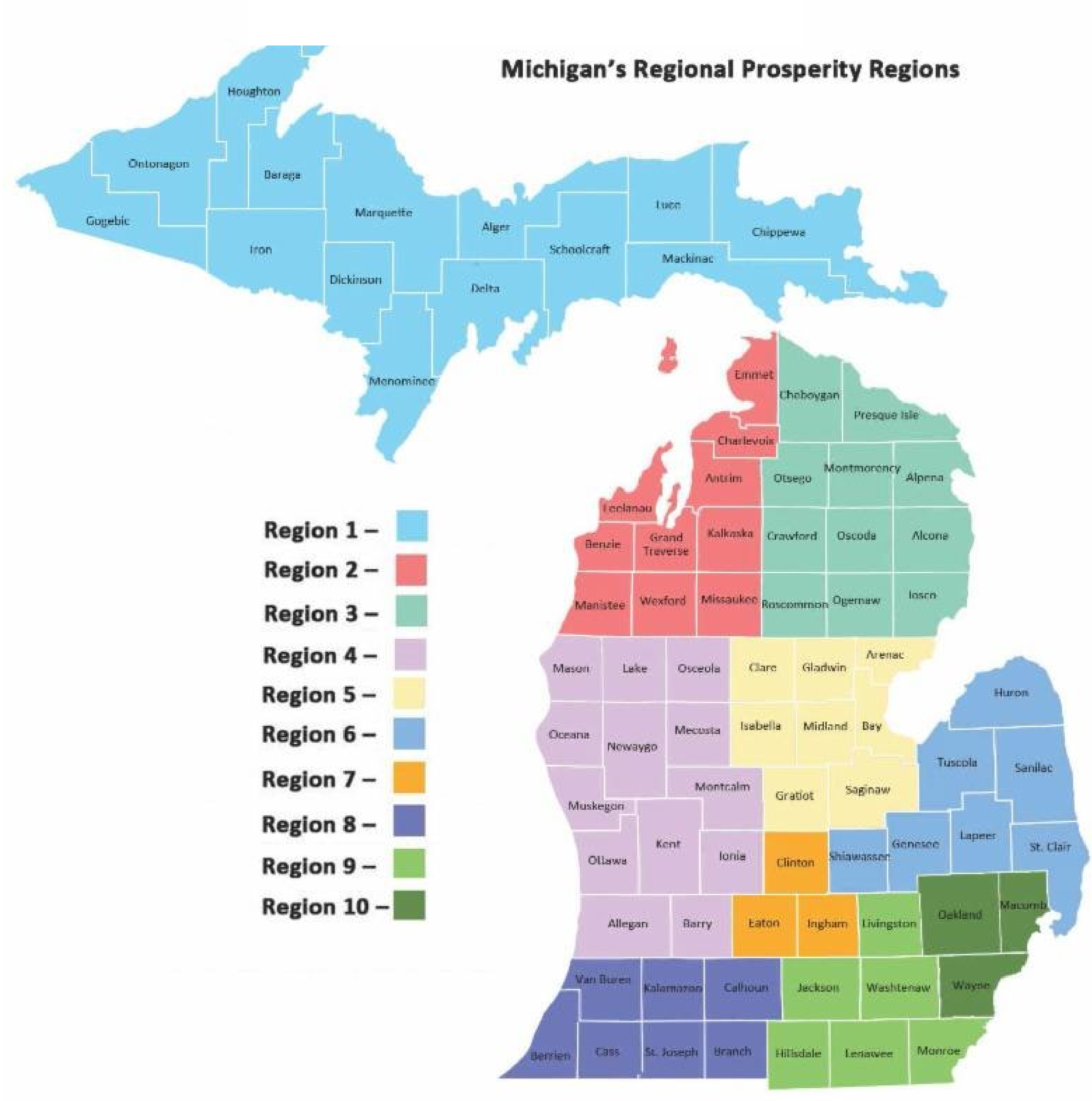
Methodology

MDHHS used audited Healthcare Effectiveness Data and Information Set (HEDIS) data to draw the initial numbers (total numerators and denominators) and total numbers by race/ethnicity for the HEDIS specific measures. All HEDIS measures were calculated in accordance with specifications provided by the National Committee for Quality Assurance (NCQA). The HEDIS measures presented in this report are for the 2023 calendar year.

For the non-HEDIS measures, CSHCS staff compiled a list of relevant diagnosis codes for a given measure. This includes diagnosis codes for hearing aids, wheelchairs, and continuous glucose monitors that are considered standard/best practice of care. Denominators for non-HEDIS measures are based on enrollment in CSHCS managed care (CSHCS-MC) in January 2023 and December 2023, and diagnosed with the given condition(s) based on diagnosis codes on or before Dec. 31 of the report year. Numerators for non-HEDIS measures are based on if requisite medical equipment is received on or before the report end date, Dec. 31, 2023, and based on Medicaid and CSHCS claims and encounter data.

Race/ethnicity data are provided by program enrollment forms, which use self-identification to determine race and ethnicity. Measures were stratified for the following racial populations: Asian American, Native Hawaiian/Other Pacific Islander, African American/Black, American Indian/Alaska Native, white, unknown and one ethnicity: Hispanic. Any reference to Hispanic was categorized into the Hispanic population and the numbers represented by the racial categories were non-Hispanic.

The regions used for analysis follow Michigan's Regional Prosperity Regions as determined by MDHHS (See Michigan's Regional Prosperity Regions map).



The CSHCS Managed Care population was utilized for all comparisons in this report. For each measure, this population was stratified by race/ethnicity and by prosperity region.

A Pearson Chi-Square test was used to determine if the distribution of the stratified group was significantly different than the expected distribution. A p-value of less than 0.05 indicates statistical significance.

In the event a Pearson Chi-Square test determined the measure to be statistically significant, the strength of the significance of an association was determined using a Cramer's V comparison. The following formula was utilized to determine the strength of association:

$$\omega = \phi' \sqrt{r-1}$$

Where:

ϕ' = Cramer's V

(r-1) = degrees of freedom

Interpretation for degree of association:

ω	Degree of Association
.10	Small
.30	Moderate
.50	Large

Crosstabulation comparisons were completed on statistically significant measures to determine the category groups (race/ethnicity or prosperity regions) whose proportions differed from each other at the .05 level.

Data were considered insufficient for analysis, and results were suppressed if: the total measure sample size is less than 50, there are less than five observations in each group, and the expected values for each cell are less than five.

Please note on all graphs, only those categories fulfilling the above requirements will appear. Further, we recommend exercising caution when interpreting results with denominators less than 100.

Table 1. Full list and description of measures

Acronym	Full Measure Title	Measure Description
Dev-Tot	Developmental Screening Total	The percentage of children who turned 1, 2, or 3 during the performance period who were screened for risk of developmental, behavioral, and social delays using a standardized tool with interpretation and report within 12 months preceding or on their birthday.
LSC-CH	Lead Screening in Children	The percentage of children 2 years of age who had one or more capillary or venous lead blood test for lead poisoning by their second birthday.

Acronym	Full Measure Title	Measure Description
W30-015	Well-Care Visits in the First 15 months	Completion of at least six well visits within the first 15 months of life.
W30-1530	Well-Care Visits between 15-30 months	Completion of at least six well visits within the first 15 months of life and at least two well visits between 15-30 months of age.
WCV-311	Child and Adolescent Well Visits Between age 3 and 11 years	Members between the ages 3-11 years of age who received one or more well-care visit with a primary care practitioner or an OB/GYN practitioner during the measurement year.
WCV-1217	Child and Adolescent Well Visits Between 12-17 years	Members between the ages 12-17 years of age who received one or more well-care visit with a primary care practitioner or an OB/GYN practitioner during the measurement year.
WCV-1821	Child and Adolescent Well Visits between age of 18 and 21 years	Members between the ages 18-21 years of age who received one or more well-care visit with a primary care practitioner or an OB/GYN practitioner during the measurement year.
WCV-CH	Child and Adolescent Well Visits-Total	Members between 3-21 years of age who received one or more well-care visit with a primary care practitioner or an OB/GYN practitioner during the measurement year.
CIS Combo 3	Childhood Immunizations Combination 3	The percentage of children 2 years of age who had four diphtheria, tetanus and acellular pertussis (DTaP); three polio (IPV); one measles, mumps and rubella (MMR); three haemophilus influenza type B (HiB) ; three hepatitis B (HepB), one chicken pox (VZV); four pneumococcal conjugate (PCV); one hepatitis A (HepA); two or three rotavirus (RV); and two influenza (flu) vaccines by their second birthday. The measure calculates a rate of each vaccine and three combination rates.
HA-C	Hearing Aid Comparison	Patients diagnosed with condition that required and received a hearing aid. Numerator: CSHCS-MC enrolled who received a hearing aid. Denominator: CSHCS-MC enrollees with a Dx code of hearing loss.
W-C	Wheelchair Comparison	Patients diagnosed with condition that required and received a wheelchair. Numerator: CSHCS-MC enrolled who received a wheelchair. Denominator: CSHCS-MC enrollees with a Dx code requiring a wheelchair.
CGM-C	Continuous Glucose Monitors Comparison	Patients diagnosed with condition that required and received a continuous glucose monitor. Numerator: CSHCS-MC Enrollees who received a CGM; denominator: CSHCS-MC enrollees with type 1 diabetes Dx code

CY2023 HEDIS and CSHCS Specific Race/Ethnicity Summary Results

Race/Ethnicity Significance	Measure	Comparison to Reference Proportion	Reference Race/Ethnicity	Strength of Association (Cramer's V)
Not Significant	Developmental Screening – Total	N/A	N/A	N/A
Hispanic, Asian American	Lead Screening	Higher	African American/Black, Unknown race, White	Small
African American/Black	Well-Care Visits in the First 15 Months	Lower	Hispanic, White	Moderate
Unknown race	Well-Care Visits in the First 15 Months	Lower	White	Moderate
African American/Black	Well-Care Visits 15-30 months	Lower	Unknown race, White	Small
African American/Black	Well Visits 3-11 Years	Lower	Hispanic, Unknown, White	Small
Hispanic	Well Visits 3-11 Years	Higher	White	Small
African American/Black	Well Visits 12-17 Years	Lower	Asian American, Unknown race, White	Small
Not Significant	Well Visits 18-21 Years	N/A	N/A	N/A
African American/Black	Child and Adolescent Well Visits Total	Lower	Asian American, Hispanic, Native Hawaiian/Pacific Islander, Unknown race, White	Small
Unknown race	Child and Adolescent Well Visits Total	Lower	White	Small
African American/Black	Childhood Immunizations Combination 3	Lower	Asian American, Hispanic, Unknown, White	Moderate

Race/Ethnicity Significance	Measure	Comparison to Reference Proportion	Reference Race/Ethnicity	Strength of Association (Cramer's V)
African American/Black, Asian American, Hispanic, Unknown race	Hearing Aids	Lower	White	Moderate
African American/Black, Unknown race	Wheelchair	Lower	White	Small
Hispanic	Wheelchair	Lower	African American/Black, American Indian/ Alaska Native, Asian American, Unknown race, White	Small
African American/Black, Hispanic	Continuous Glucose Monitors	Lower	Asian American, Unknown, White	Large

Table 2. Race/ethnicity disparity summary measures

CY2023 HEDIS and CSHCS Specific Prosperity Region Summary Results

Prosperity Region Significance	Measure	Comparison to Statewide CSHSC-MC Proportion	Strength of Association (Cramer's V)
1, 6, 7	Developmental Screening - Total	Higher	Large
2, 8	Developmental Screening - Total	Lower	Large
Not Significant	Lead Screening	N/A	N/A
2	Well-Care Visits 15 months	Higher	Small
4	Well-Care Visits 15-30 months	Higher	Moderate

Prosperity Region Significance	Measure	Comparison to Statewide CSHSC-MC Proportion	Strength of Association (Cramer's V)
10	Well-Care Visits 15-30 months	Lower	Moderate
4, 6	Well Visits 3-11 Years	Higher	Small
7, 8, 9	Well Visits 3-11 Years	Lower	Small
1, 7, 8	Well Visits 12-17 Years	Lower	Small
Not Significant	Well Visits 18-21 Years	N/A	N/A
4, 6	Child and Adolescent Well Visits Total	Higher	Small
7, 8, 9	Child and Adolescent Well Visits Total	Lower	Small
Not Significant	Childhood Immunizations Combination 3	N/A	N/A
4, 5	Hearing Aids	Higher	Large
10	Hearing Aids	Lower	Large
7, 9	Wheelchair	Higher	Small
1, 2	Continuous Glucose Monitors	Higher	Moderate
10	Continuous Glucose Monitors	Lower	Moderate

Table 3. Prosperity region disparity summary measures

CY2023 HEDIS Measures

Developmental Screening - Total

Developmental screenings in children from ages 1 to 3 were evaluated to determine if there were disparities in race/ethnicity. MDHHS used audited 2023 HEDIS data (DEV-TOT) in this analysis.

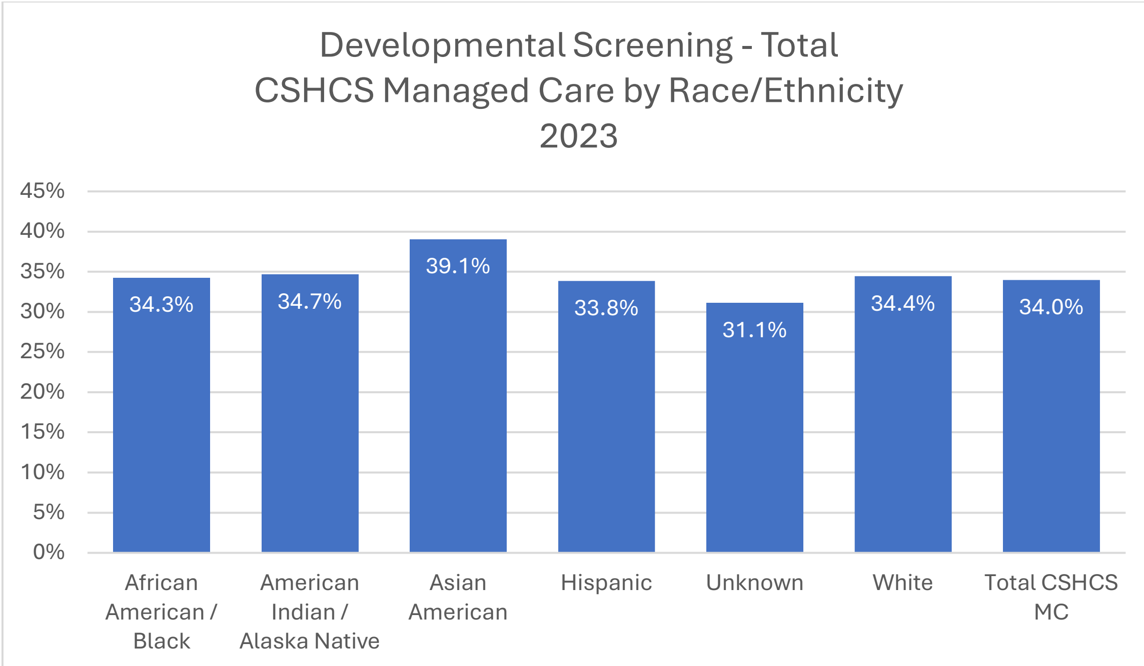


Figure 1. Developmental screening total, by race/ethnicity, 2023

Race/Ethnicity	Numerator	Denominator	Rate
African American/Black	437	1,275	34.3%
American Indian/Alaska Native	17	49	34.7%
Asian American	25	64	39.1%
Hispanic	91	269	33.8%
Unknown	184	591	31.1%
White	839	2,436	34.4%
Total CSHCS Managed Care	1,593	4,689	34.0%

Table 4. Developmental screening- total by race/ethnicity, 2023

A Chi-Square test was completed to explore the association between race/ethnicity and developmental screenings of children who turned 1, 2, or 3 during the performance period who were screened for risk of developmental, behavioral, and social delays using a standardized tool with interpretation and report within 12 months preceding or on their birthday. The analysis did not reveal a statistically significant association between race/ethnicity and developmental screenings at the .05 level ($\chi^2(2)$ = 3.16, p = .675).

In addition, MDHHS evaluated developmental screening in children from ages 1 to 3 by prosperity region. MDHHS used audited 2023 HEDIS data (DEV-TOT) in this analysis.

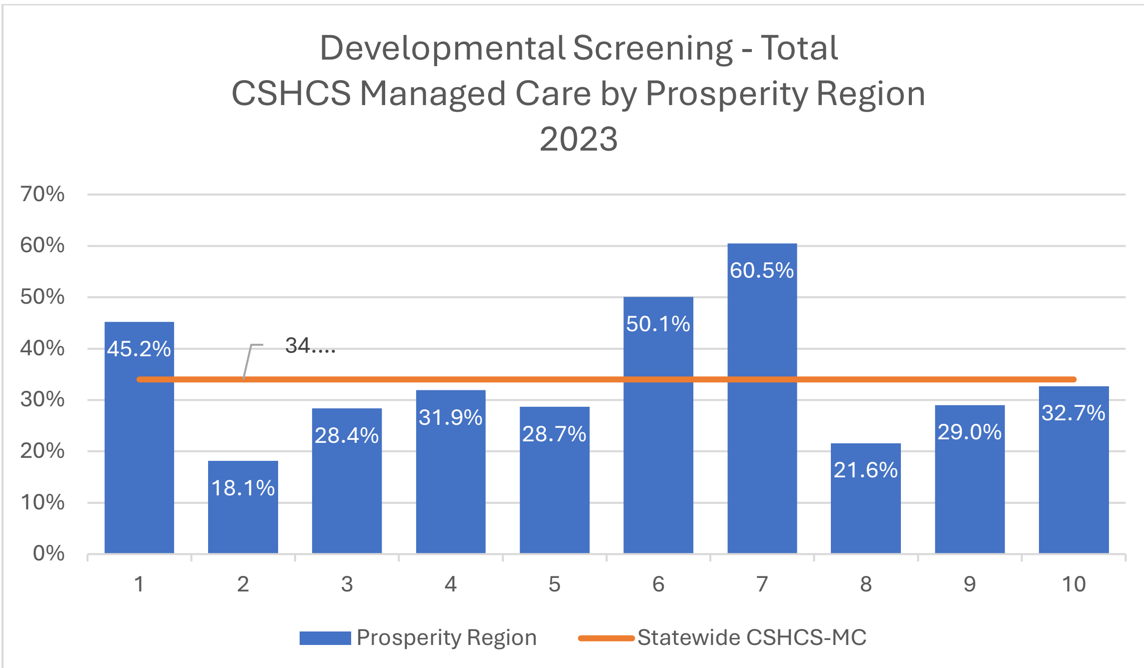


Figure 2. Developmental screening total, by prosperity region, 2023

* Sample size varies by region which impacts statistical significance calculation.

Prosperity Region	Numerator	Denominator	Rate
1	75	166	45.2%
2	15	83	18.1%
3	21	74	28.4%
4	365	1,143	31.9%
5	60	209	28.7%
6	190	379	50.1%

Prosperity Region	Numerator	Denominator	Rate
7	118	195	60.5%
8	68	315	21.6%
9	104	359	29.0%
10	577	1,763	32.7%

Table 5. Developmental screening - Total by prosperity region, 2023

A Chi-Square test was completed to explore the association between prosperity region and developmental screenings of children who turned 1, 2, or 3 during the performance period who were screened for risk of developmental, behavioral, and social delays using a standardized tool with interpretation and report within 12 months preceding or on their birthday. The analysis revealed a statistically significant association between prosperity region and developmental screenings ($\chi^2(2)$ = 156.45, p < .001).

The crosstabulation of prosperity region and developmental screenings indicated several prosperity region proportions that differed significantly from the CSHCS Managed Care total at the .05 level. Regions 1, 6, and 7 enrollees received significantly more screenings than total statewide CSHCS Managed Care enrollees. Regions 2 and 8 enrollees received significantly less screenings than total statewide CSHCS Managed Care enrollees.

A Cramer's V comparison was completed where Cramer's V = .183, df = 9, and the degree of association = .549. There is a large association between prosperity region and developmental screenings.

Lead Screening in Children

The percentage of lead screening in children 2 years of age was evaluated to determine if there were disparities in race/ethnicity. MDHHS used audited 2023 HEDIS data (LSC-CH) in this analysis.

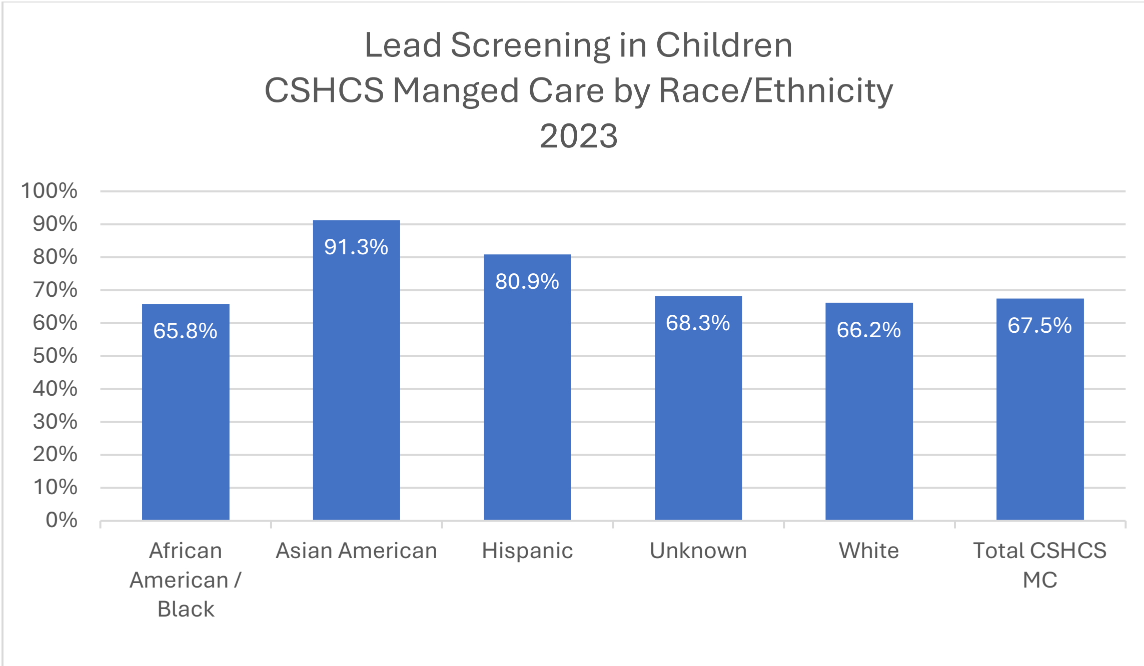


Figure 3. Lead screening in children by race/ethnicity, 2023

Race/Ethnicity	Numerator	Denominator	Rate
African American/Black	263	400	65.8%
Asian American	21	23	91.3%
Hispanic	72	89	80.9%
Unknown	110	161	68.3%
White	553	836	66.2%
Total CSHCS Managed Care	1,029	1,524	67.5%

Table 6. Lead screening in children by race/ethnicity, 2021

A Chi-Square test was completed to explore the association between race/ethnicity and the percentage of children 2 years of age who had one or more capillary or venous lead blood test for lead poisoning by their second birthday. The analysis revealed a significant association between race/ethnicity and lead screenings ($\chi^2(2)$ = 14.54, p = .006) at the .05 level.

The crosstabulation of race/ethnicity and lead screenings indicated there were proportions of race/ethnicity that differed significantly from each other at the .05 level. The Hispanic ethnicity group and the Asian American race group received significantly more lead screenings than the African American/Black, unknown race, and white race groups.

A Cramer's V comparison was completed where Cramer's V = .098, df = 4, and the degree of association = .20. These results indicate a small association between race/ethnicity and lead screenings.

In addition, MDHHS evaluated lead screening in children 2 years of age by prosperity region. MDHHS used audited 2023 HEDIS data (LSC-CH) in this analysis.

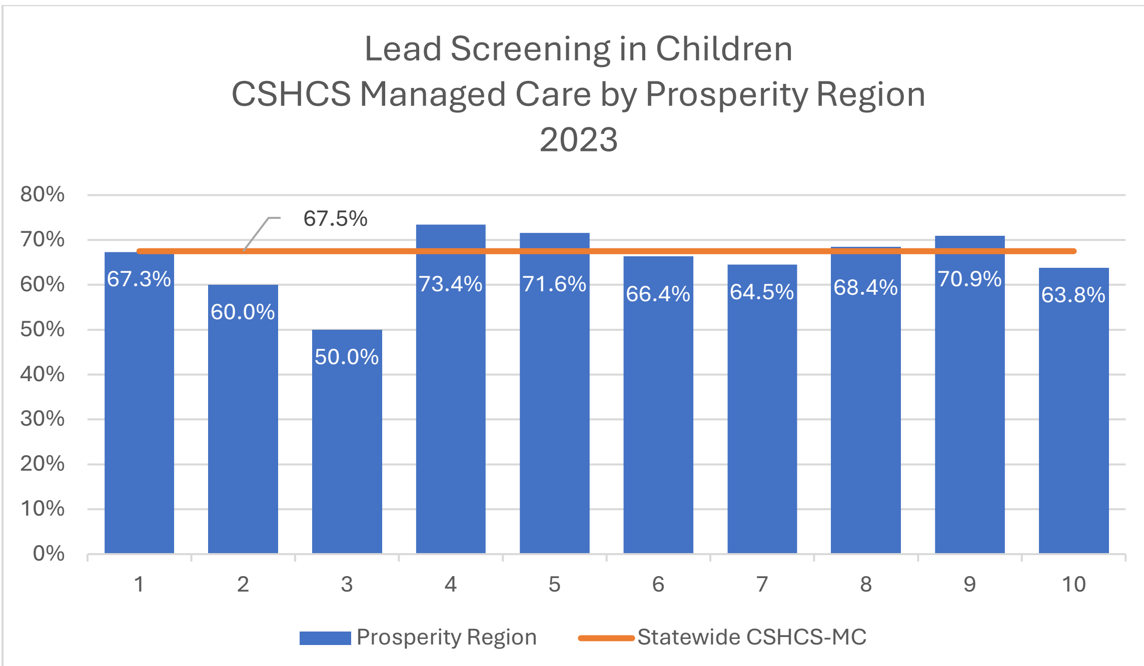


Figure 4. Lead screening in children by prosperity region, 2023

Prosperity Region	Numerator	Denominator	Rate
1	35	52	67.3%
2	12	20	60.0%
3	14	28	50.0%
4	284	387	73.4%
5	53	74	71.6%
6	79	119	66.4%
7	40	62	64.5%
8	65	95	68.4%
9	90	127	70.9%
10	357	560	63.8%

Table 7. Lead screening in children by prosperity region, 2023

A Chi-Square test was completed to explore the association between prosperity region and the percentage of children 2 years of age who had one or more capillary or venous lead blood test for lead poisoning by their second birthday. The analysis did not reveal a statistically significant association between prosperity region and lead screenings ($\chi^2(2)$ = 15.71, p = .073) at the .05 level.

Well-Care Visits in the First 15 Months

The percentage of children who received at least six well visits within the first 15 months of life was evaluated to determine if there were disparities in race/ethnicity. MDHHS used audited 2023 HEDIS data (W30-015) in this analysis.

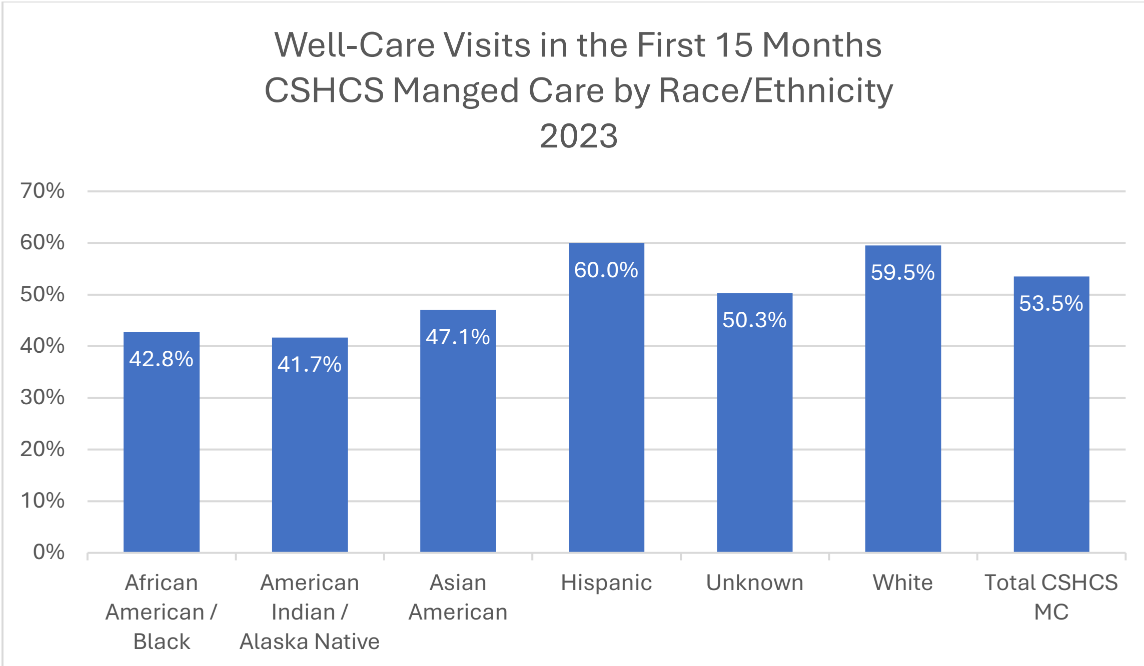


Figure 5. Well-care visits under 15 months of age by race/ethnicity, 2023

Race/Ethnicity	Numerator	Denominator	Rate
African American/Black	165	386	42.8%
American Indian/Alaska Native	5	12	41.7%
Asian American	8	17	47.1%
Hispanic	54	90	60.0%
Unknown	98	195	50.3%
White	455	765	59.5%
Total CSHCS Managed Care	786	1,468	53.5%

Table 8. Well-care visits under 15 months of age by race/ethnicity, 2023

A Chi-Square test was completed to explore the association between race/ethnicity and well-care visits in the first 15 months of life. The analysis revealed a significant association between race/ethnicity and well-care visits in the first 15 months of life ($\chi^2(2)$ = 32.25, $p < .001$).

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The crosstabulation of race/ethnicity and well-care visits in the first 15 months of life indicated the African American/Black group proportion was significantly lower than the Hispanic and white groups at the .05 level. The unknown race group proportion was significantly lower than the white race group at the .05 level.

A Cramer's V comparison was completed where Cramer's V = .148, df = 5, and the degree of association = .33. These results indicate there is a moderate association between race/ethnicity and well-care visits in the first 15 months of life.

In addition, MDHHS evaluated well-care visits in the first 15 months of life by prosperity region. MDHHS used audited 2023 HEDIS data (W30-015) in this analysis.

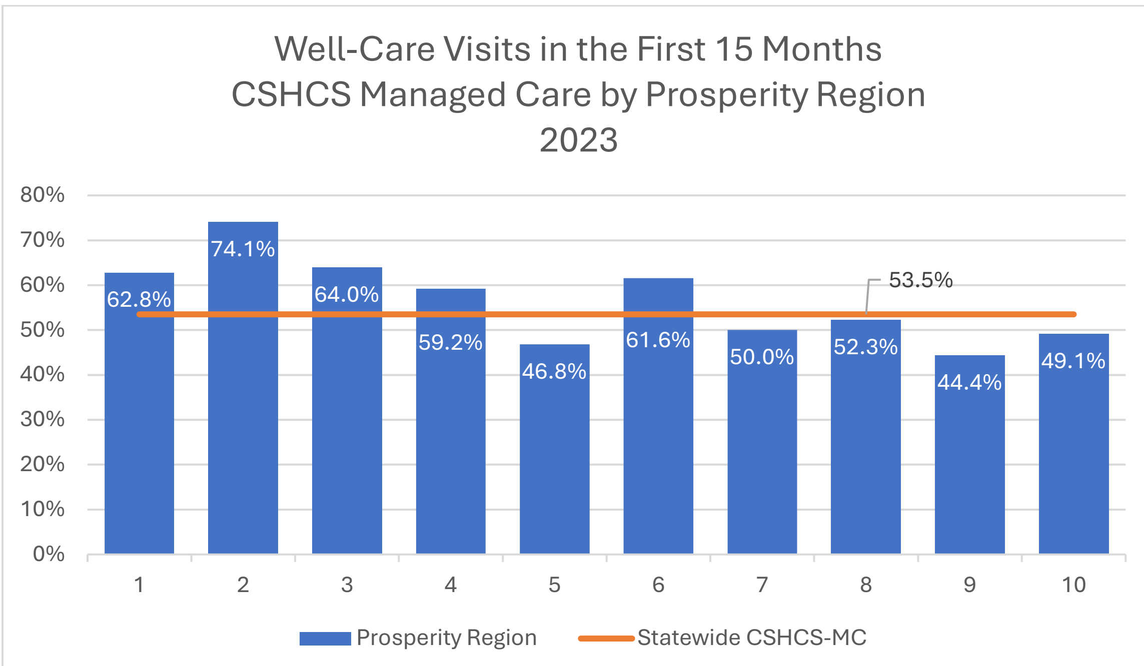

Figure 6. Well-care visits under 15 months of age by prosperity region, 2021

Prosperity Region	Numerator	Denominator	Rate
1	32	51	62.8%
2	20	27	74.1%
3	16	25	64.0%
4	206	348	59.2%
5	37	79	46.8%

Prosperity Region	Numerator	Denominator	Rate
6	77	125	61.6%
7	31	62	50.0%
8	58	111	52.3%
9	48	108	44.4%
10	261	532	49.1%

Table 9. Well-care visits under 15 months of age by prosperity region, 2023

A Chi-Square test was completed to explore the association between prosperity region and well-care visits in the first 15 months of life. The analysis revealed a significant association between prosperity region and well-care visits in the first 15 months of life ($\chi^2(2)$ = 24.85, p = .003) at the .05 level.

The crosstabulation of prosperity region and well-care visits in the first 15 months of life indicated the prosperity region 2 proportion was significantly higher than the CSHCS Managed Care statewide total at the .05 level.

A Cramer's V comparison was completed where Cramer's V = .13, df = 9, and the degree of association = .23. These results indicate there is a moderate association between prosperity region and well-care visits in the first 15 months of life.

Well-Care Visits Between 15-30 Months

The percentage of children who received at least six well visits within the first 15 months of life and at least two well visits between 15-30 months of age was evaluated to determine if there were disparities in race/ethnicity. MDHHS used audited 2023 HEDIS data (W30-1530) in this analysis.

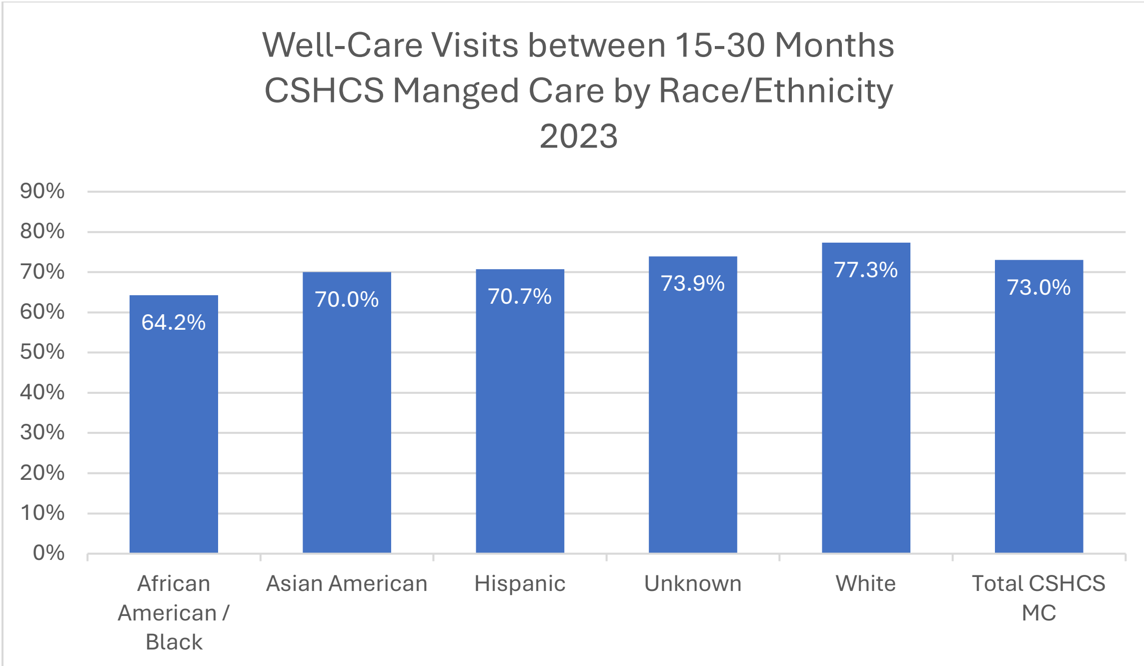

Figure 7. Well-care visits between 15-30 months by race/ethnicity, 2023

Race/Ethnicity	Numerator	Denominator	Rate
African American/Black	253	394	64.2%
Asian American	14	20	70.0%
Hispanic	65	92	70.7%
Unknown	99	134	73.9%
White	614	794	77.3%
Total CSHCS Managed Care	1,059	1,450	73.0%

Table 10. Well-care visits between 15-30 months by race/ethnicity, 2023

A Chi-Square test was completed to explore the association between race/ethnicity and well-care visits in the first 15 to 30 months of life. The analysis revealed a significant association between race/ethnicity and well-care visits in 15 to 30 months of life ($\chi^2(2) = 23.31$, $p < .001$).

The crosstabulation of race/ethnicity and well-care visits in the first 15 to 30 months of life indicated the African American/Black group proportion was significantly lower than the unknown race and white race group at the .05 level.

A Cramer's V comparison was completed where Cramer's V = .127, df = 4, and the degree of association = .25. These results indicate there is a small association between race/ethnicity and well-care visits in the first 15 to 30 months of life.

In addition, MDHHS evaluated well-care visits in the first 15 to 30 months of life by prosperity region. MDHHS used audited 2023 HEDIS data (W30-1530) in this analysis.

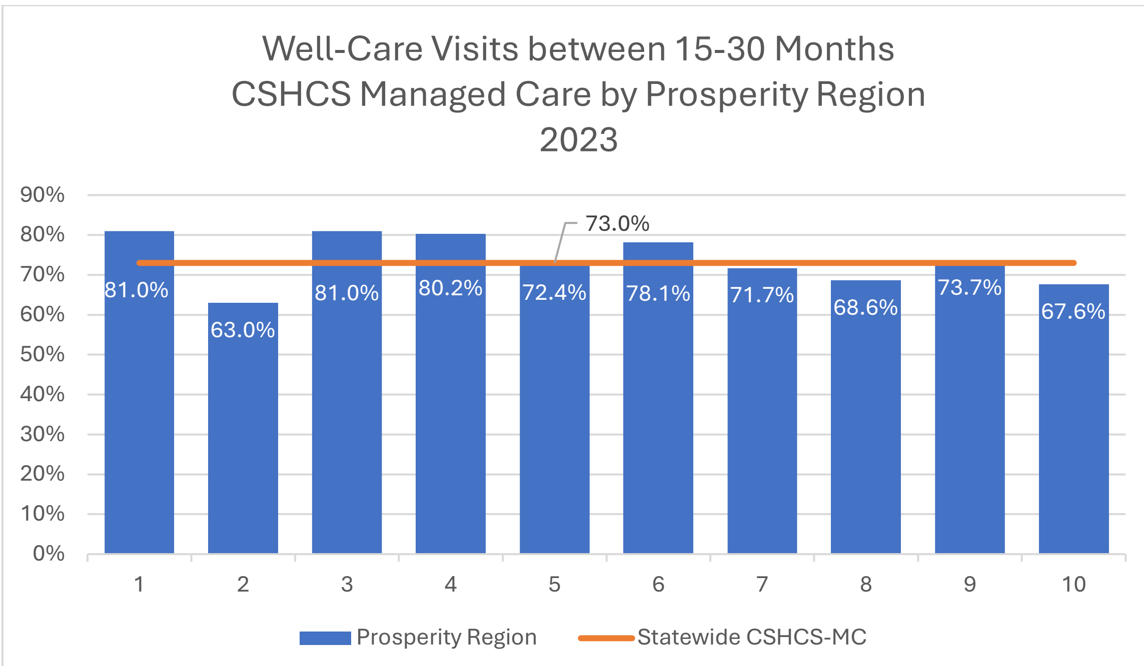

Figure 8. Well-care visits between 15-30 months by prosperity region, 2023

* Sample size varies by region which impacts statistical significance calculation.

Prosperity Region	Numerator	Denominator	Rate
1	47	58	81.0%
2	17	27	63.0%
3	17	21	81.0%
4	279	348	80.2%

Prosperity Region	Numerator	Denominator	Rate
5	42	58	72.4%
6	89	114	78.1%
7	33	46	71.7%
8	59	86	68.6%
9	98	133	73.7%
10	378	559	67.6%

Table 11. Well-care visits between 15-30 months by prosperity region, 2023

A Chi-Square test was completed to explore the association between prosperity region and well-care visits in the first 15 to 30 months of life. The analysis revealed a significant association between prosperity region and well-care visits in the first 15 months of life ($\chi^2(2)$ = 23.67, p = .005) at the .05 level.

The crosstabulation of prosperity region and well-care visits in the first 15 to 30 months of life indicated the prosperity region 4 proportion was significantly higher than the CSHCS Managed Care statewide total at the .05 level. The region 10 proportion was significantly lower than the CSHCS Managed Care statewide total at the .05 level.

A Cramer's V comparison was completed where Cramer's V = .13, df = 9, and the degree of association = .38. These results indicate there is a moderate association between prosperity region and well-care visits in the first 15 to 30 months of life.

Child and Adolescent Well Visits Between 3-11 Years

The percentage of children between the ages 3-11 years of age who received one or more well-care visit with a primary care practitioner or an OB/GYN practitioner during the measurement year was evaluated to determine if there were disparities in race/ethnicity. MDHHS used audited 2023 HEDIS data (WCV-311) in this analysis.

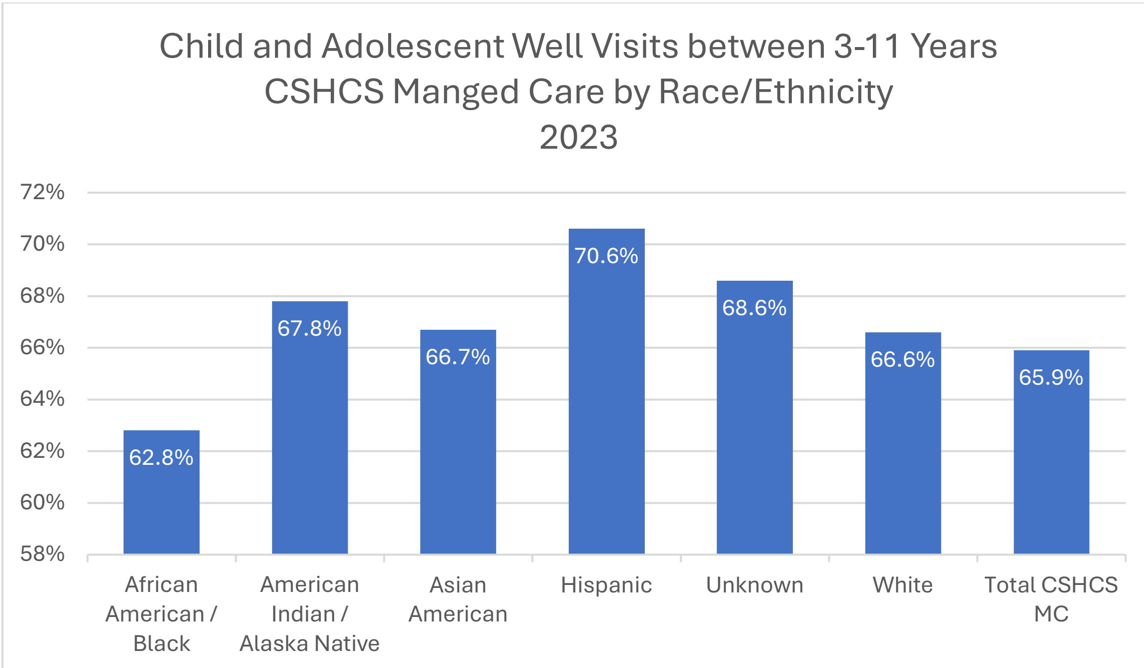

Figure 9. Child and adolescent well visits age 3-11 by race/ethnicity, 2023

Race/Ethnicity	Numerator	Denominator	Rate
African American/Black	2,261	3,603	62.8%
American Indian/Alaska Native	101	149	67.8%
Asian American	144	216	66.7%
Hispanic	553	783	70.6%
Unknown	626	912	68.6%
White	4,739	7,114	66.6%
Total CSHCS Managed Care	8,431	12,785	65.9%

Table 12. Child and adolescent well visits age 3-11 by race/ethnicity, 2023

A Chi-Square test was completed to explore the association between race/ethnicity and well-care visits between 3 to 11 years old. The analysis revealed a significant association between race/ethnicity and well-care visits between 3 to 11 years old ($\chi^2(2) = 28.62$, $p < .001$).

The crosstabulation of race/ethnicity and well-care visits between 3 to 11 years old indicated the African American/Black proportion was significantly lower than the Hispanic, unknown race, and white groups at the .05 level. The Hispanic ethnicity group proportion was significantly higher than the white race group at the .05 level.

A Cramer's V comparison was completed where Cramer's V = .047, df = 5, and the degree of association = .11. These results indicate there is a small association between race/ethnicity and well-care visits between 3 to 11 years old.

In addition, MDHHS evaluated well-care visits between 3 to 11 years old by prosperity region. MDHHS used audited 2023 HEDIS data (WVC-311) in this analysis.

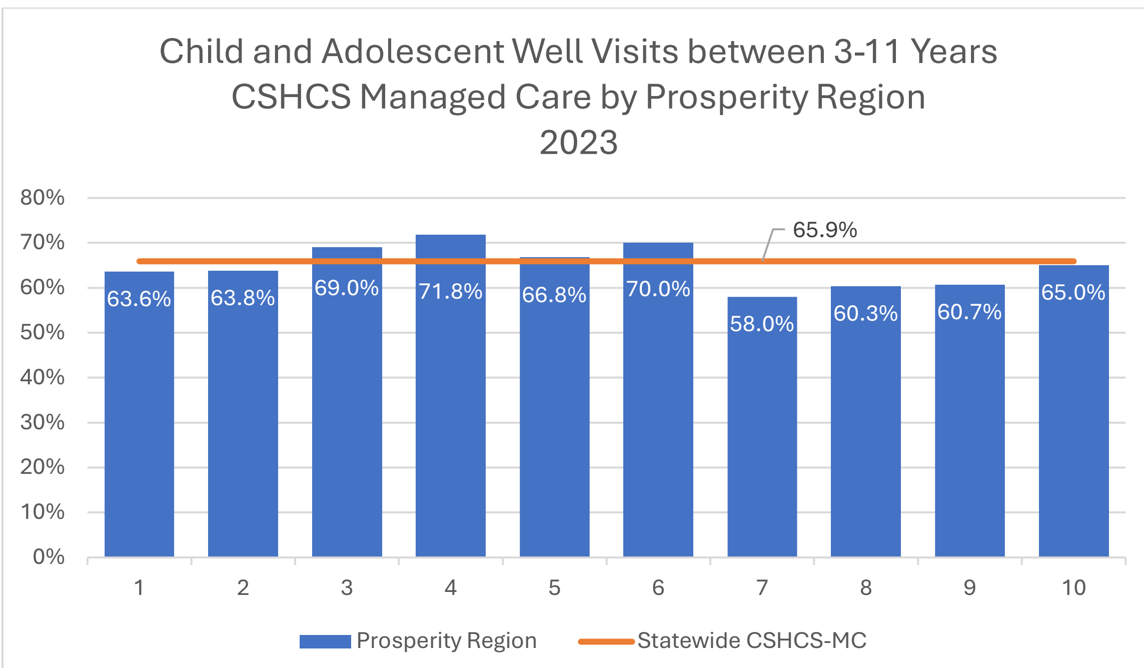

Figure 10. Child and adolescent well visits age 3-11 by prosperity region, 2021

Prosperity Region	Numerator	Denominator	Rate
1	252	396	63.6%
2	169	265	63.8%
3	151	219	69.0%
4	1,894	2,637	71.8%
5	401	600	66.8%
6	817	1,167	70.0%
7	335	578	58.0%
8	520	863	60.3%
9	620	1,021	60.7%
10	3,272	5,036	65.0%

Table 13. Child and adolescent well visits age 3-11 by prosperity region, 2023

A Chi-Square test was completed to explore the association between prosperity region and well-care visits between 3 to 11 years old. The analysis revealed a significant association between prosperity region and well-care visits between 3 to 11 years old ($\chi^2(2)$ = 95.14, p < .001).

The crosstabulation of prosperity region and well-care visits between 3 to 11 years old indicated the proportions of regions 4 and 6 were significantly higher than the statewide proportion of CSHCS Managed Care enrollees at the .05 level. The proportions of regions 7, 8, and 9 were significantly lower than the statewide proportion of CSHCS Managed Care enrollees at the .05 level.

A Cramer's V comparison was completed where Cramer's V = .086, df = 9, and the degree of association = .26. These results indicate there is a small association between prosperity region and well-care visits between 3 to 11 years old.

Child and Adolescent Well Visits Between 12-17 Years

The percentage of children between the ages 12-17 years of age who received one or more well-care visit with a primary care practitioner or an OB/GYN practitioner during the measurement year was evaluated to determine if there were disparities in race/ethnicity. MDHHS used audited 2023 HEDIS data (WCV-1217) in this analysis.

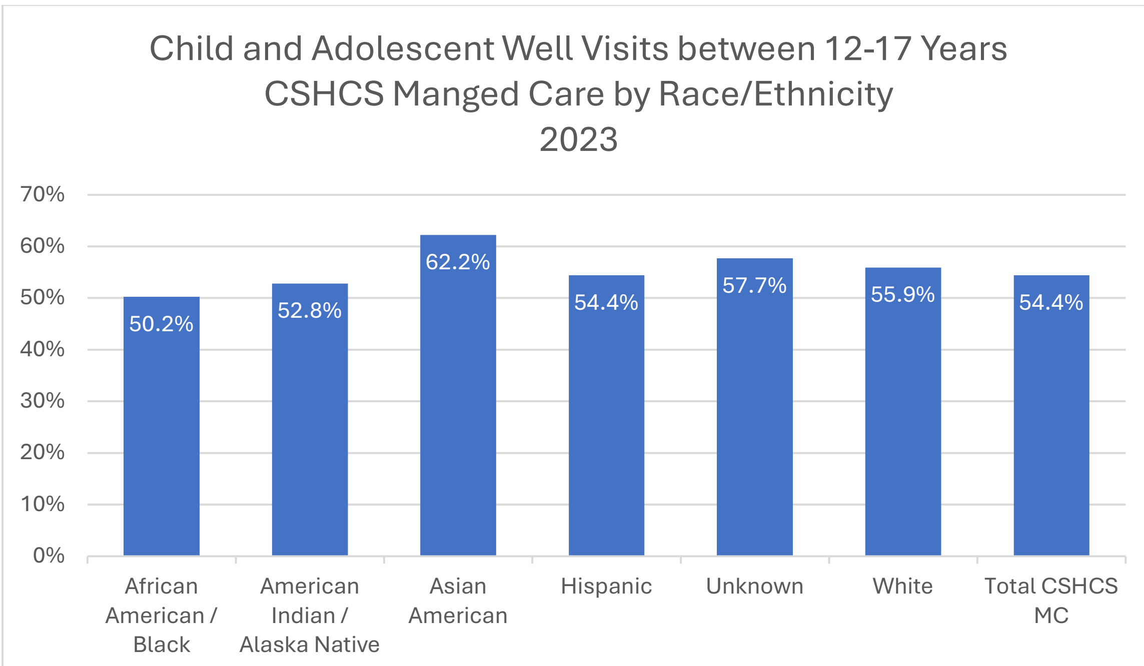

Figure 11. Child and adolescent well visits 12-17, by race/ethnicity, 2023

Race/Ethnicity	Numerator	Denominator	Rate
African American/Black	1,200	2,389	50.2%
American Indian/Alaska Native	47	89	52.8%
Asian American	92	148	62.2%
Hispanic	307	564	54.4%
Unknown	299	518	57.7%
White	2,751	4,920	55.9%
Total CSHCS Managed Care	4,700	8,634	54.4%

Table 14. Child and adolescent well visits age 12-17 by race/ethnicity, 2023

A Chi-Square test was completed to explore the association between race/ethnicity and well-care visits between 12 to 17 years old. The analysis revealed a significant association between race/ethnicity and well-care visits between 12 to 17 years old ($\chi^2(2)$ = 27.29, $p < .001$).

The crosstabulation of race/ethnicity and well-care visits between 12 to 17 years old indicated the African American/Black proportion was significantly lower than the Asian American, unknown race, and white race group at the .05 level.

A Cramer's V comparison was completed where Cramer's V = .056, df = 5, and the degree of association = .13. These results indicate there is a small association between race/ethnicity and well-care visits between 12 to 17 years old.

In addition, MDHHS evaluated well-care visits between 12 to 17 years old by prosperity region. MDHHS used audited 2023 HEDIS data (WVC-1217) in this analysis.

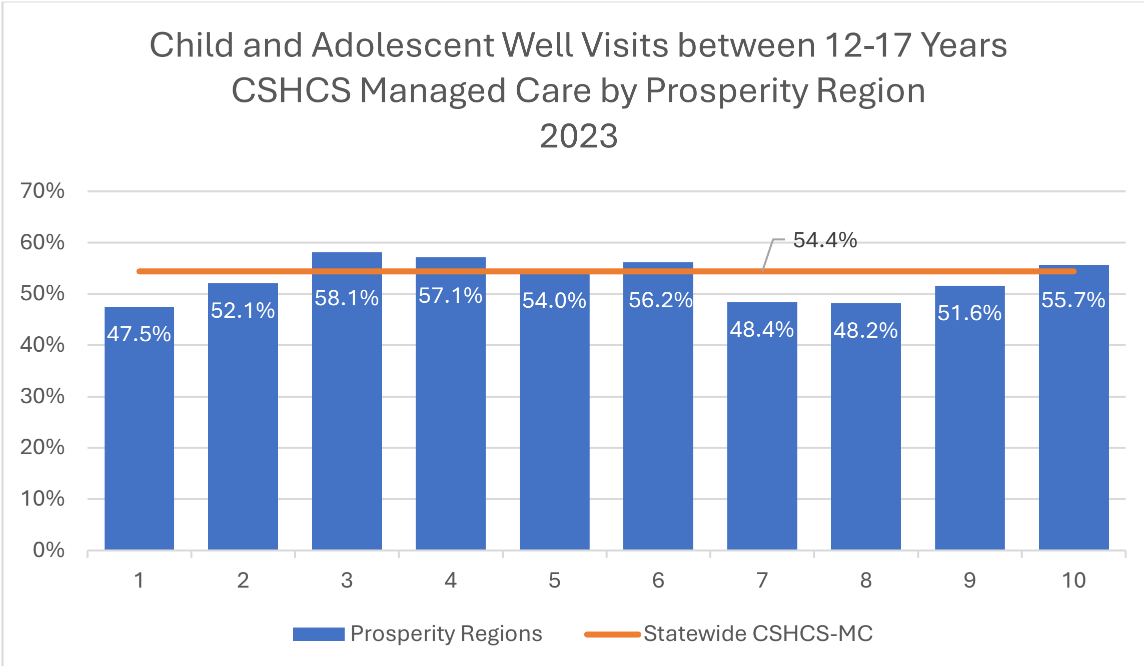

Figure 12. Child and adolescent well visits 12-17 by prosperity region, 2023

Prosperity Region	Numerator	Denominator	Rate
1	121	255	47.5%
2	99	190	52.1%
3	90	155	58.1%
4	859	1,505	57.1%
5	243	450	54.0%
6	433	770	56.2%
7	164	339	48.4%
8	312	647	48.2%
9	337	653	51.6%
10	2,042	3,668	55.7%

Table 15. Child and adolescent well visits age 18-21 by prosperity region, 2023

A Chi-Square test was completed to explore the association between prosperity region and well-care visits between 12 to 17 years old. The analysis revealed a significant association between prosperity region and well-care visits between 12 to 17 years old ($\chi^2(2)$ = 30.97, p < .001).

The crosstabulation of prosperity region and well-care visits between 12 to 17 years old indicated the proportions of regions 1, 7, and 8 were significantly lower than the statewide proportion of CSHCS Managed Care enrollees at the .05 level.

A Cramer's V comparison was completed where Cramer's V = .06, df = 9, and the degree of association = .18. These results indicate there is a small association between prosperity region and well-care visits between 12 to 17 years old.

Child and Adolescent Well Visits Between Age 18-21 Years

The percentage of children between the ages 18 to 21 years of age who received one or more well-care visit with a primary care practitioner or an OB/GYN practitioner during the measurement year was evaluated to determine if there were disparities in race/ethnicity. MDHHS used audited 2023 HEDIS data (WCV-1821) in this analysis.

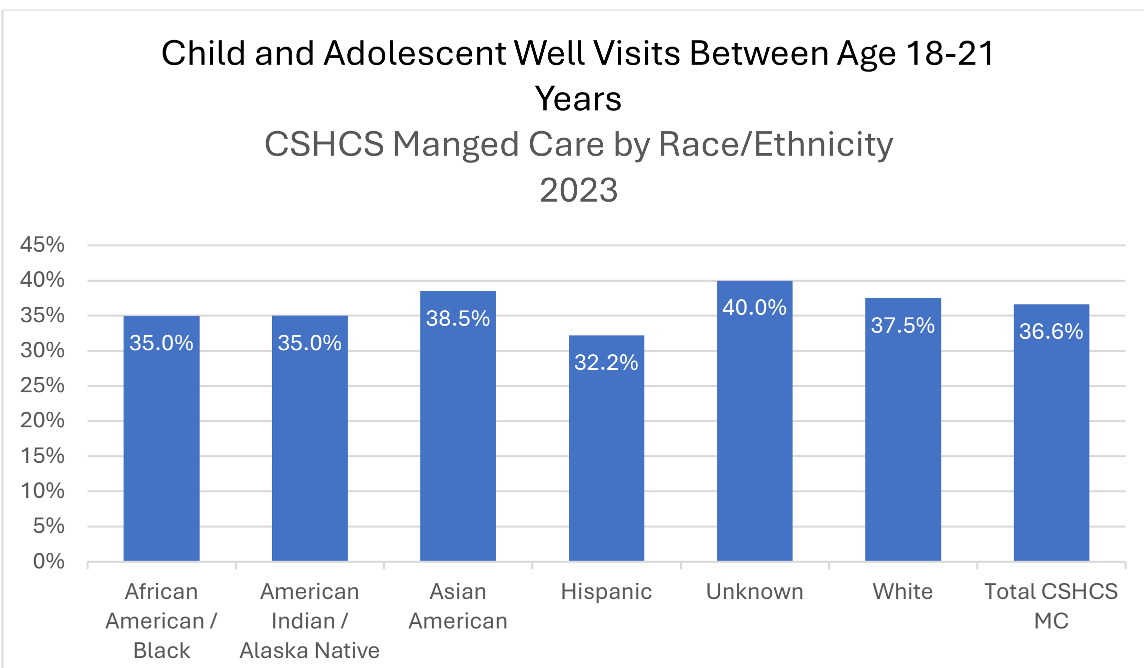

Figure 13. Child and adolescent well visits between age of 18 and 21 by race/ethnicity, 2023

Race/Ethnicity	Numerator	Denominator	Rate
African American/Black	326	932	35.0%
American Indian/Alaska Native	14	40	35.0%
Asian American	20	52	38.5%
Hispanic	65	202	32.2%
Unknown	76	190	40.0%
White	743	1,984	37.5%
Total CSHCS Managed Care	1,247	3,404	36.6%

Table 16. Child and adolescent well visits age 18-21 by race/ethnicity, 2023

A Chi-Square test was completed to explore the association between race/ethnicity and well-care visits between 18 to 21 years old. The analysis did not reveal a significant association between race/ethnicity and well-care visits between 18 to 21 years old ($\chi^2(2)$ = 2.08, p = .838) at the .05 level.

In addition, MDHHS evaluated well-care visits between 18 to 21 years old by prosperity region. MDHHS used audited 2023 HEDIS data (WVC-1821) in this analysis.

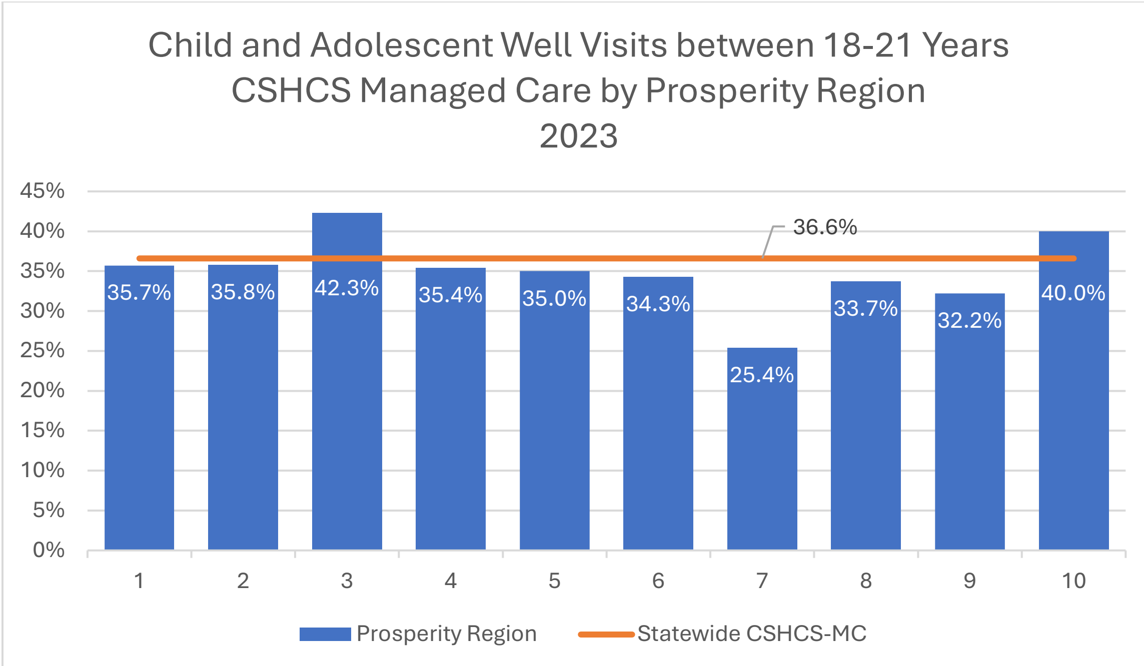

Figure 14. Child and adolescent well visits between age of 18 and 21 by prosperity region, 2023

Prosperity Region	Numerator	Denominator	Rate
1	35	98	35.7%
2	24	67	35.8%
3	30	71	42.3%
4	226	639	35.4%
5	63	180	35.0%
6	105	306	34.3%
7	30	118	25.4%
8	85	252	33.7%
9	83	258	32.2%
10	566	1,415	40.0%

Table 17. Child and adolescent well visits 18-21 years by prosperity region, 2023

A Chi-Square test was completed to explore the association between prosperity region and well-care visits between 18 to 21 years old. The analysis did not reveal a significant association between prosperity region and well-care visits between 18 to 21 years old ($\chi^2(2)$ = 8.94, p = .443).

Child and Adolescent Well Visits- Total

The percentage of children and adolescents between the ages 3 to 21 years of age who received one or more well-care visit with a primary care practitioner or an OB/GYN practitioner during the measurement year was evaluated to determine if there were disparities in race/ethnicity. MDHHS used audited 2023 HEDIS data (WCV-CH) in this analysis.

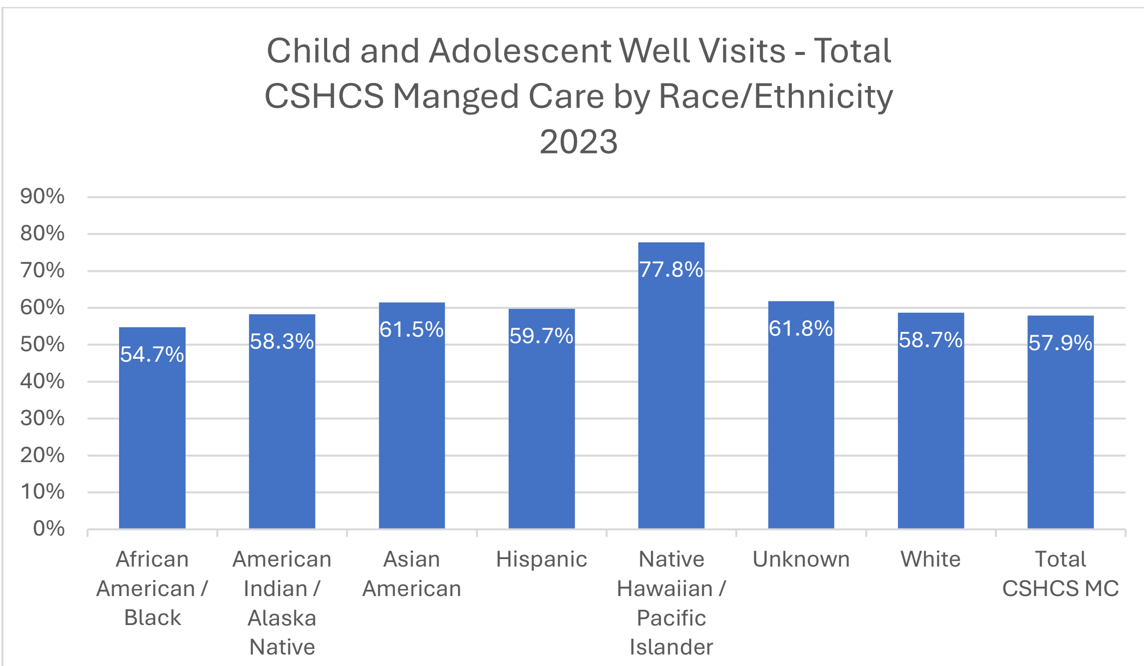

Figure 15. Child and adolescent well visits (ages 3-21) total by race/ethnicity, 2023

Race/Ethnicity	Numerator	Denominator	Rate
African American/Black	3,787	6,924	54.7%
American Indian/Alaska Native	162	278	58.3%
Asian American	256	416	61.5%
Hispanic	925	1,549	59.7%
Native Hawaiian/Pacific Islander	14	18	77.8%
Unknown	1,001	1,620	61.8%
White	8,233	14,018	58.7%
Total CSHCS Managed Care	14,378	24,823	57.9%

Table 18. Child and adolescent well visits (ages 3-21) total by race/ethnicity, 2023

A Chi-Square test was completed to explore the association between race/ethnicity and well-care visits between 3 to 21 years old. The analysis revealed a significant association between race/ethnicity and well-care visits between 3 to 21 years old ($\chi^2(2)$ = 50.53, $p < .001$).

The crosstabulation of race/ethnicity and developmental screenings indicated race and ethnicity proportions that differed significantly from each other at the .05 level. The African American/Black group proportion was significantly lower than Asian American, Hispanic, Native Hawaiian / Pacific Islander, unknown race, and white groups. The unknown group proportion was significantly lower than the white race group.

A Cramer's V comparison was completed where Cramer's V = .045, df = 6, and the degree of association = .11. These indicate a small association between race/ethnicity and well-care visits between 3 to 21 years old.

In addition, MDHHS evaluated well-care visits between 3 to 21 years old by prosperity region. MDHHS used audited 2023 HEDIS data (WVC-CH) in this analysis.

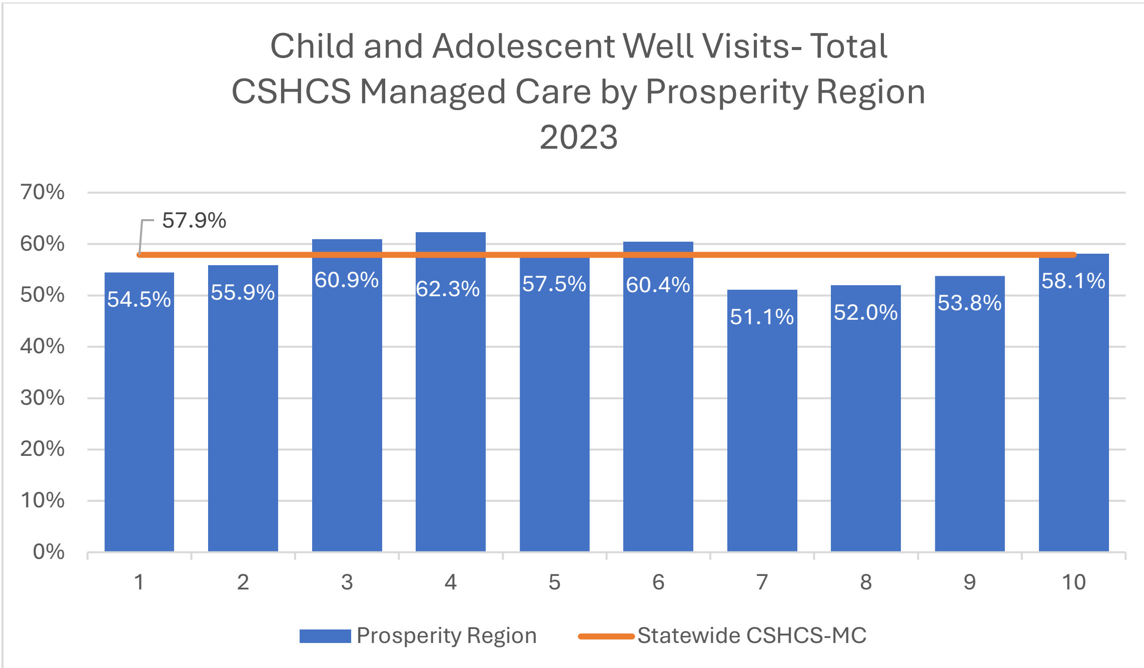

Figure 16. Child and adolescent well visits (ages 3-21) total by prosperity region, 2023

Prosperity Region	Numerator	Denominator	Rate
1	408	749	54.5%
2	292	522	55.9%
3	271	445	60.9%
4	2,979	4,781	62.3%
5	707	1,230	57.5%
6	1,355	2,243	60.4%
7	529	1,035	51.1%
8	917	1,762	52.0%
9	1,040	1,932	53.8%
10	5,880	10,119	58.1%

Table 19. Child and adolescent well visits (ages 3-21) total by prosperity region, 2023

– **MDHHS-Pub-2007 (10-24)**.

A Chi-Square test was completed to explore the association between prosperity region and well-care visits between 3 to 21 years old. The analysis revealed a significant association between prosperity region and well-care visits between 3 to 21 years old ($\chi^2(2)$ = 107.78, p < .001).

The crosstabulation of prosperity region and well-care visits between 3 to 21 years old indicated the proportions of regions 4 and 6 were significantly higher than the statewide proportion of CSHCS Managed Care enrollees at the .05 level. The proportions for regions 7, 8, and 9 were significantly lower than the statewide proportion of CSHCS Managed Care enrollees at the .05 level.

A Cramer's V comparison was completed where Cramer's V = .07, df = 9, and the degree of association = .20. These results indicate there is a small association between prosperity region and well-care visits between 3 to 21 years old.

Childhood Immunizations Combination 3

Childhood immunizations combination 3 represents the percentage of children 2 years of age who had four diphtheria, tetanus and acellular pertussis (DTaP); three polio (IPV); one measles, mumps and rubella (MMR); three haemophilus influenza type B (HiB) ; three hepatitis B (HepB), one chicken pox (VZV); four pneumococcal conjugate (PCV); one hepatitis A (HepA); two or three rotavirus (RV); and two influenza (flu) vaccines by their second birthday. The measure calculates a rate of each vaccine and three combination rates. This measure was evaluated to determine if there were disparities in race/ethnicity. MDHHS used audited 2023 HEDIS data (CIS-COM3) in this analysis.

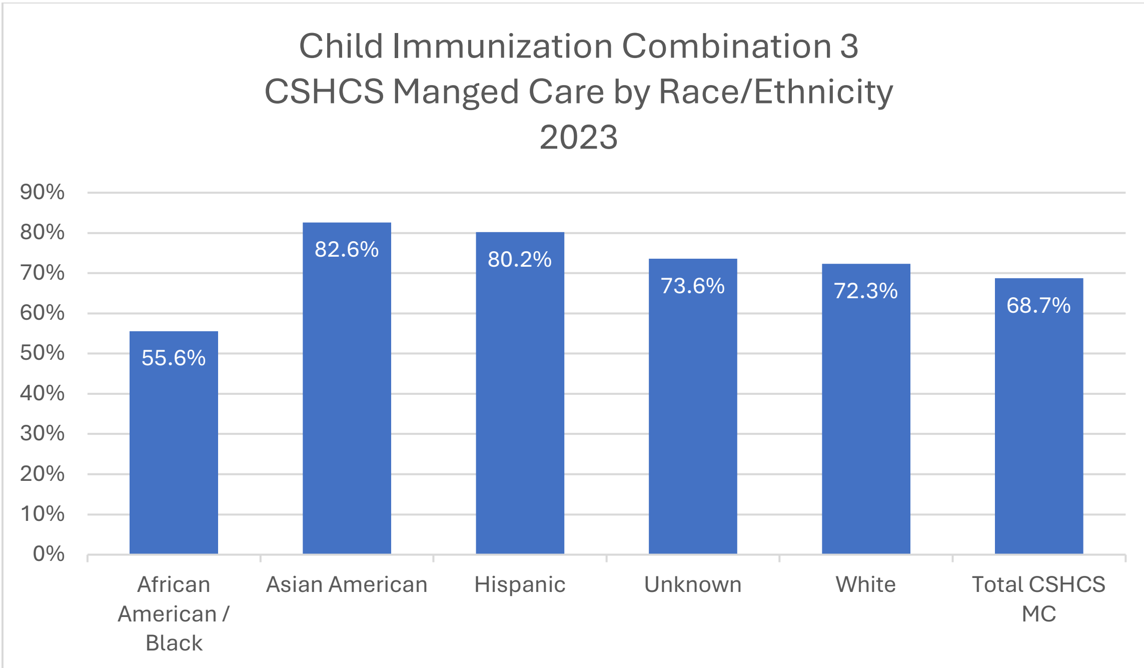

Figure 17. Child immunization combination 3 by race/ethnicity, 2023

Race/Ethnicity	Numerator	Denominator	Rate
African American/Black	213	383	55.6%
Asian American	19	23	82.6%
Hispanic	69	86	80.2%
Unknown	114	155	73.6%
White	585	809	72.3%
Total CSHCS Managed Care	1,009	1,468	68.7%

Table 20. Child immunization combination 3 by race/ethnicity, 2023

A Chi-Square test was completed to explore the association between race/ethnicity and childhood immunizations combination 3. The analysis revealed a significant association between race/ethnicity and childhood immunizations combination 3 ($\chi^2(2)$ = 44.48, p < .001).

The crosstabulation of race/ethnicity and childhood immunizations combination 3 indicated that the proportion for the African American/Black group was significantly lower than the Asian American, Hispanic, unknown race, and white groups at the .05 level.

A Cramer's V comparison was completed where Cramer's V = .18, df = 4, and the degree of association = .35. These results indicate a moderate association between race/ethnicity and childhood immunizations combination 3.

In addition, MDHHS evaluated childhood immunizations combination 3 by prosperity region. MDHHS used audited 2023 HEDIS data (Lead Screening in Children) in this analysis.

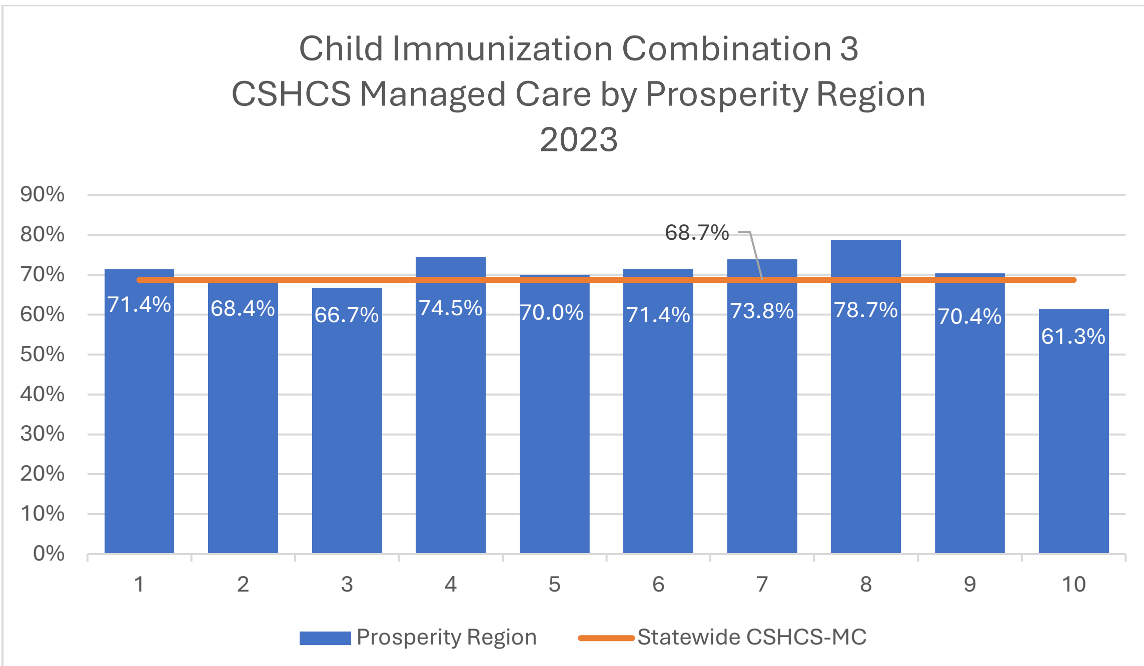

Figure 18. Child immunization combo 3 by prosperity region, 2023

Prosperity Region	Numerator	Denominator	Rate
1	35	49	71.4%
2	13	19	68.4%
3	18	27	66.7%
4	280	376	74.5%
5	49	70	70.0%
6	80	112	71.4%
7	45	61	73.8%
8	70	89	78.7%
9	88	125	70.4%
10	331	540	61.3%

Table 16. Child immunization combination 3 by prosperity region, 2023

A Chi-Square test was completed to explore the association between prosperity region and childhood immunizations combination 3. The analysis did not reveal a significant association between prosperity region and childhood immunizations combination 3 ($\chi^2(2)$ = 4.72, p = .858) at the .05 level.

CY2023 CSHCS Specific Measures

Hearing Aid Comparison

The CSHCS hearing aid comparison represents the percentage CSHCS Managed Care enrollees diagnosed with a condition that required and received a hearing aid (See Appendix). This measure was evaluated to determine if there were disparities in race/ethnicity. The CHAMPS (Community Health Automated Medicaid Processing System) Data Warehouse was utilized to obtain data used (HA-C) in this analysis.

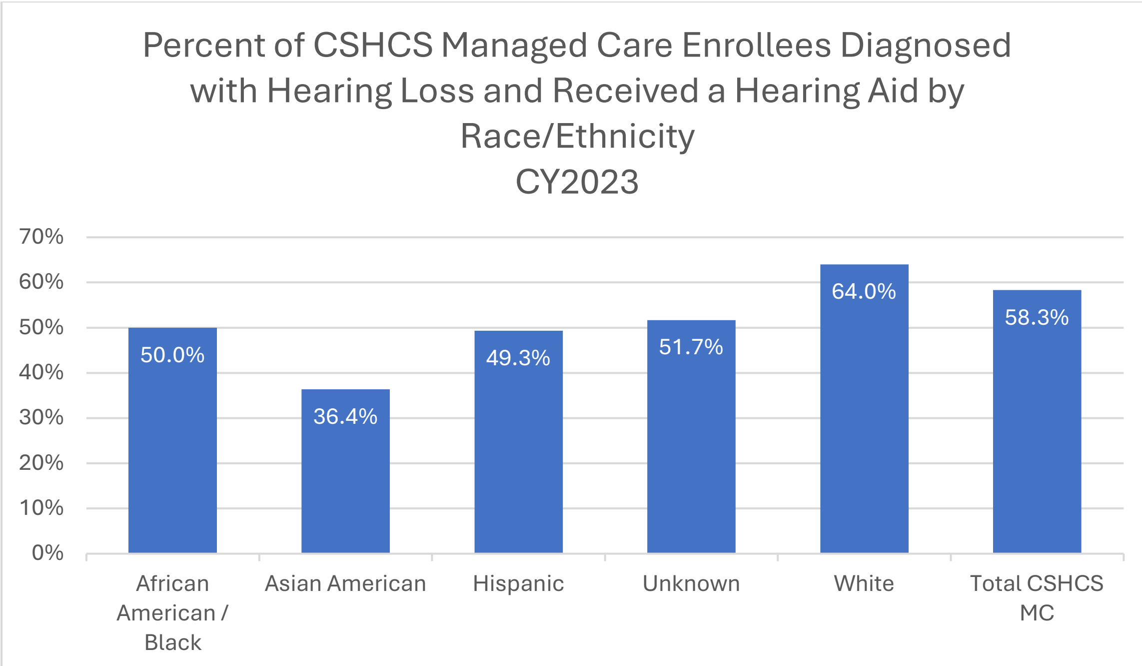

Figure 19. Percent of CSHCS MC enrollees diagnosed with hearing loss and received a hearing aid by race/ethnicity, 2023

Race/Ethnicity	Numerator	Denominator	Rate
African American/Black	111	222	50.0%
Asian American	8	22	36.4%
Hispanic	33	67	49.3%
Unknown	46	89	51.7%
White	408	638	64.0%
Total CSHCS Managed Care	610	1,046	58.3%

Table 22. Percent of CSHCS MC enrollees diagnosed with hearing loss and received a hearing aid by race/ethnicity, 2023

A Chi-Square test was completed to explore the association between race/ethnicity and CSHCS managed care enrollees diagnosed with hearing loss that received a hearing aid. The analysis revealed a significant association between race/ethnicity and the percent of CSHCS managed care enrollees diagnosed with hearing loss who received a hearing aid ($\chi^2(2)$ = 22.89, p < .001).

– MDHHS-Pub-2007 (10-24).

The crosstabulation of race/ethnicity and CSHSC managed care enrollees diagnosed with hearing loss who received hearing aids indicated that the proportion for the African American/Black, Asian American, Hispanic, and unknown race group was significantly lower than the white group at the .05 level.

A Cramer's V comparison was completed where Cramer's V = .15, df = 4, and the degree of association = .30. These results indicate a moderate association between race/ethnicity and the percent of CSHCS managed care enrollees diagnosed with hearing loss who received a hearing aid.

In addition, MDHHS evaluated the percent of CSHCS managed care enrollees diagnosed with hearing loss who received a hearing aid by prosperity region.

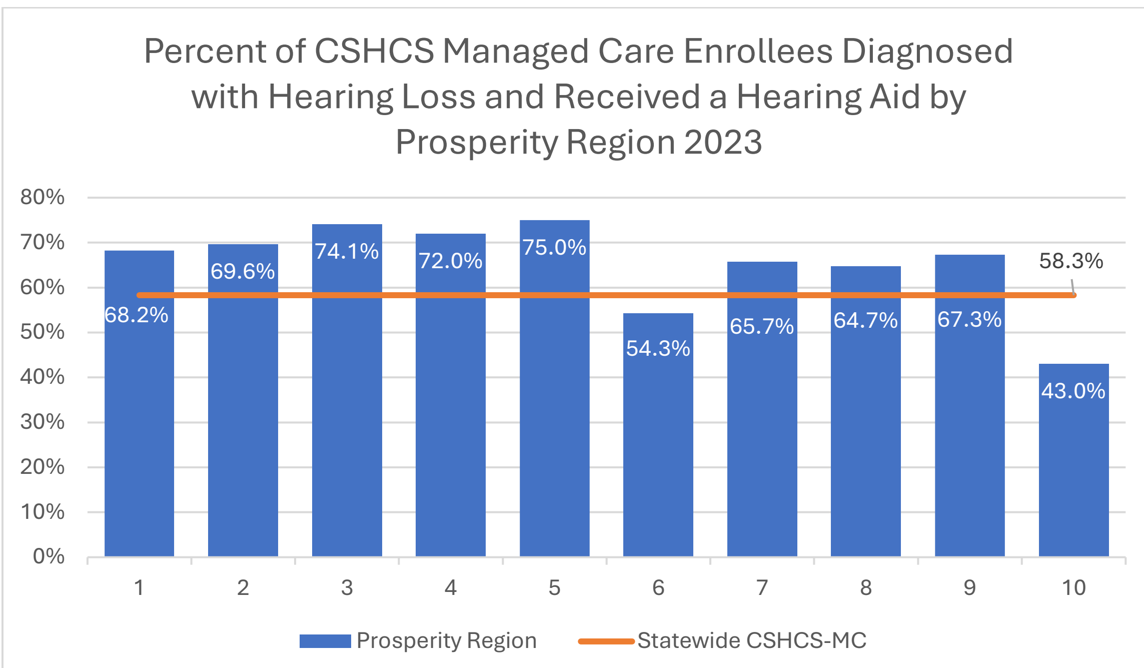

Figure 20. Percent of CSHCS MC enrollees diagnosed with hearing loss and received a hearing aid by prosperity region, 2023

Prosperity Region	Numerator	Denominator	Rate
1	15	22	68.2%
2	16	23	69.6%
3	20	27	74.1%
4	159	221	72.0%
5	30	40	75.0%
6	44	81	54.3%
7	23	35	65.7%
8	55	85	64.7%
9	76	113	67.3%
10	171	398	43.0%

Table 23. Hearing aid comparison by prosperity region, 2023

A Chi-Square test was completed to explore the association between prosperity regions and CSHCS managed care enrollees diagnosed with hearing loss that received a hearing aid. The analysis revealed a significant association between prosperity regions and the percent of CSHCS managed care enrollees who received a hearing aid ($\chi^2(2)$ = 71.33, p < .001).

The crosstabulation of prosperity regions and CSHSC managed care enrollees diagnosed with hearing loss who received hearing aids indicated that the proportion for the prosperity region 10 was significantly lower than the statewide CSHCS managed care proportion at the .05 level. However, the region 4 and 5 proportions were significantly higher than the statewide CSHCS managed care proportion at the .05 level.

A Cramer's V comparison was completed where Cramer's V = .26, df = 9, and the degree of association = .78. These results indicate a large association between prosperity regions and the percentage of CSHCS managed care enrollees diagnosed with hearing loss who received a hearing aid.

Wheelchair Comparison

The CSHCS wheelchair comparison represents the percentage CSHCS Managed Care enrollees diagnosed with a condition that required and received a wheelchair (See Appendix). This measure was evaluated to determine if there were disparities in race/ethnicity. The CHAMPS Data Warehouse was utilized to obtain data used (W-C) in this analysis.

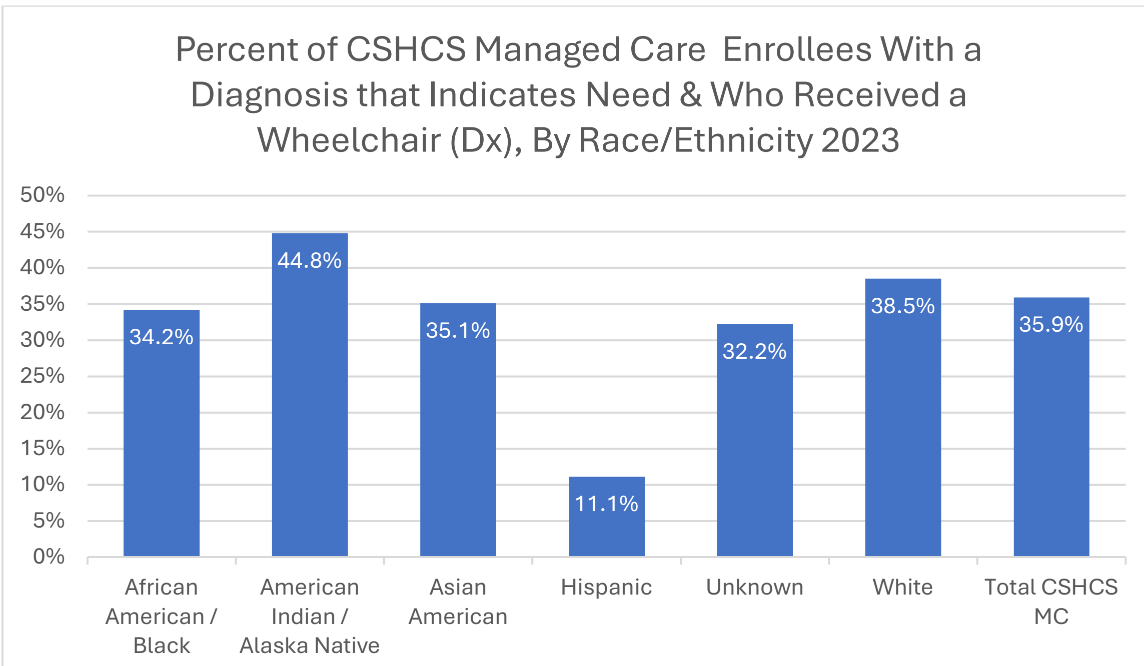

Figure 21. Percent of CSHCS MC enrollees with a diagnosis that indicated need & who received a wheelchair (Dx), by race/ ethnicity, 2023

Race/Ethnicity	Numerator	Denominator	Rate
African American/Black	299	874	34.2%
American Indian/Alaska Native	13	29	44.8%
Asian American	20	57	35.1%
Hispanic	12	108	11.1%
Unknown	88	273	32.2%
White	715	1,855	38.5%
Total CSHCS Managed Care	1,147	3,197	35.9%

Table 24. Wheelchair comparison by race/ethnicity

A Chi-Square test was completed to explore the association between race/ethnicity and CSHCS managed care enrollees with a diagnosis that indicated a need and who received a wheelchair. The analysis revealed a significant association between race/ethnicity and the percentage of CSHCS managed care enrollees with a diagnosis that indicated a need and who received a wheelchair ($\chi^2(2)$ = 38.18, p < .001).

The crosstabulation of race/ethnicity and CSHSC managed care enrollees with a diagnosis that indicated a need and who received a wheelchair indicated that the proportion for the Hispanic ethnicity group was significantly lower than the African American/Black, American Indian/Alaska Native, Asian American, unknown race and white race group at the .05 level. In addition, the African American/Black group and the unknown race group proportions were significantly lower than the white group at the .05 level.

A Cramer's V comparison was completed where Cramer's V = .11, df = 5, and the degree of association = .24. These results indicate a small association between race/ethnicity and the percent of CSHCS managed care enrollees with a diagnosis that indicated a need and who received a wheelchair.

In addition, MDHHS evaluated the percent of CSHCS managed care enrollees with a diagnosis that indicated a need and who received a wheelchair by prosperity region.

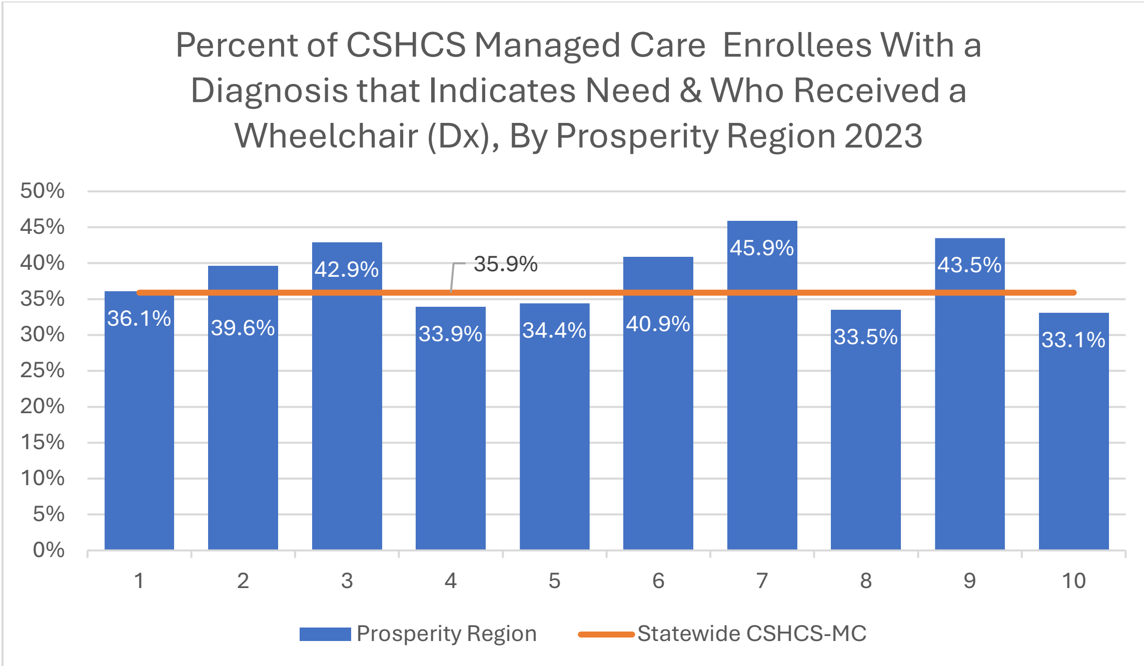

Figure 22. Percent of CSHCS MC enrollees with a diagnosis that indicated need & who received a wheelchair (Dx), by prosperity region, 2023

Prosperity Region	Numerator	Denominator	Rate
1	31	86	36.1%
2	38	96	39.6%
3	27	63	42.9%
4	203	599	33.9%
5	56	163	34.4%
6	124	303	40.9%
7	62	135	45.9%
8	87	260	33.5%
9	107	246	43.5%
10	412	1,246	33.1%

Table 25. Wheelchair Comparison by Prosperity Region

A Chi-Square test was completed to explore the association between prosperity regions and CSHCS managed care enrollees with a diagnosis that indicated a need and who received a wheelchair. The analysis revealed a significant association between prosperity regions and the percent of CSHCS managed care enrollees with a diagnosis that indicated a need and who received a wheelchair ($\chi^2(2)$ = 23.53, p = .005).

The crosstabulation of prosperity regions and CSHCS managed care enrollees with a diagnosis that indicated a need and who received a wheelchair indicated that the proportions for prosperity regions 7 and 9 were significantly higher than the statewide CSHCS managed care proportion at the .05 level.

A Cramer's V comparison was completed where Cramer's V = .09, df = 9, and the degree of association = .26. These results indicate a small association between prosperity regions and the percent of CSHCS managed care enrollees with a diagnosis that indicated a need and who received a wheelchair.

Continuous Glucose Monitor Comparison

The CSHCS continuous glucose monitor comparison represents the percentage CSHCS Managed Care enrollees diagnosed with type 1 diabetes and received a continuous glucose monitor (See Appendix). This measure was evaluated to determine if there were disparities in race/ethnicity. The CHAMPS Data Warehouse was utilized to obtain data used (CGM-C) in this analysis.

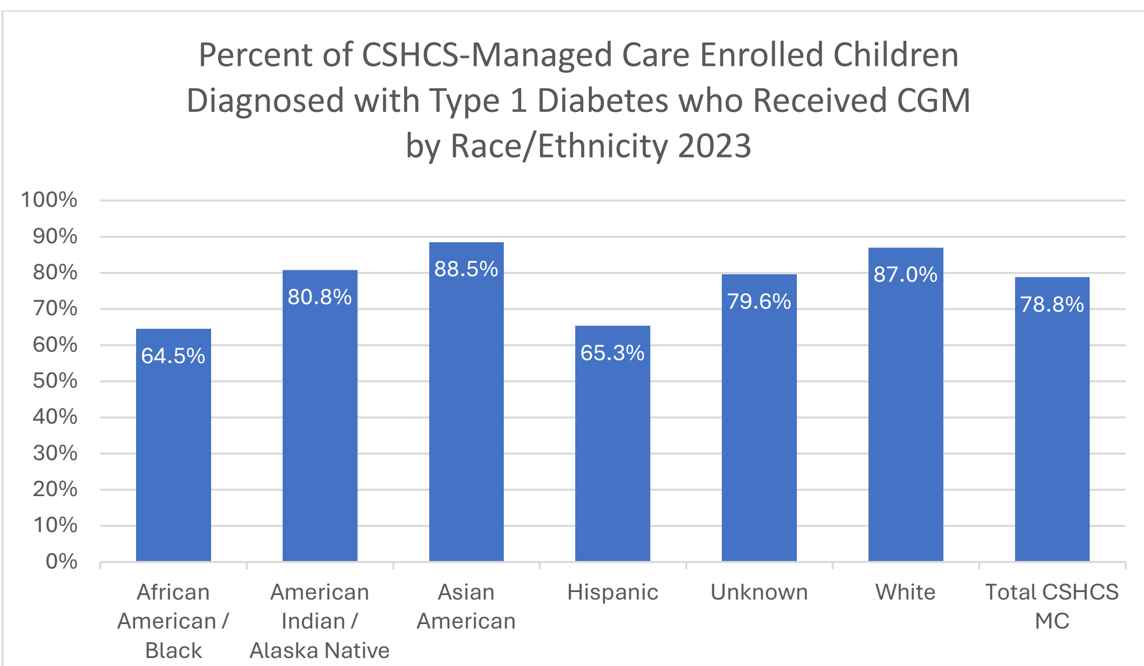

Figure 23. Percent of CSHCS MC enrollees diagnosed with type 1 diabetes and received a continuous glucose monitor by race/ethnicity, 2023

Race/Ethnicity	Numerator	Denominator	Rate
African American/Black	411	637	64.5%
American Indian/Alaska Native	21	26	80.8%
Asian American	23	26	88.5%
Hispanic	77	118	65.3%
Unknown	78	98	79.6%
White	1,082	1,243	87.0%
Total CSHCS Managed Care	1,696	2,152	78.8%

Table 26. Percent of CSHCS MC enrollees diagnosed with type 1 diabetes and received a continuous glucose monitor by race/ethnicity, 2023

A Chi-Square test was completed to explore the association between race/ethnicity and CSHCS managed care enrollees with type 1 diabetes who received a continuous glucose monitor. The analysis revealed a significant association between race/ethnicity and the percentage of CSHCS managed care enrollees with type 1 diabetes who received a continuous glucose monitor ($\chi^2(2)$ = 141.77, p < .001).

The crosstabulation of race/ethnicity and CSHSC managed care enrollees with type 1 diabetes who received a continuous glucose monitor indicated that the proportions for the African American/Black and Hispanic groups were significantly lower than the Asian American, unknown race and white race group at the .05 level. In addition, the unknown race group proportion was significantly lower than the white race group at the .05 level.

A Cramer's V comparison was completed where Cramer's V = .26, df = 5, and the degree of association = .58. These results indicate a large association between race/ethnicity and the percent of CSHCS managed care enrollees with type 1 diabetes who received a continuous glucose monitor.

In addition, MDHHS evaluated the percent of CSHCS managed care enrollees with type 1 diabetes who received a continuous glucose monitor by prosperity region.

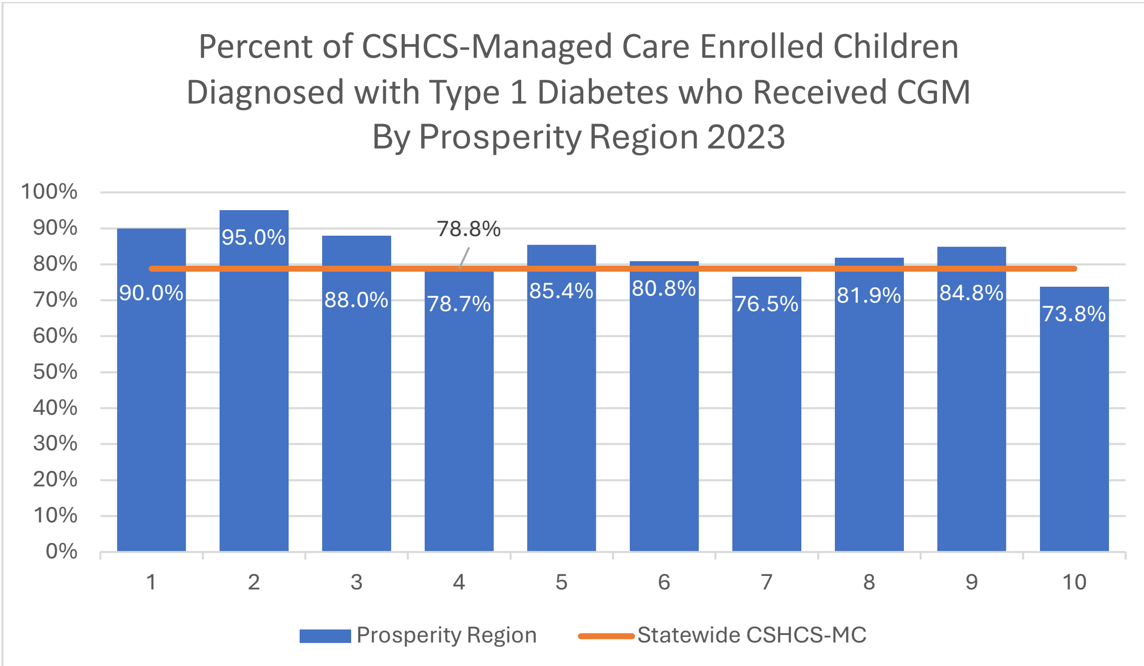

Figure 24. Percent of CSHCS MC enrollees diagnosed with type 1 diabetes and received a continuous glucose monitor by prosperity region, 2023
**Sample size varies by region which impacts statistical significance calculation.*

Prosperity Region	Numerator	Denominator	Rate
1	54	60	90.0%
2	57	60	95.0%
3	44	50	88.0%
4	233	296	78.7%
5	82	96	85.4%
6	168	208	80.8%
7	65	85	76.5%

Prosperity Region	Numerator	Denominator	Rate
8	158	193	81.9%
9	140	165	84.8%
10	692	938	73.8%

Figure 27. Percent of CSHCS MC enrollees diagnosed with type 1 diabetes and received a continuous glucose monitor by prosperity region, 2022

A Chi-Square test was completed to explore the association between prosperity regions and CSHCS managed care enrollees with type 1 diabetes who received a continuous glucose monitor. The analysis revealed a significant association between prosperity regions and the percent of CSHCS managed care enrollees with type 1 diabetes who received a continuous glucose monitor ($\chi^2(2)$ = 38.49, $p < .001$).

The crosstabulation of prosperity regions and CSHCS managed care enrollees with type 1 diabetes who received a continuous glucose monitor indicated that the proportions for prosperity regions 1 and 2 were significantly higher than the statewide CSHCS managed care proportion at the .05 level. However, the proportion for prosperity region 10 was significantly lower than the statewide CSHCS managed care proportion at the .05 level.

A Cramer's V comparison was completed where Cramer's V = .13, df = 9, and the degree of association = .40. These results indicate a moderate association between prosperity regions and the percent of CSHCS managed care enrollees with type 1 diabetes who received a continuous glucose monitor.

Additional CGM Analysis

The continuous glucose monitor comparison revealed a large association between race/ethnicity and the percentage of CSHCS managed care enrollees with type 1 diabetes who received a continuous glucose monitor. The prosperity region analysis revealed a moderate association between prosperity regions and CSHCS managed care enrollees with type 1 diabetes who received a continuous glucose monitor. The prosperity region 10 proportion was significantly lower than statewide CSHCS managed care. As a result, additional analysis was completed for the race/ethnicity and continuous glucose monitor comparison within prosperity region 10.

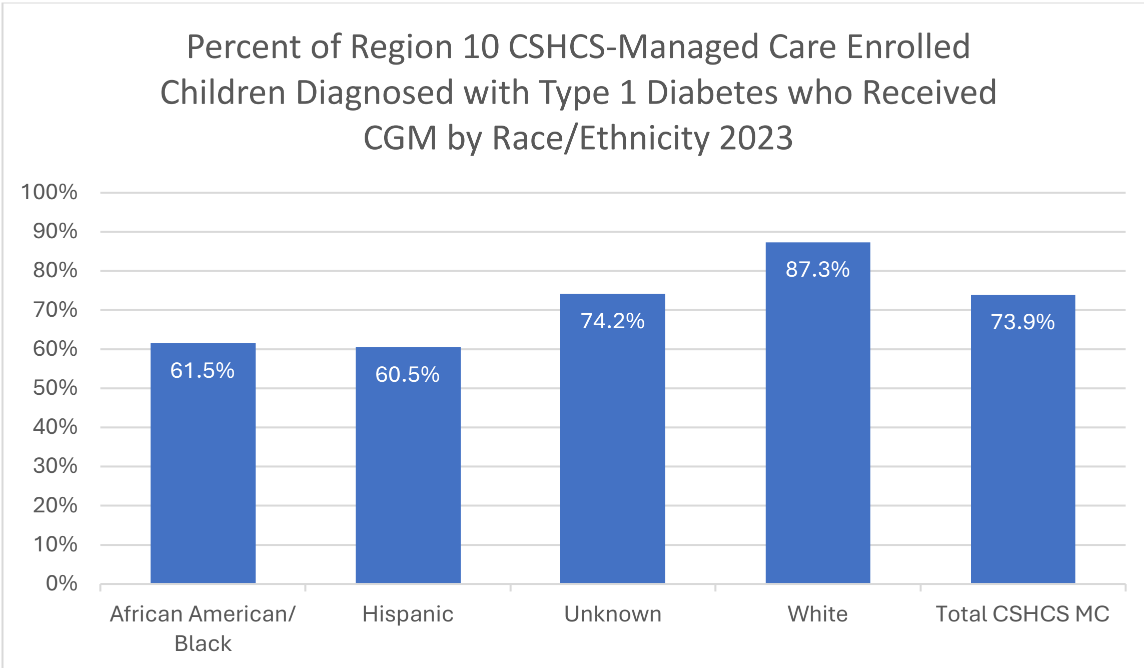

Figure 25. Percent of prosperity region 10 CSHCS MC enrollees diagnosed with type 1 diabetes and received a continuous glucose monitor by race/ethnicity, 2023

Race/Ethnicity	Numerator	Denominator	Rate
African American/Black	249	405	61.5%
Hispanic	26	43	60.5%
Unknown	46	62	74.2%
White	350	401	87.3%
Total CSHCS Managed Care	693	938	73.9%

Table 28. Percent of prosperity region 10 CSHCS MC enrollees diagnosed with type 1 diabetes and received a continuous glucose monitor by race/ethnicity, 2023

A Chi-Square test was completed to explore the association in prosperity region 10 between race/ethnicity and CSHCS managed care enrollees with type 1 diabetes who received a continuous glucose monitor. The analysis revealed a significant association between race/ethnicity and the percent of CSHCS managed care enrollees with type 1 diabetes who received a continuous glucose monitor ($\chi^2(2)$ = 73.17, p < .001).

The crosstabulation of race/ethnicity and CSHSC managed care enrollees in prosperity region 10 with type 1 diabetes who received a continuous glucose monitor indicated that the proportions for the African American/Black, Hispanic, and the unknown race groups were significantly lower than the white race group at the .05 level.

A Cramer's V comparison was completed where Cramer's V = .28, df = 3, and the degree of association = .49. These results indicate a large association in prosperity region 10 between race/ethnicity and the percent of CSHCS managed care enrollees with type 1 diabetes who received a continuous glucose monitor.

The significant association between race/ethnicity and continuous glucose monitors for prosperity region 10 indicates a need for additional analysis. The next step in this process was to review access to an endocrinologist for CSHCS Managed Care enrollees, located in prosperity region 10. Analysis was completed on CSHCS Managed Care enrollees, in prosperity region 10 with type 1 diabetes, to determine the proportions that had a visit with an endocrinologist by race/ethnicity.

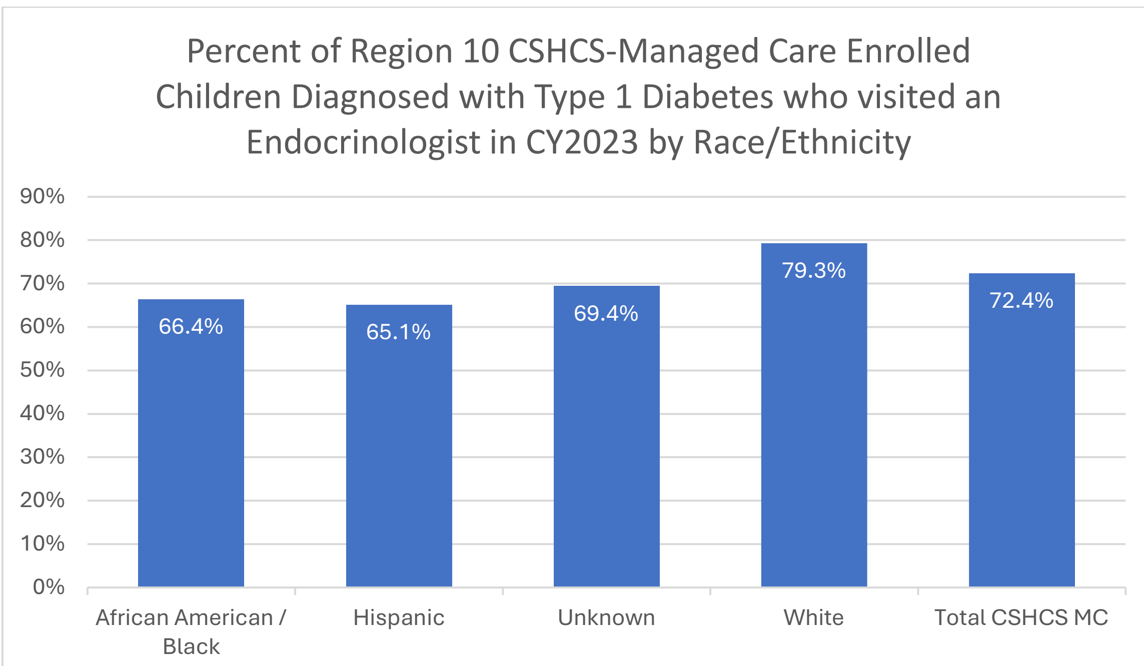

Figure 26. Percent of prosperity region 10 CSHCS MC enrollees diagnosed with type 1 diabetes who visited an endocrinologist by race/ethnicity, 2023

Race/Ethnicity	Numerator	Denominator	Rate
African American/Black	269	405	66.4%
Hispanic	28	43	65.1%
Unknown	43	62	69.4%
White	318	401	79.3%
Total CSHCS Managed Care	679	938	72.4%

Table 29. Percent of prosperity region 10 CSHCS MC enrollees diagnosed with type 1 diabetes who visited an endocrinologist, 2023

A Chi-Square test was completed to explore the association in prosperity region 10 between race/ethnicity and CSHCS managed care enrollees with type 1 diabetes who visited an endocrinologist during CY2023. The analysis revealed a significant association between race/ethnicity and the percent of CSHCS managed care enrollees with type 1 diabetes who visited an endocrinologist during CY2023 ($\chi^2(2)$ = 18.15, $p < .001$).

The crosstabulation of race/ethnicity and CSHSC managed care enrollees in prosperity region 10 with type 1 diabetes who visited an endocrinologist during CY2023 indicated that the proportions for the African American/Black and the Hispanic groups were significantly lower than the white race group at the .05 level.

A Cramer's V comparison was completed where Cramer's V = .14, df = 3, and the degree of association = .24. These results indicate a small association in prosperity region 10 between race/ethnicity and the percentage of CSHCS managed care enrollees with type 1 diabetes who visited an endocrinologist during CY2023.

Future Research and Analysis

The measures examined in this report will be tracked over time to determine if racial/ethnic inequity within the analyzed measures are getting better, worse, or staying the same. The overall goal of this project is to continue improving quality in the CSHCS program while decreasing any racial/ethnic disparities that may be present. This report will be repeated annually to monitor racial/ethnic disparities in the CSHCS program. The findings of these reports will be used in future interventions and policy changes to make meaningful and impactful change on the disparities landscape in the CSHCS program.

Appendix

Hearing Aids

A CSHCS Managed Care enrollee was determined to require a hearing aid if they had a diagnosis code of H902, H905, or H908 on or before Dec. 31, 2023.

The requirement for a hearing aid was determined fulfilled if they received a procedure code of V5030, V5040, V5050, V5060, V5100, V5120, V5130, V5150, V5170, V5180, V5181, V5190, V5210, V5211, V5212, V5213, V5214, V5215, V522, V5230, V5242, V5243, V5244, V5245, V5246, V5247, V5248, V5249, V5250, V5251, V5252, V5253, V5255, V5256, V5257, V5258, V5259, V5260, or V5261 on or before Dec. 31, 2023.

Wheelchair

A CSHCS Managed Care enrollee was determined to require a wheelchair if they had a diagnosis of any of the following diagnosis codes on or before Dec. 31, 2023:

E791, G041, G10, G1110, G1111, G1119, G112, G113, G114, G118, G120, G121, G1220, G1221, G1223, G1224, G1225, G1229, G128, G129, G130, G14, G230, G231, G232, G238, G239, G241, G242, G248, G249, G253, G2589, G259, G3181, G3182, G3189, G319, G3289, G35, G360, G361, G368, G369, G371, G372, G373, G374, G378, G379, G4042, G40822, G40824, G40834, G600, G601, G602, G609, G610, G6181, G629, G63, G7000, G7001, G702, G7089, G709, G7100, G7101, G7109, G7111, G7119, G7120, G7121, G71220, G71228, G7129, G718, G723, G729, G800, G801, G802, G803, G804, G808, G809, G8190, G8220, G8250, G8330, G834, G8381, G8382, G8383, G8389, G839, G901, G903, G910, G911, G913, G914, G918, G919, G930, G931, G935, G9389, G939, G94, G950, G9511, G9519, G9520, G9529, G9581, G9589, G959, G9600, G96191, G96198, G96810, G96819, G9689, G969, G9781, G9782, G988, G992, G998, I6789, I6900, I69059, I69098, I6910, I69159, I69198, I6920, I69259, I69298, I6930, I69359, I69398, I6980, I69859, I69898, I6990, I69919, I69959, I69998, P115, P148, P149, P9160, P9163, P91823, P91829, Q019, Q039, Q042, Q043, Q044, Q045, Q046, Q048, Q049, Q050, Q051, Q052, Q053, Q054, Q055, Q056, Q057, Q058, Q059, Q060, Q061, Q062, Q063, Q064, Q069, Q0701, Q0702, Q0703, Q078, Q079, Q6589, Q6600, Q6610, Q6640, Q666, Q6670, Q6689, Q6690, Q6691, Q669, Q688, Q7210, Q7220, Q7230, Q7240, Q7250, Q7260, Q7270, Q72819, Q72899, Q7290, Q730, Q731, Q738, Q742, Q743, Q749, Q770, Q771, Q773, Q774, Q776, Q778, Q779, Q780, Q781, Q782, Q783, Q784, Q786, Q788, Q789, Q798, Q799, Q8501, Q8502, Q8503, Q851, Q858, Q859, Q8797, Q898, Q899, S064X0A, S065X0A, S065X9A, S066X0A, S066X9A, S069X0S, S069X9S, S071xxS, S078xxS, S128xxS, S129xxA, S129xxS, S140xxS, S14109S, S14115A, S14116A, S14117A, S14119S, S14121A, S14122A, S14123A, S14124A, S14129S, S14139S, S14149S, S14159S, S149xxS, S22009A, S22009B, S22009K, S22009S, S240xxS, S24109S, S24119S, S24139S, S24149S, S24159S, S32000S, S32009K, S32009S, S3210xK, S3210xS, S32309K,

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The requirement for wheelchair was determined fulfilled if they received a procedure code of K0001, K0010, E1229, E1231, E1232, E1233, E1234, E1235, E1236, E1237, E1238, E1239, or E1229 on or before Dec. 31, 2023.

Continuous Glucose Monitor (CGM)

A CSHCS Managed Care enrollee was determined to require a continuous glucose monitor if they had a diagnosis of any of the following diagnosis codes on or before Dec. 31, 2023:

E0840, E0849, E08610, E088, E1021, E1022, E1029, E1039, E1040, E1043, E1049, E1059, E1069, E108, E109, E1140, E118, or E161.

The requirement for a continuous glucose monitor was determined to be fulfilled if they received a procedure code of A9276, A9277, K0553, K0554, A4239, E2103, A4238, A9278, E2102 on or before Dec. 31, 2023.