Equity in Home and Community-Based Services (HCBS)

A Colorado Analysis of HCBS Representation and Utilization with a Focus on Race/Ethnicity

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I. Executive Summary

More than 52,000 adults and children receive home and community-based services (HCBS) through Health First Colorado (Colorado's Medicaid program). These services are available through Health First Colorado waivers for members who meet both income and level of care requirements. Medicare does not cover HCBS. Services vary widely and include personal care services, home modifications, adult day services and respite care, among others.[1] Together, these services comprise an essential long-term care safety net for Coloradans with disabilities.

Through funding from the American Rescue Plan Act, the Department of Health Care Policy and Financing (HCPF) was afforded the opportunity to better understand equity within Colorado HCBS. While individuals living with disabilities are often considered a standalone population to evaluate for health disparities in comparison to those without disabilities, this report focuses on racial/ethnic disparities **within** this population.

HCPF's Research and Analysis Team and the Data Analytics Team analyzed Health First Colorado data to identify health disparities within the population of members with disabilities. Overall, the data suggest that underrepresentation in HCBS by groups that are not white or English speaking appears to be the key health equity concern.

The following are key findings of this research.

- Hispanic/Latino members are underrepresented in HCBS. Underrepresentation is estimated by comparing a member group's HCBS enrollment to their overall enrollment in Health First Colorado.[2] Hispanic/Latino children and youth are especially underrepresented. They comprise 40.0% of all Health First Colorado members up to age 18 but just 12.3% of HCBS members in this age group.

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[1] An overview of HCBS services can be found on the Health Care Policy and Financing (HCPF) website.
[2] Underrepresentation is estimated by comparing a member group's HCBS enrollment to their overall enrollment in Health First Colorado. There are limitations to this method, but this was determined to be the most valuable comparison. More information on this decision is available in Appendix A.

- Members across all age groups whose preferred language is Spanish are underrepresented in HCBS when compared to overall Health First Colorado enrollment.

- Smaller racial/ethnic groups, particularly Black/African American, American Indian and Alaska Native (AIAN), and Native Hawaiian/Other Pacific Islander, have low enrollments in HCBS and in specific waivers despite often having higher prevalence rates of disability than other groups. AIAN members also use fewer services than they are authorized when compared to other groups in some parts of the state. HCBS waivers targeted to people with intellectual and/or developmental disabilities (IDD) and the adult Community Mental Health Supports (CMHS) waiver are disproportionately represented by white members. Asian members, though a small population, are more represented in HCBS than in Health First Colorado overall. It is important to consider that some Asian subgroups may face greater barriers to HCBS enrollment than others. More representation, though, is an indication that members in this group are enrolling to receive the services for which they qualify.

- HCBS members are more likely than Health First Colorado members overall to have a diagnosed behavioral health condition. The adult CMHS waiver only serves a small number of people with high needs, so connections to behavioral health providers are critical for the HCBS population broadly.

- Consumer-directed services – available on some HCBS waivers – empower members to have more control over their care. However, for Consumer Directed Attendant Support Services (CDASS), Black/African American and Hispanic/Latino adults are receiving fewer units of this care than other groups. Black/African American members are also more likely to choose agency support for their consumer-directed services than managing their care themselves.

HCPF will rely on community meetings and interviews held in the spring of 2023 to better understand these findings. The results of that work will be published separately on the HCPF website. HCPF also developed a literature review that summarizes evidence of disparities within the HCBS population and factors that contribute to underrepresentation and underutilization of services.

II. Introduction

A. Why Examine Equity?

People with disabilities who are enrolled in Health First Colorado are a diverse population comprising many backgrounds, ages, races and ethnicities, ranges of disability types, severities and symptomologies, and co-occurring health conditions. Intersectional[3] identities influence people's health care preferences, needs, and choices, as well as their experience with the health care system. This report focuses on health disparities, which are defined as differences in health outcomes between populations due to socioeconomic factors or population characteristics.[i] While disability is often a primary lens for evaluating health disparities, this research considers additional identities, especially race/ethnicity, to understand how members enroll in, navigate, and utilize services within the Health First Colorado system.

This report focuses on two primary areas of disparities: underrepresentation in Health First Colorado home and community-based services (HCBS) and underutilization of services once enrolled (See Box 1 for an overview of services).

[3] Intersectionality describes the concept that social identities (e.g., race, class, gender, disability status, etc.) are interconnected and additive rather than separate. Kimberlé Crenshaw first defined this term in 1989.

Box 1: What Are Home and Community-Based Services (HCBS) and How Are They Accessed?

Individuals seeking health care and support for functional limitations and/or disabilities through Health First Colorado must apply. Individuals have to meet specific financial criteria and meet an institutional level of care regardless of whether or not they prefer to live at home. A high-level overview of criteria is available on HCPF's website. Once enrolled, members have access to supports for functional limitations that they qualify for as well as medical and behavioral health services, just like any Health First Colorado member.

Individuals seeking services for their disability or functional limitation can choose between facility-based services, such as nursing facilities, and home and community-based services (HCBS) which are offered by waivers. Regardless of the setting of care (facility or HCBS), members are part of Health First Colorado's long-term care system, also called "Long-term Services and Supports" or LTSS. In other words, HCBS is a subset of LTSS services within Colorado's broader Health First Colorado program. Other programs for this population, such as the Program of All-Inclusive Care for the Elderly (PACE), also are considered LTSS but are not discussed in this report.

There are currently six adult HCBS waivers and four children's HCBS waivers. Chart comparisons published on HCPF's website outline the services available, who is eligible, and basic steps in accessing care. Examples of services include personal care, homemaker services, certified nursing assistants, home modifications, respite care, assistive technology, case management, therapeutic services, among many others. Service options vary by waiver even though some services are available across multiple waivers.

At the Case Management Agency, staff conduct a level of care assessment and service planning process with the member and/or caregiver to determine the number of service hours or units that can be authorized. The services outlined go through a Prior Authorization Request (PAR) process and are documented in the service plan. Members can then use up to the amount of care authorized via the PAR on a weekly basis. There are sometimes differences in the quantity of services authorized versus the quantity of services used. Reasons can include challenges in finding providers or other issues, but differences can also be the result of normal variation in utilization, such as not needing as many services one week or having fluctuating needs.

HCPF analyzed enrollment data and HCBS utilization data to identify health disparities. The intention is to use this research, paired with a literature review and community feedback, to identify opportunities for improving health equity in Health First Colorado long-term.

Before delving into disparities **within** the disability community, it is important to acknowledge that people with disabilities experience health disparities when

compared to their peers without disabilities. This context is important because it grounds HCBS disparities within larger disparities, which increases the urgency of identifying and acting on opportunities to improve health equity for this population.

B. Health Disparities Between People with and without Disabilities

A large body of evidence suggests that people with disabilities experience disparities in access to care and health outcomes compared to people without disabilities.[ii] [iii] [iv] [v] In Colorado, people with disabilities generally receive fewer preventive screenings, are less likely to have an annual dental visit, and are less likely to receive the flu vaccine.[vi] They are also more likely to be a smoker, live with diabetes, and experience obesity.[vii] Table 1 below highlights these differences and others.

Table 1. Health Statistics, People with Disabilities Compared to People without Disabilities in Colorado (2020)

Health condition	Coloradans with Disabilities	Coloradans without Disabilities
Current smoker	20.6%	10.5%
Body mass index > 29.0	33.9%	21.5%
Flu vaccine in past 12 months	47.4%	49.0%
Visited a dentist in the past year	57.0%	69.5%
Routine check-up in past year	71.3%	66.0%
Up-to-date cervical cancer screening	77.4%	83.7%
Fair or poor self-rated health	29.2%	5.0%
Ever had high blood pressure	35.6%	21.6%
14+ days of mentally unhealthy days in the past 30 days	32.8%	9.1%

Source: Centers for Disease Control and Prevention (CDC) Disability and Health Data System, 2020. Note: The Behavioral Risk Factor Surveillance System (BRFSS) is the original data source. This is a state-based survey with representative sampling methods, but the data shown here are not limited to Health First Colorado members.

These disparities are rooted in complex factors that extend beyond individual behaviors, specifically systemic socioeconomic disadvantages and discrimination.[viii]

People with disabilities are more likely to be low-income, less likely to be employed, and more likely to have lower educational attainment than individuals without disabilities.[ix] [x] [xi] Many of the reasons are tied to historic and present-day societal exclusion and discrimination that do not equitably value people with disabilities. This results in limited opportunities for finding well-paying jobs, accessible and affordable housing, and a quality education.[xii] Race/ethnicity, language, sex and gender, and/or poverty can further "compound the impact of the disability, leading to even poorer health and quality of life."[xiii] These challenges impact health equity, meaning the opportunity for people with disabilities to live an optimally healthy life regardless of their disability status and other identities.

C. Health Disparities within the Population of People with Disabilities

There is less research and knowledge dedicated to understanding disparities **within** the diverse population that receives HCBS. This report adds to that knowledge base.

HCPF's analysis finds that individuals receiving HCBS in Colorado are more likely to be white and English-speaking than the Health First Colorado population. Existing national research also has suggested that HCBS spending is lower for Black/African American and Hispanic/Latino members than white members,[xiv] and that identifying as white increases one's likelihood of receiving home care.[xv] This matters for many reasons, including that when people underutilize HCBS, the risk of a nursing home admission increases.[xvi]

People of color who use HCBS also experience disparities in the form of lower *quality* care, which can result in poorer health outcomes.[xvii] [xviii] [xix] [xx] [xxi] [xxii] [xxiii] Some of these disparities are deeply ingrained in historical and present-day systemic inequities that are more challenging to address. In particular, racial segregation has impacted which services are available where and to whom.[xxiv] Providers are less likely to accept Medicaid where Black/African American and Hispanic/Latino people are more likely to live,[xxv] and people of color are more likely to live in neighborhoods with more home health providers but receive lower quality care.[xxvi] People of color in Medicaid also use fewer services than white members, influenced by institutional barriers to accessing health care.[xxvii] This larger context is important to keep in mind when considering

barriers that impede health equity work, particularly in the limitations of Health First Colorado policy.

There may be several reasons that Health First Colorado members are underrepresented in HCBS. First, awareness of HCBS can be low for some member groups. People with low incomes are less likely to have conversations with their medical providers about HCBS,[xxviii] and one study found that Black caregivers were more likely to report not needing services and being less aware of services.[xxix] Cultural norms and preferences can also impact whether a person or caregiver seeks HCBS. For example, Asian cultures tend to view caregiving as a duty[xxx] and may be less likely to seek paid support. Navigating the HCBS system is challenging for many but particularly so for people with less time and fewer resources. It is imperative that health systems – including Medicaid – become more accessible.[xxxi]

Underrepresentation in HCBS may exist for different reasons depending on the unique characteristics of populations. For people who speak a language other than English, research suggests they are less likely to access care they need[xxxii] and may experience lower quality care including fewer referrals.[xxxiii] [xxxiv] Individuals with both an IDD diagnosis and a mental health diagnosis may have their disability overlooked by providers or they may even be over-diagnosed in some situations (e.g., prescribed more psychotropic drugs).[xxxv] [xxxvi] [xxxvii] [xxxviii] [xxxix] For American Indian/Alaska Native individuals who are members of tribes, they are more likely to use HCBS when services are administered by the tribes themselves, and although this arrangement is possible, it is uncommon.[xl] [xli] The literature review that accompanies this report goes into greater detail on access challenges for specific populations, including the availability of services, culturally competent care, and systems barriers for populations not already mentioned including LGBTQ+ individuals and members with housing challenges.

D. Report Goals and Research Questions

Because HCBS (and long-term care more broadly) are typically outside the financial reach of many people, Health First Colorado plays a critical role as a safety net for people with disabilities and, therefore, has an obligation to ensure equity as a priority within the system. As Colorado's aging population grows over time, the racial/ethnic diversity in Health First Colorado LTSS is expected to increase,[xlii] raising the stakes on health equity. Beyond race/ethnicity, HCPF also considers other intersecting

identities including age, gender and sexual orientation, housing status, and the presence of co-occurring behavioral health conditions.

The overarching goals of this report are to:

(1) identify health disparities in HCBS enrollment and service utilization particularly by race/ethnicity; and

(2) highlight Health First Colorado member groups that have greater barriers to becoming enrolled and use this information to inform qualitative research.

Results from conversations with community stakeholders (qualitative research in goal #2 above) are not included in this report but will be published on HCPF's website later in 2023. All of this information will be used to inform an equity plan for the Office of Community Living, which administers HCBS.

For the analysis, the following questions guided the research:

- To what extent are there differences in overall Health First Colorado enrollment versus HCBS enrollment by member group – especially race/ethnicity, age, geography, and language – that might suggest certain populations are underrepresented in HCBS programs?
- Is underrepresentation an issue for certain HCBS waivers or services in particular?
- Once enrolled in HCBS, are some member groups not able to use as many service hours or service units as they have been authorized as compared to other groups? To what extent do authorized hours and utilized hours vary by member group and service type?

A full methodology including research limitations is available in Appendix A.

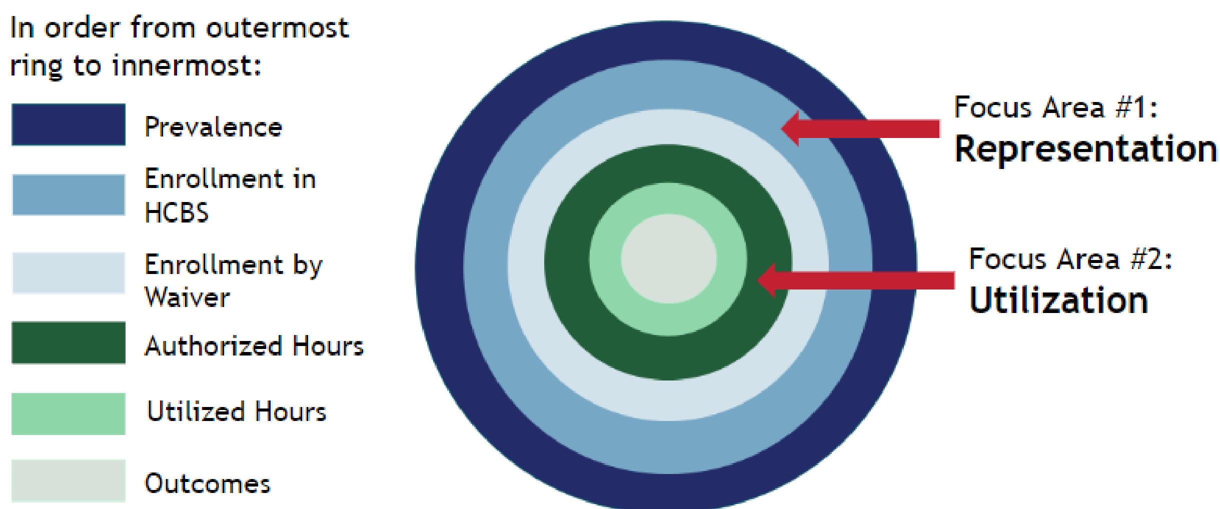
III. Equity Approach

This report is organized around two key issues that pertain to health equity: **representation** and **utilization** (Figure 1). Representation in Health First Colorado is primarily about ensuring that Coloradans who may qualify for HCBS are aware of and have access to enrolling in services that they qualify for. Once enrolled, utilization

refers to making sure each enrolled member is approved for the appropriate amount and type of services they need and making sure they can fully access those services. We selected these two issues because Health First Colorado is positioned to implement policy, program, and outreach efforts to address health disparities identified in these areas.

Figure 1 below depicts how HCPF conceptualized health disparities for HCBS members, including how disparities can compound to exacerbate the effects of inequity. For example, prevalence data from the Census (Figure 2) suggests American Indian/Alaska Native members are more likely to report living with a disability; this group also is underrepresented in HCBS broadly, particularly among children and youth, and this group is underrepresented in certain waivers. HCPF evaluated findings using this conceptual model.

Figure 1. Diagram of Compounding Health Equity within HCBS



Source: Health First Colorado diagram. HCPF loosely based this evaluation as well as the literature review on the Conceptual Framework of Access to Healthcare developed by [Levesque et al, 2013.](#)
Note: The National Council on Disability has published a broader [equity framework](#) that includes strategies and concepts not included in this diagram, such as requiring disability clinical-care curricula in medical schools.

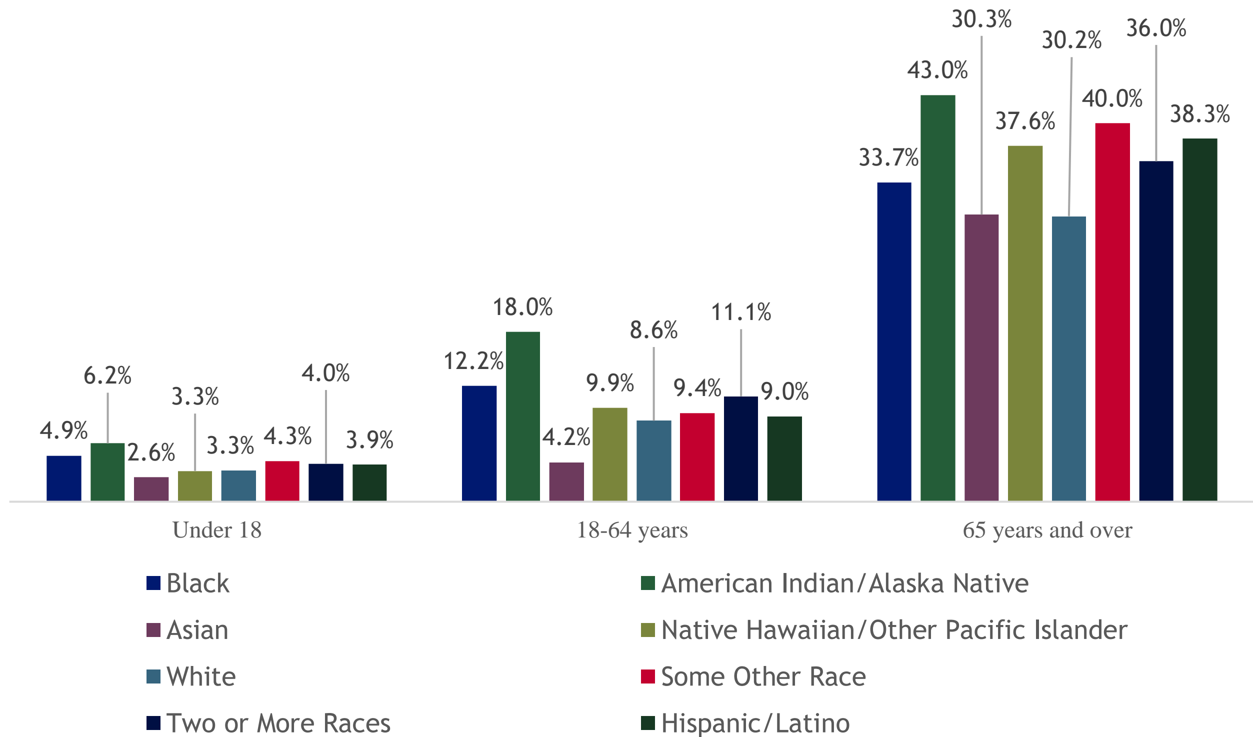
This report does not address health and wellbeing outcomes, which is the inner most layer of this diagram. Most of the existing outcome measures are captured in an annual survey, which is not statistically representative and tends to have relatively low response rates. In the absence of better measures, this report focuses on the

other elements of equity and emphasizes disparities in representation because the data are readily available to make member group comparisons. In addition, utilization is difficult to analyze without adequate representation.

Disability prevalence – the outermost layer in Figure 1 – is a useful starting point for determining whether certain member groups are underrepresented in HCBS. For example, in Colorado American Indian/Alaska Native (AIAN) members report higher disability rates across all age groups (Figure 2), so it is reasonable to expect this group would be more represented in HCBS. As explained later in the report, this is not the case in reality. Figure 2 below shows disability prevalence in Colorado using 2020 U.S. Census data. The Census questionnaire asks participants to self report disability in six categories: hearing difficulty, vision difficulty, cognitive difficulty, ambulatory difficulty, self-care difficulty, and independent living difficulty. Percentages are based on the reporting of one or more disabilities, and all income levels are included.[4] Unlike the Census, Health First Colorado HCBS criteria are acuity based. In other words, a Coloradan may have reported a disability on the Census survey, but they do not meet the disability severity required by Health First Colorado for receiving HCBS. Still, this information is valuable for understanding which race/ethnicity groups are potentially more likely to be represented in Health First Colorado.

Figure 2. Self-Reported Disability Prevalence in Colorado by Age, 2020

[44] HCPF included all income levels because the Census cross-tabulations did not allow for comparisons of race/ethnicity and income by disability status. There is some research that indicates controlling for income eliminates differences in disability rates by race/ethnicity. Income level and disability status are interrelated. People with a disability are more likely to be in poverty and alternately, people who meet poverty thresholds are also more likely to have a disability. More information is available at the National Disability Institute.



Source: Census American Community Survey data. (2020). 5-Year file.
Note: Percentages reflect one or more disabilities. The Census does not ask about acuity, thus prevalence is not necessarily reflective of HCBS eligibility. HCPF did not control for income. Controlling for income potentially may have the effect of reducing the magnitude of differences by race/ethnicity shown here. Acronyms: AIAN = American Indian/Alaska Native, NHOPI=Native Hawaiian and Other Pacific Islander. These race/ethnicity categories are used by the Census Bureau.

The prevalence Census data in Figure 2 above do not adequately reflect rates of intellectual and developmental disabilities (IDD) in Colorado. In part, this is because people could report cognitive difficulty based on neurological and/or behavioral health conditions apart from IDD, such as dementia.[xliii] In general, IDD prevalence rates are not readily available a population level part. Of the research that does exist, much of it is focused on children. For example, an analysis of the National Health Interview Survey (NHIS) (from 2009 to 2017) found that white and Black children had higher prevalence of any developmental disability than Hispanic/Latino

children.[5] [xliv] White children had slightly higher rates of autism spectrum disorders and attention deficit/hyperactivity disorder (ADHD) when compared to Black children, though Black children had slightly higher rates of learning disabilities. For adults, IDD prevalence data are not available with the exception of older NHIS studies. Regardless of age, IDD prevalence can be difficult to measure because other factors – particularly the availability of services, screening methods, changing diagnosis criteria, and varying levels of disability awareness – which influence the reported rates of disability.[xlv]

IV. Key Findings

Each key finding of our analysis is outlined below.

Finding #1

Hispanic/Latino members are underrepresented in HCBS across all age groups. Underrepresentation is particularly substantial for Hispanic/Latino children and youth. Alternatively, white and Asian members are more represented in HCBS than in Health First Colorado overall.

Hispanic/Latino members are underrepresented in HCBS when compared to their representation in Health First Colorado overall. For instance, Hispanic/Latino individuals comprise 30.8% of the total Health First Colorado population but just 15.0% of the HCBS population, which suggests they may be underenrolled. Table 2 displays the percentage of members enrolled in Health First Colorado vs the percentage of members enrolled in HCBS by all race/ethnicity groups. This disparity is particularly large for Hispanic/Latino children and youth (ages 0-17). They make up 40.0% of all Health First Colorado members of that age range but just 12.3% of HCBS children and youth (see Figure 3). These disparities persist across most regions of the state, even where there is more ethnic diversity.

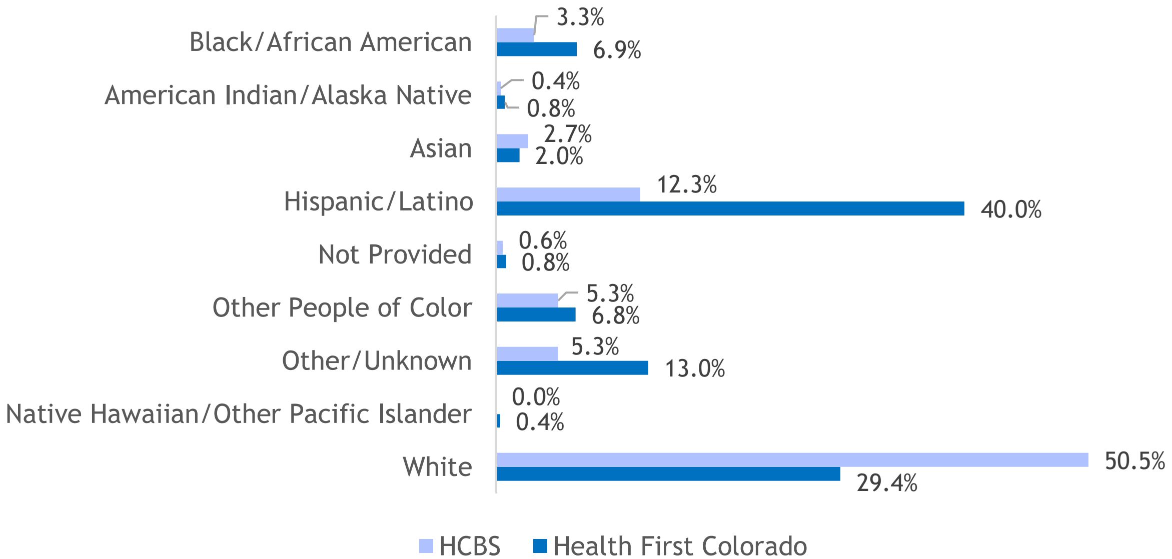
[5] The National Health Interview Survey defines developmental disability as any of the following: ADHD, autism spectrum disorder, blindness, cerebral palsy, moderate to profound hearing loss, learning disability, intellectual disability, seizures, stuttering or stammering, or other developmental delay. This definition does not align precisely with HCPF's definition of developmental disability.

Table 2. Representation in HCBS versus Health First Colorado by Age and Race/Ethnicity

	All Ages	All Ages	Ages 0-17	Ages 0-17	Ages 18+	Ages 18+
	% of Health First Colorado Enrolled Members	% of HCBS Enrolled Members	% of Health First Colorado Enrolled Members	% of HCBS Enrolled Members	% of Health First Colorado Enrolled Members	% of HCBS Enrolled Members
Black/African American	7.0%	6.0%	6.9%	3.3%	7.0%	6.3%
American Indian/Alaska Native	0.9%	0.6%	0.8%	0.4%	1.1%	0.6%
Asian	2.4%	4.4%	2.0%	2.7%	2.7%	4.5%
Hispanic/Latino	30.8%	15.0%	40.0%	12.3%	25.7%	15.3%
Native Hawaiian/Other Pacific Islander	0.3%	0.1%	0.4%	0.0%	0.3%	0.1%
Other People of Color	4.7%	2.4%	6.8%	5.3%	3.5%	2.1%
White	40.4%	54.7%	29.4%	50.5%	46.6%	55.2%
Other/Unknown	12.6%	16.2%	13.0%	24.9%	12.4%	15.3%
Not Provided	0.8%	0.5%	0.8%	0.6%	0.8%	0.5%

Source: Health First Colorado enrollment data, April 2021 – March 2022

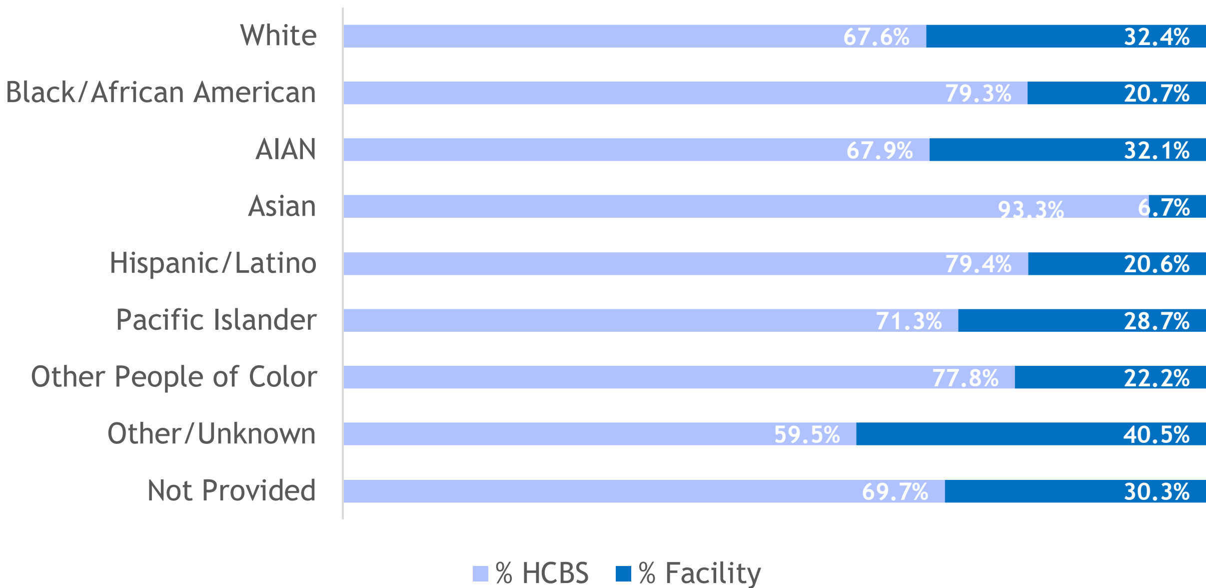
Figure 3. Representation in HCBS versus Health First Colorado for Children and Youth by Race/Ethnicity



Source: Health First Colorado enrollment data, April 2021 – March 2022

Among older Hispanic/Latino populations (ages 65+), underrepresentation in HCBS is still an issue but the gap is smaller (16.8% enrolled in HCBS v. 23.0% enrolled in Health First Colorado). The reason for underrepresentation cannot be explained by these individuals receiving care in other settings (i.e., nursing facilities). This race/ethnicity group is less likely to use nursing facilities than white members in Colorado (see Figure 4).

Figure 4. LTSS Setting of Care by Race/Ethnicity, Ages 65+



Source: Health First Colorado enrollment data, April 2021-March 2022
Note: Assisted living is considered HCBS in the graph. Only adults ages 65 and older are included in the graph because this age group is the primary user of facility-based services (i.e., nursing facilities).

Alternatively, white members are more represented in HCBS when compared to Health First Colorado overall, especially for children and youth, suggesting greater awareness of and/or access to HCBS (Figure 3 and Table 2). Greater representation does not mean there is an issue that needs to be corrected; rather, it means more members are enrolling in the services for which they qualify.

Asian members are also more represented, though this is a smaller number of people. This group is comprised of a diversity of populations with varying socioeconomic circumstances, including subgroups that are more likely to be refugees.[xlvi] In other words, some Asian members may face barriers to enrollment even though this group as a whole is more represented in HCBS than in Health First Colorado. At this time, HCPF is not able to break out the Asian race/ethnicity into smaller member groups because the Health First Colorado application does not allow members to select other options.

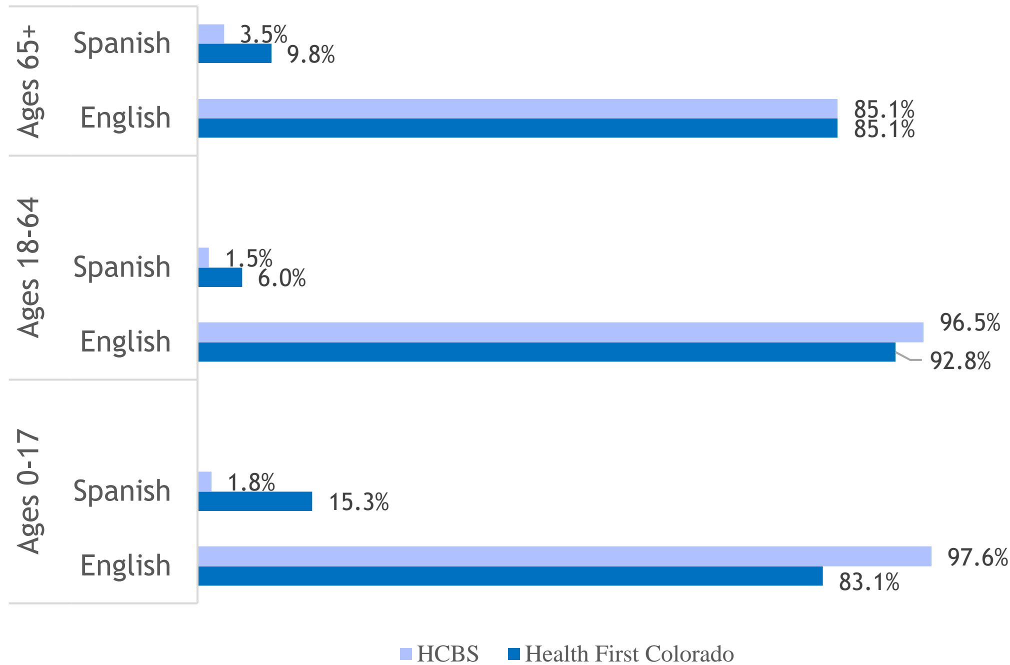
Finding #2

Spanish speakers are underrepresented in HCBS across all age groups.

Members whose preferred language is Spanish are underrepresented in HCBS when compared to their enrollment in the overall Health First Colorado program. As shown in Figure 5 below, there is underrepresentation of Spanish speakers in HCBS across all age groups. For children and youth, 15.3% of all Health First Colorado members' preferred language is Spanish, but that is the true for just 1.8% of HCBS-enrolled children and youth. This disparity persists in older age groups but to a lesser degree. Stated more simply, Health First Colorado HCBS membership is overwhelmingly English speaking when compared to Health First Colorado enrollment overall.

"Preferred language" is not the same as speaking that language. At the time of enrollment, Health First Colorado members can select on their application their preferred language, which indicates they have a need for translated material. However, there are likely many more people who are bilingual or who feel more comfortable speaking Spanish but who chose "English" as their preferred language.

Figure 5. Spanish-speaking Members in HCBS versus in Health First Colorado Overall by Age Group



Source: Health First Colorado enrollment data, April 2021 – March 2022

Underrepresentation among Spanish speakers is consistent across specific HCBS waivers and service options. One example is Consumer-Directed Attendant Support Services (CDASS), which grants members more flexibility in choosing care attendants they prefer such as attendants who speak the same language as the member. However, members using this service are 97% English-speaking, which may suggest it is being underutilized to address health disparities.

Although not depicted in Figure 5 above, members who speak other languages (e.g., Russian, Nepali, Chinese, Arabic) are actually more represented in HCBS than in Health First Colorado overall. Across all ages, members who indicated preferred languages other than English and Spanish comprise 1.6% of all Health First Colorado members but 5.2% of HCBS members.

Finding #3

White members are more represented in certain HCBS waivers and services, particularly the Developmental Disabilities waiver and the Community Mental Health Supports waiver for adults. Similarly, children and youth who are white are more represented in the Children's Home and Community-Based Services waiver.

HCPF also looked specifically at each HCBS waiver when analyzing underrepresentation (Table 3). Sixty-one percent of adult members on the Developmental Disabilities (DD) waiver identify as white. Almost every other racial/ethnic group is underrepresented on this waiver. For example, Hispanic/Latino adults comprise 9.4% of DD waiver recipients, but 15.3% of all adult HCBS members and 27.5% of all adult Health First Colorado members. The other waiver for adults with developmental disabilities – the Supported Living Services (SLS) waiver – looks similar in some ways. For example, a majority of recipients (51.8%) are white, with underrepresentation among Black/African American and American Indian/Alaska Native members. The percentage of Hispanic/Latino adult recipients of the SLS waiver is greater than the DD waiver, but this group is still underrepresented when compared to enrollment in Health First Colorado overall.

The majority of recipients of the adult Community Mental Health Supports (CMHS) waiver are also white (61%) with underrepresentation among most racial/ethnic groups. However, Black/African American adults on the CMHS waiver (6.4% of all CMHS recipients) more closely align with HCBS representation (6.3%) and Health First Colorado representation (7.0%).

Table 3. Percentage of Health First Colorado Members Receiving HCBS by Race/Ethnicity, Ages 18+

	% of Health First Colorado Enrolled Members	**% of HCBS Enrolled Members**	**EBD** Waiver	**SCI** Waiver	**SLS** Waiver	**DD** Waiver	**BI** Waiver	**CMHS** Waiver
Black/African American	7.0%	6.3%	7.1%	.	4.8%	4.2%	6.6%	6.4%
American Indian/Alaska Native	1.1%	0.6%	0.7%	.	.	.	.	1.0%
Asian	2.7%	4.5%	6.6%	.	2.0%	1.0%	.	1.2%
Hispanic/Latino	25.7%	15.3%	17.4%	.	17.0%	9.4%	11.5%	11.9%
Other People of Color	3.5%	2.1%	2.0%	.	2.8%	1.9%	.	1.9%
Native Hawaiian/Other Pacific Islander	0.3%	0.1%	0.1%	0.0%	.	.	0.0%	.
White	46.6%	55.2%	53.1%	50.7%	51.8%	61.1%	59.6%	61.2%
Other/Unknown	12.4%	15.3%	12.4%	.	20.3%	21.7%	16.9%	15.5%
Not Provided	0.8%	0.5%	0.5%	.	0.8%	0.3%	.	.
Total Waiver Recipients			*24,475*	*204*	*4,172*	*7,304*	*551*	*3,321*

Source: Health First Colorado enrollment data, April 2021 – March 2022
Note: Data have been blinded as notated by "." when there are less than 30 members. The first two data columns are provided for comparison purposes. EBD = Elderly, Blind and Disabled waiver; SCI = Spinal Cord Injury waiver (now called the Complementary and Integrative Health (CIH) waiver); SLS = Supportive Living Services waiver; DD = Developmental Disabilities waiver; BI = Brain Injury waiver; and CMHS = Community Mental Health Supports waiver.

For children's waivers (see Table 4), the Children's Home and Community-Based Services (CHCBS) waiver has a substantially higher representation of white members than other waivers (58%). Children eligible for this waiver must have a significant medical need and be at risk of institutional care. The income of parents and caregivers is not counted toward eligibility criteria for this waiver, meaning many children on this waiver would not otherwise qualify for Health First Colorado.

Table 4. Percentage of Health First Colorado Members Receiving HCBS by Race/Ethnicity, Ages 0-17

	% of Health First Colorado Enrolled Members	% of HCBS Enrolled Members	**CHCBS** Waiver	**CES** Waiver	**CHRP** Waiver	**CCLI** Waiver
Black/African American	6.9%	3.3%	1.6%	4.5%	.	.
American Indian/Alaska Native	0.8%	0.4%	.	.	.	.
Asian	2.0%	2.7%	2.6%	2.9%	.	.
Hispanic/Latino	40.0%	12.3%	9.5%	14.8%	.	.
Other People of Color	6.8%	5.3%	4.0%	6.5%	.	.
Native Hawaiian/Other Pacific Islander	0.4%	0.0%	.	.	.	.
White	29.4%	50.5%	57.6%	43.8%	48.2%	51.6%
Other/Unknown	13.0%	24.9%	24.0%	26.3%	22.3%	.
Not Provided	0.8%	0.6%	.	.	.	.
Total Waiver Recipients			*1,986*	*2,035*	*145*	*135*

Source: Health First Colorado enrollment data, April 2021 – March 2022
Note: Data have been blinded as notated by "." when there are less than 30 members. The first two data columns are provided for comparison purposes. CHCBS = Children's Home and Community-Based Services waiver; CES = Children's Extensive Support waiver; CHRP = Children's Habilitation Residential Program waiver; and CLLI = Children with Life Limiting Illness waiver.

Finding #4

For racial/ethnic groups of smaller population sizes, there are concerns about underrepresentation in any HCBS service, particularly for children, and for AIAN members.

There are several areas of HCBS in which members of smaller racial/ethnic groups are underrepresented. It is difficult to say by how much these groups are underrepresented in HCBS for two reasons. First, small population sizes make it more difficult to accurately measure disparities. However, just because a population is small does not mean that a disparity is not significant. Second, a substantial portion of HCBS members self-identify as “Other/Unknown” for race/ethnicity. It is not clear which, if any, of the other racial/ethnic categories these members identify with.

Despite these challenges, we identified a few areas of concern. Please refer back to Figure 2 for disability prevalence data.

- A very small number of American Indian and Alaska Native (AIAN) members who are children are enrolled in any HCBS waiver.
- There are effectively no Native Hawaiian/Other Pacific Islander children members who are enrolled in any HCBS service.
- Black/African American members who are children also comprise a small portion of all HCBS recipients ages 0-17 despite having the second highest reported disability rates for their age group (Figure 2).

AIAN members of all ages are underrepresented in HCBS when compared to Health First Colorado overall despite this group reporting the disability rates in Colorado (Figure 2). AIAN members are also underrepresented in many HCBS waivers, and in some parts of the state where more AIAN members live, they use fewer of the services for which they have been authorized than other racial/ethnic groups.

Finding #5

Across most geographic regions of the state, white members are more represented in HCBS when compared to Health First Colorado overall.

Beginning in July 2024, HCBS services will be consolidated and reorganized according to new Case Management Agency (CMA) regions (map). HCPF analyzed racial/ethnic representation in HCBS based on these future CMA regions and found that white members are more represented in almost every region. In other words, members of color are often underrepresented, particularly Hispanic/Latino members. This finding holds true in more racially/ethnically diverse areas of the state. For example:[6]

- In CMA 5 (Arapahoe, Douglas and Elbert counties), 34.5% of Health First Colorado members in the region are white, but 48.6% of HCBS members are white. Hispanic/Latino members are underrepresented – 23.6% of Health First Colorado members but 7.7% of HCBS recipients.

- In CMA 6 (Adams and Denver counties), 26.4% of Health First Colorado members in the region are white, but 46.1% of HCBS members are white. Hispanic/Latino members are underrepresented – 42.7% of Health First Colorado members but 19.5% of HCBS recipients.

- In CMA 9 (Weld county), 35.5% of Health First Colorado members in the region are white, but 51.6% of HCBS members are white. Hispanic/Latino members are underrepresented – 43.0% of Health First Colorado members but 24.4% of HCBS recipients.

The San Luis Valley is an exception. In CMA 14 (Alamosa, Conejos, Costilla, Mineral, Rio Grande, and Saguache counties), Hispanic/Latino members comprise 49.4% of Health First Colorado members and 55.2% of HCBS members. CMA 4 (Huerfano and Las Animas counties) -- located adjacent to CMA 14 – also has more representation among Hispanic/Latino members in HCBS when compared to Health First Colorado overall.

Please see Appendix B for a table with more data on representation by future CMA regions.

HCPF also briefly looked at how many units of services members used compared to the number of units they were authorized by current CMA region. Access to care was measured by the percentage of service hours used out of service hours authorized. There is variation by region with some urban areas having higher rates of access to

[6] All ages are included. See Appendix B for breakouts by age group.

care and several rural regions having lower access to care, though overall it is difficult to make meaningful associations between geography and access to care using this metric. While provider availability challenges are certainly at play, there are likely other factors contributing to these differences, and additional research would be valuable.

Finding #6

HCBS members are more likely than Health First Colorado members overall to have a diagnosed behavioral health condition.

While 41.6% of Health First Colorado members have a behavioral health diagnosis, 70.5% of HCBS members have a behavioral health diagnosis (Figure 6). A disparity exists across all age groups when comparing HCBS members to the overall Health First Colorado population. “Behavioral health diagnosis” is defined broadly to include any mental health condition or substance use disorder.[7]

Only one HCBS waiver – the adult Community Mental Health Supports Waiver – specifically serves members with a mental health diagnosis which allows them to receive supports to remain in the community. Services include adult day services, homemaker services, life skills training, respite care, among others. Even if the members in this HCBS waiver are excluded from the disparity calculation, the magnitude is nearly the same because this group of members is relatively small. More data are needed to understand what percentage of HCBS members are able to access behavioral health treatment, especially those with intellectual and developmental disabilities.

Figure 6. Diagnosed Behavioral Health Condition for HCBS versus Health First Colorado Members Overall

[7] Only diagnoses covered by the behavioral health capitation are included which excludes some fee-for-service diagnoses.

Percentage of Members with a Behavioral Health Diagnosis

Source: Health First Colorado claims data, April 2021-March 2022

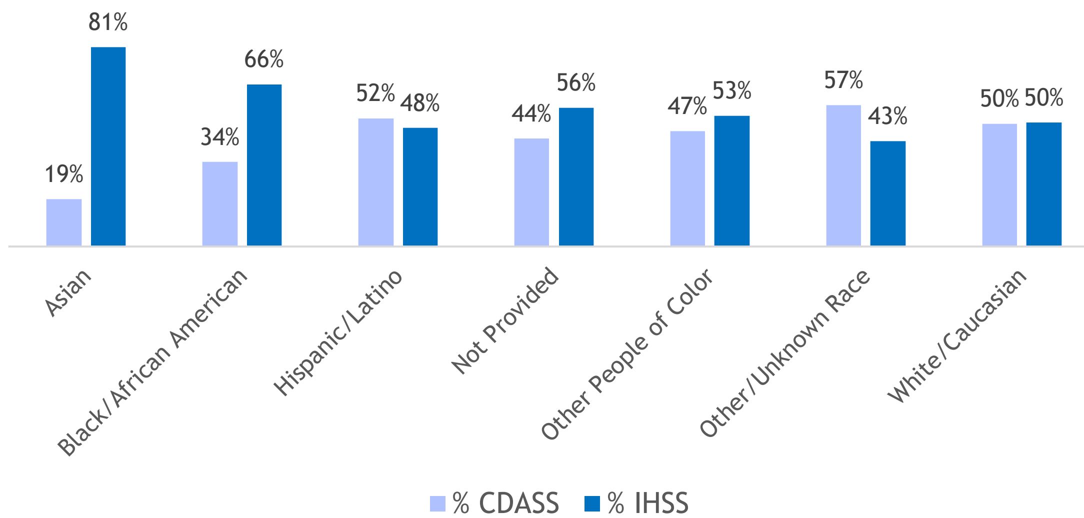
Finding #7

Consumer-directed services can be considered a health equity mechanism since these services promote member empowerment to manage their own care. However, some racial/ethnic groups are using fewer service units than others, particularly Hispanic/Latino and Black/African American adults.

Once enrolled in HCBS, HCPF identified few disparities in utilization. One exception is consumer-directed services, which include the Consumer-Directed Attendant Support Services (CDASS) program as well as the In-Home Support Services (IHSS) program. CDASS only serves adults while IHSS serves both adults and children/youth. Members who use CDASS to manage their HCBS are in control of their own funds and attendant support, while IHSS involves the support of an agency. Beginning in 2025, these services will be offered on a state-wide basis to eligible members through the Community First Choice program.

There are differences in which racial/ethnic groups are more likely to use IHSS versus CDASS (Figure 7). A greater percentage of Asian and Black/African American adult members are in IHSS as compared to CDASS while other racial/ethnic groups are closer to an even split. HCPF does not collect data on why members choose one service over another.

Figure 7. Utilization of Consumer-Direction by Type of Service and Race/Ethnicity



Source: Health First Colorado claims data, April 2018 – March 2022
Note: American Indian and Alaska Native as well as Native Hawaiian/Other Pacific Islander groups have been removed from this graph due to small sample sizes.

Asian members are using the most CDASS service units[8] at $3,388 per month while Black/African American members and Hispanic/Latino members are using the least ($2,817 and $2,591 per month, respectively) (Figure 8). HCPF also analyzed differences in quantities of service units authorized by race/ethnicity and found similar results (refer back to Box 1 for an explanation of authorized and utilized service units/hours). In other words, the data suggests that members may be utilizing fewer services because they are authorized for fewer services. For IHSS, there are minimal differences in authorized or utilized service units by race/ethnicity, which is why those data are not shown here.[9]

Figure 8. CDASS Service Units ($) Authorized and Utilized Per Month by Race/Ethnicity, Ages 18+

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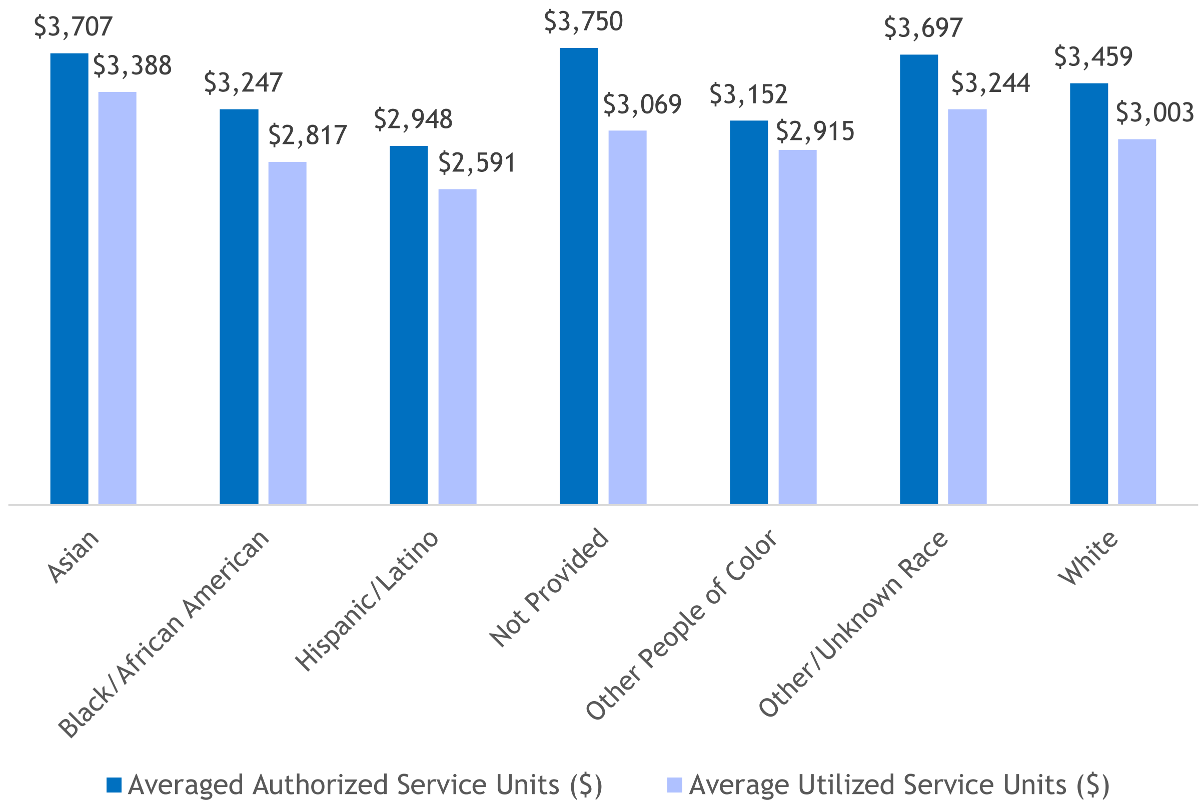
[8] Attendant services are structured in terms of service units instead of authorized hours because members are authorized to receive a certain amount of funding to spend on care. Dollar amounts represent monthly averages.
[9] Findings for children and youth are not presented here due to small sample sizes for many race/ethnicity groups.



Source: Health First Colorado claims data, April 2018 – March 2022
Note: American Indian/Alaska Native and Native Hawaiian/Other Pacific Islander member groups have been excluded from this graph due to small sample sizes.

V. Conclusions and Next Steps

While many health disparities exist between people with disabilities and their peers without disabilities, this report focused on disparities **within** the disability community, specifically those receiving home and community-based services (HCBS). As the long-term care safety net, Health First Colorado is an essential resource to Colorado residents who require supportive services to maintain health and wellbeing. Health First Colorado is accountable for ensuring residents who qualify and need care are able to enroll and obtain the level of services they deserve. Health equity in access to care – in its many dimensions – is a priority for the Office of Community Living and its long-term goals.

This analysis revealed that members who do not identify as white are underrepresented in HCBS, particularly Hispanic/Latino children and youth as well as

Spanish-speaking individuals. White and Asian members tend to be more represented when compared to overall Health First Colorado enrollment. Representation also varies depending on the specific HCBS waiver or service under consideration. It will be essential to understand what organizations, systems, and processes are benefiting some groups but not others in order to reduce these disparities.

Once enrolled in HCBS, there are sometimes disparities in the number of services utilized. In general, HCPF did not find substantial disparities in service utilization overall. However, low levels of representation among some racial/ethnic groups impacts the ability to fully explore underutilization concerns. Consumer-directed services represent an opportunity to empower members to obtain the care they need, and HCPF finds that Black/African American and Hispanic/Latino adults are using fewer service units for the CDASS program than other groups. There also appear to be preferences in whether someone fully manages their own care or goes through an agency, and these differences are worth exploring.

There are many questions that remain and will be the focus of qualitative inquiry with providers and community organizations. In particular, it will be helpful to better understand how individuals find out about HCBS services; what navigation and enrollment barriers exist; whether language translation is adequately available; and what factors are at play that may influence whether someone receives the right type of service at the right level. The results of this qualitative work with stakeholders will be publicly available later in 2023. The final step of this larger equity project will be for the Office of Community Living to develop a health equity strategy to address these issues.

Appendix A: Methodology

HCPF employed quantitative methods to analyze representation and utilization of HCBS. Details of each analysis are described below.

Enrollment Analysis

HCPF used Health First Colorado enrollment data from April 2021 – March 2022 to explore issues of representation. HCPF selected Health First Colorado enrollment as the comparison to HCBS enrollment even though it is imperfect (see the “Limitations” section below). These data were used to compare the two populations on the following characteristics: race/ethnicity, age, waiver, HCBS service, preferred

language, and county. While Census data provide population level disability estimates, these data were not used as the comparison point for HCBS representation for several reasons. First, Medicaid members do not generally reflect the demographics of their communities since Medicaid tends to have a higher enrollment of people of color. Second, racial/ethnic definitions do not completely align between the Census and Health First Colorado data. Third, Census data do not account for disability acuity, and definitions of disability do not align with Health First Colorado definitions which makes accurate comparisons challenging.

Utilization Analysis

Health First Colorado claims data and prior authorization report (PAR) data were used to analyze utilization for HCBS members. Complete PAR spans between April 2018 and March 2020 were selected for the analysis, and if members had multiple completed PAR spans, then the weighted average was calculated. HCPF removed outliers whenever possible to avoid skewing the data.

HCPF chose to look at three metrics – 1) authorized hours; 2) utilized hours; and 3) the percentage of authorized hours that were used – on a monthly basis and by race/ethnicity, waiver, age, language spoken, and case management agency (CMA). The analysis included HCBS waivers and services that covered physical disabilities and developmental disabilities, and adults as well as children/youth. The age cut-off for children/youth varies by waiver. The number of authorized hours per month was pulled from the PAR span of each member. The utilized service units or service hours were pulled from claims data. HCPF also calculated the percentage of service hours or units used of the number authorized.

When analyzing these three metrics, HCPF focused on two types of HCBS services – personal care and homemaker services – because they are commonly used by members and span multiple waivers allowing for easier comparisons. This focus allowed for an analysis of services on the following waivers: Persons with Brain Injury waiver, Community Mental Health Supports waiver, Complementary and Integrative Health waiver (formerly the Spinal Cord Injury waiver), Elderly, Blind and Disabled waiver, the Supported Living Services waiver, and the Children's Extensive Support waiver. We also looked at Consumer-Directed Attendant Support Services (CDASS) and In-Home Supportive Services (IHSS) – which includes health maintenance services in addition to personal care and homemaker services.

HCPF analyzed data for the purpose of identifying disparities by race/ethnicity, language, and geography across the three metrics while accounting for age differences in the waivers and services. As time allowed, HCPF conducted regression analyses to understand the variables driving differences in authorized and utilized hours, but ultimately the regression results were not used because they did not add further insights to the existing data. The regressions, however, did allow for an examination of the relationship between the activity of daily living (ADL) scores (a measure of acuity) and the number of authorized hours, which did correlate and provided a degree of reassurance that differences observed were not simply due to underlying acuity differences.

Limitations

Without knowing what percentage of the Colorado population with a disability would qualify for HCBS, it is impossible to precisely measure underrepresentation. This research relied on Health First Colorado enrollment as the comparison as described above. There are several limitations of this approach. If people of a specific community are already underrepresented in Health First Colorado, then the HCBS enrollment comparison may not reflect the magnitude of actual underrepresentation. Additionally, Health First Colorado enrollment as a comparison does not offer nuance on the need for services or acuity levels.

A substantial portion of members (16% on average) select the race/ethnicity category of “other/unknown” on the Health First Colorado application which, when paired with already small sample sizes, makes it difficult to accurately evaluate disparities by race/ethnicity. Efforts are underway at HCPF to make improvements to the Health First Colorado application to enhance data quality. Language data are also self-reported and imperfect because this information is not updated regularly, and members may hesitate to select a language other than English even if they prefer it.

Given the diversity of HCBS waiver services that members use, it is difficult to make comparisons of utilization across member groups, which is why we relied on personal care and homemaker services. In some cases, the variation in services authorized and utilized by member group (e.g., race/ethnicity) would have been easier to identify if underrepresentation were not an issue.

Appendix B: Representation by Geography

The following table shows the percentage of Health First Colorado members and home- and community-based services (HCBS) recipients by race/ethnicity for each future Case Management Agency (CMA) region (start date: July 2024). This table includes all ages, although representation may look different for children versus adults. HCPF does not show the data by age group due to the issue of small sample sizes. Sample size is also reason for focusing on white and Hispanic/Latino populations.

Future CMA Region	Counties	Percentage of all Health First Colorado members that identify as white	Percentage of all HCBS recipients that identify as white	Percentage of all Health First Colorado members that identify as Hispanic/Latino	Percentage of all HCBS recipients that identify as Hispanic/Latino
1	Cheyenne, Kit Carson, Lincoln, Logan, Morgan, Phillips, Sedgwick, Washington, Yuma	50.3%	71.8%	31.1%	11.6%
2	Baca, Kiowa, Prowers	46.1%	63.8%	30.1%	19.1%
3	Bent, Crowley, Otero	38.9%	42.5%	39.7%	35.7%
4	Huerfano, Las Animas	41.0%	44.1%	37.5%	44.2%

5	Arapahoe, Douglas, Elbert	34.5%	48.6%	23.6%	7.7%
6	Adams, Denver	26.4%	46.1%	42.7%	19.5%
7	Clear Creek, Jefferson	49.3%	60.0%	25.0%	10.3%
8	Boulder, Broomfield, Gilpin	49.8%	64.4%	26.0%	11.3%
9	Weld	35.5%	51.6%	43.0%	24.4%
10	Larimer	58.3%	70.0%	19.6%	8.4%
11	El Paso, Park, Teller	47.3%	58.0%	21.1%	9.8%
12	Pueblo	36.4%	44.7%	45.2%	31.3%
13	Chaffee, Custer, Fremont, Lake	67.3%	78.9%	9.8%	.
14	Alamosa, Conejos, Costilla, Mineral, Rio Grande, Saguache	32.4%	30.8%	49.4%	55.2%
15	Eagle, Garfield, Pitkin, Summit	43.7%	68.6%	38.2%	15.0%

16	Grand, Jackson, Moffat, Rio Blanco, Routt	65.1%	77.3%	13.7%	.
17	Mesa	59.6%	69.4%	17.4%	5.4%
18	Delta, Gunnison, Hinsdale	57.6%	63.0%	13.0%	.
19	Montrose, Ouray, San Miguel	56.7%	68.1%	25.1%	11.9%
20	Archuleta, Dolores, La Plata, Montezuma, San Juan	53.7%	65.7%	13.4%	9.6%

Source: Health First Colorado enrollment data, April 2021 – March 2022
Note: Data represented by "." Indicates the population size is too small to report.

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