



POPULATION HEALTH AND INTEGRATED CARE PLAN 2020 - 2022

Mid-State Health Network, Clinical Leadership Committee Approved: September 2020
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I. Overview/Mission Statement

Mid-State Health Network (MSHN) is a regional entity, which was formed pursuant to 1974 P.A. 258, as amended, MCL §330.1204b, as a public governmental entity separate from the CMHSP Participants that established it. The CMHSP Participants formed Mid-State Health Network to serve as the prepaid inpatient health plan (“PIHP”) for the twenty-one counties designated by the Michigan Department of Community Health as Region 5. The CMHSP Participants include Bay-Arenac Behavioral Health, Clinton-Eaton-Ingham Community Mental Health Authority, Community Mental Health for Central Michigan, Gratiot Integrated Health Network, Huron County Community Mental Health Authority, LifeWays Community Mental Health Authority, Montcalm Care Network, Newaygo County Community Mental Health Authority, The Right Door (formerly Ionia County CMH), Saginaw County Community Mental Health Authority, Shiawassee Health and Wellness and Tuscola Behavioral Health Systems. As of October 1, 2015, MSHN took over the direct administration of all public funding for substance use disorder (SUD) prevention, treatment and intervention within the region and expanded the provider network to include SUD providers.

The mission of Mid-State Health Network is to ensure access to high-quality, locally delivered, effective and accountable public behavioral health and substance use disorder services provided by its participating members.

II. Scope of Plan

As an organization, Mid-State Health Network (MSHN) is committed to increasing its understanding of the health needs of individuals within its 21-county service region and finding innovative ways to achieve the goals of better health, better care, better value, better provider systems, and better equity by utilizing informed population health and integrated care strategies. The purpose of the MSHN population health and integrated care plan is to establish regional guidance and best practices in these areas as well as describe specific population health and integrated care initiatives currently underway in the MSHN region. The plan will:

- Identify the population served by MSHN and explore key population health needs
- Identify chronic co-morbid physical health conditions that contribute to poor health and drive health costs for individuals with behavioral health disorders
- Describe the concepts of population health, social determinants of health, health disparities, health equity, and identify specific factors that impact the population in the MSHN region
- Examine key foundational areas necessary to support population health programs and evaluate MSHN’s stage of readiness for each area
- Describe current population health and integrated care initiatives underway by MSHN and its CMHSP partner organizations.

The summary section of the plan incorporates all the above and recommends priority steps to drive population health and integrated care efforts across the region. These include:

- Foundational/structural needs
- Address current integrated health program gap areas

- Identify strategic priorities for 2021-2022 related to improving health outcomes and reducing health disparities
- Determine resource and budget requirements
- Propose Committee(s) for strategic planning, monitoring and oversight of integrated care and population health activities.
- Steps to measure value and effectiveness through quality, costs, outcomes

III. Definitions

1. Behavioral Health: refers to care provided to individuals with a Mental Health, Intellectual Developmental Disability, Substance Use Disorder Provider and/or children with Serious Emotional Disturbances
2. Care management: programs that apply systems, science, incentives, and information/data, ideally for implementation across all settings and levels, to improve health care practice and assist consumers and their support systems to become engaged in a collaborative process designed to manage medical/social/mental health conditions more effectively.
3. Care Coordination: services which are primarily implemented at the practice level (with supports from the care management level) that help to execute and support the plan of care.
4. CMHSP: Community Mental Health Service Program
5. Comorbid Conditions/Comorbidity: The presence of more than one disease or disorder. This may include physical health conditions and behavioral health conditions.
6. Customers/Consumers: Refers to those individuals who are eligible to receive specialty mental health and substance use disorder services, as well as those currently receiving such services and their families/guardians. For the purpose of MSHN policy, these terms are used interchangeably.
7. Epidemiology: The study of the distribution and determinants of health-related states or events in specified populations, and the application of this study to the control of health problems.
8. FQHC (Federally-Qualified Health Center): Community-based health care providers that receive funds from the federal Health Resources & Services Administration to provide primary care services in underserved areas. They must meet a stringent set of requirements, including providing care on a sliding fee scale based on ability to pay and operating under a governing board that includes patients.
9. Health Disparity: Preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations.
10. Health Equity: Occurs when nobody is denied the opportunity to be healthy even if they belong to a socially disadvantaged group.
11. HEDIS (Healthcare Effectiveness Data and Information Set): The Healthcare Effectiveness Data and Information Set (HEDIS) is a tool used by more than 90 percent of America's health plans to measure

performance on important dimensions of care and service. Altogether, HEDIS consists of 81 measures across 5 domains of care.

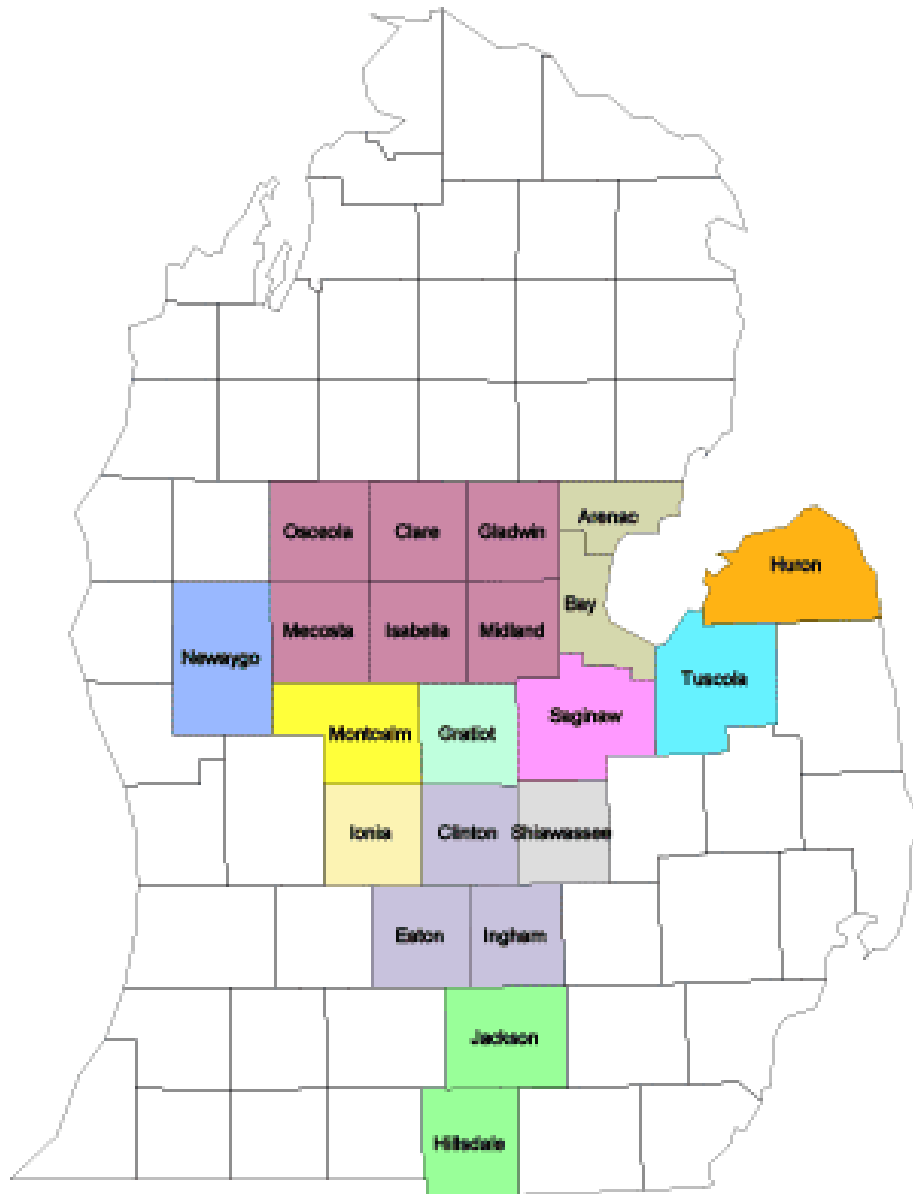
12. High Risk: Consumers identified as having 1 or more emergency department visits, no primary care visit within the previous 12 months, 2 or more chronic conditions, psychiatric or physical hospitalization within the previous 12 months.
13. Managed Care Entity/Managed Care Organization: A type of health insurance plan that maintains contracts with health care providers and medical facilities to provide care for its members.
14. MCIS: Managed Care Information System
15. MDHHS: Michigan Department of Health and Human Services
16. MiHIN: Michigan Health Information Network
17. MHP: Medicaid Health Plan; a managed care organization responsible for administering physical health insurance benefits to Michigan Medicaid enrollees
18. NCQA: The National Committee for Quality Assurance (NCQA) is a private, not-for-profit organization dedicated to improving health care quality by evaluating and reporting on the quality of managed care and other health care organizations in the United States. NCQA provides accreditation to health plans using rigorous standards that are regarded as national best practices.
19. PIHP: Prepaid Inpatient Health Plan; a managed care organization responsible for administering specialty services for the treatment of mental health, intellectual and developmental disabilities and substance use disorders.
20. PHI: Protected Health Information
21. Population Health: the health outcomes of a group of individuals; an approach to healthcare that aims to improve the health of an entire group of people
22. Social Determinants of Health (SDH): conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks
23. SSO: Single Sign On, uses uniquely identified credentials to gain access to approved systems and datasets secured by the State of Michigan.
24. CareConnect360 (CC360): Software tool developed by Optum for the State of Michigan to query and report healthcare data from encounters submitted by fee for service providers, MHPs and PIHPs. Common tool used by MHPs, PIHPs and State of Michigan employees and contractors.
25. SUD: Substance Use Disorder

IV. Mid-State Health Network Population Analysis

Description & Demographics

Mid-State Health Network is the Pre-Paid Inpatient Health Plan (PIHP) for behavioral health services for Region 5 in Michigan, covering a 21-county service area. The composition of MSHN's 21-county service region is diverse, ranging from urban to very rural areas with a total population of 1,641,693 (US Census Bureau, 2019). According to U.S. Census Bureau 2019 population estimates, Region 5 is 83.4% Non-Hispanic White, 6.8% Black/African American, 5.2% Hispanic/Latino, 2.5% self-identifies as "Two or more races," 0.7% American Indian/Alaska Native, and Pacific Islander/Native Hawaiians make up <0.1%.

There is considerable variation among the racial/ethnic composition of individual counties, however. Twelve of MSHN's 21 counties have populations that are $\geq 90\%$ Non-Hispanic White, while two of MSHN's 21 counties have non-white populations that exceed the Michigan average of 25.1%: Five of MSHN's 21 counties have populations that range from nearly 15% to over 30% people of color. Ingham and Saginaw counties have the highest non-white populations (30.8%) followed by Eaton (17.2%), Jackson (15.4%) and Isabella (14.8%). Saginaw county has the highest concentration of Black/African Americans (19.3%) and Hispanic/Latinos (8.5%), while Ingham county had the largest population of Asians at 7.9% and "Two or more races" at 4.2%. The highest concentration of American Indian/Native Alaskans was found in Isabella county (4.0%).



Given disparities in health outcomes among people of color, MSHN recognizes the importance of attention to these populations' needs.

The percentage of individuals living in poverty in the MSHN region range from 7.5% to 23.4% by county and 16 of the 21 counties have poverty rates that surpass the national average poverty rate of 11.8%. Data from the 2018 U.S. Census Bureau’s *American Community Survey 5-year Estimates* show the median household income in Region 5 was \$50,846. Household income varies widely among counties where the range was from \$37,369 in Clare County to a high of \$67,482 in Clinton County. Only three counties (Clinton, Eaton, and Midland) in the MSHN region exceeded the state median household income of \$56,697. Additional population data, poverty information and health ranking status for each of MSHN’s 21 counties is available in Appendix A.

MSHN partners with 12 local Community Mental Health Service Program (CMHSP) participants throughout its 21 counties to deliver specialty behavioral health services to eligible Medicaid and Healthy Michigan Plan beneficiaries. MSHN provides direct oversight of the region’s substance use disorder (SUD) treatment and prevention services through contracts with over 75 SUD prevention, treatment, and recovery agencies in over 140 provider sites in and outside of the region.

Figure 1: MSHN CMHSP Member Organizations and Counties Served

CMHSP	Counties Served
Bay-Arenac Behavioral Health	Arenac, Bay
CMH for Clinton, Eaton, Ingham Counties	Clinton, Eaton, Ingham
CMH for Central Michigan	Osceola, Clare, Gladwin, Mecosta, Isabella, Midland
Gratiot Integrated Health Network	Gratiot
Huron Behavioral Health	Huron
The Right Door for Hope, Recovery & Wellness	Ionia
LifeWays CMH	Jackson, Hillsdale
Montcalm Care Network	Montcalm
Newaygo CMH	Newaygo
Saginaw County CMH Authority	Saginaw
Shiawassee Health and Wellness	Shiawassee
Tuscola Behavioral Health System	Tuscola

Medicaid Behavioral Health & Physical Health Dual-Service Population

The physical health benefits for Medicaid and Healthy Michigan Plan beneficiaries are managed by eleven (11) Medicaid Health Plan (MHP) managed care organizations throughout the State. Of the 11 MHPs in the State of Michigan, eight (8) of those MHPs provide service coverage to individuals within the 21 counties in the MSHN region.

Figure 2: Medicaid Health Plans and Counties Covered by Each in MSHN Region

Health Plan	Counties Covered
Aetna	Jackson, Hillsdale
Blue Cross Complete	Jackson, Hillsdale, Clinton, Eaton, Ingham, Shiawassee, Tuscola, Huron, Osceola, Mecosta, Newaygo, Ionia, Montcalm
HAP Empowered	Shiawassee, Tuscola, Huron
McLaren	Jackson, Hillsdale, Clinton, Eaton, Ingham, Shiawassee, Tuscola, Huron, Gratiot, Saginaw, Isabella, Midland, Bay, Clare, Gladwin, Arenac, Osceola, Mecosta, Newaygo, Ionia, Montcalm
Meridian	Jackson, Hillsdale, Shiawassee, Tuscola, Huron, Gratiot, Saginaw, Isabella, Midland, Bay, Clare, Gladwin, Arenac, Osceola, Mecosta, Newaygo, Ionia, Montcalm
Molina	Jackson, Hillsdale, Clinton, Eaton, Ingham, Shiawassee, Tuscola, Huron, Gratiot, Saginaw, Isabella, Midland, Bay, Clare, Gladwin, Arenac, Osceola, Mecosta, Newaygo, Ionia, Montcalm
Priority Health	Osceola, Mecosta, Newaygo, Ionia, Montcalm
United Healthcare	Jackson, Hillsdale, Clinton, Eaton, Ingham, Shiawassee, Tuscola, Huron, Gratiot, Saginaw, Isabella, Midland, Bay, Clare, Gladwin, Arenac, Osceola, Mecosta, Newaygo, Ionia, Montcalm

The Medicaid Health Plans also manage the mild to moderate behavioral health benefits for Medicaid and Healthy Michigan beneficiaries. MSHN manages the behavioral health services for beneficiaries with severe and persistent mental illness (SPMI).

Physical Health



Includes Mild to Moderate Behavioral Health

Behavioral Health



SPMI, Specialty Benefit, IDD and SUD

Dual-service Medicaid enrollees are those individuals who are receiving services for both physical health needs through a Medicaid Health Plan (MHP) and behavioral health needs through MSHN or one of its CMHSP participants. In FY2019, dual-service enrollees totaled 44,124 (12.7%) enrollees of the 346,969 individuals served by the MHPs in the MSHN Region. Among the dual-service Medicaid enrollees that MSHN serves, over 90% of those individuals have a developmental disability (DD) and/or mental illness (MI).¹

Figure 3: Displays the 44,124 Dual-Service Medicaid enrollees from FY2019 and their distribution among the Medicaid Health Plans. *Note: Unknown MHP are those individuals who have not selected a Medicaid Health Plan and/or are part of the MDHHS Fee for Service population.*

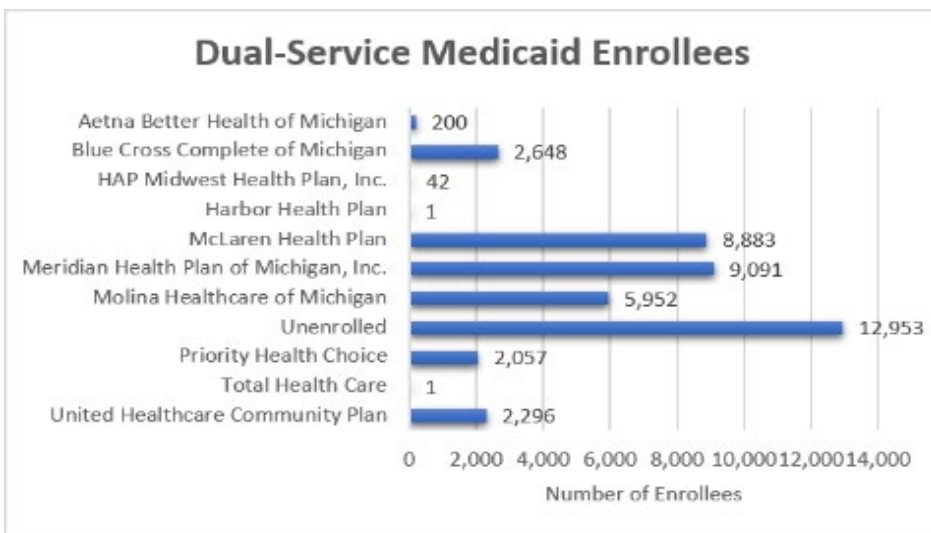
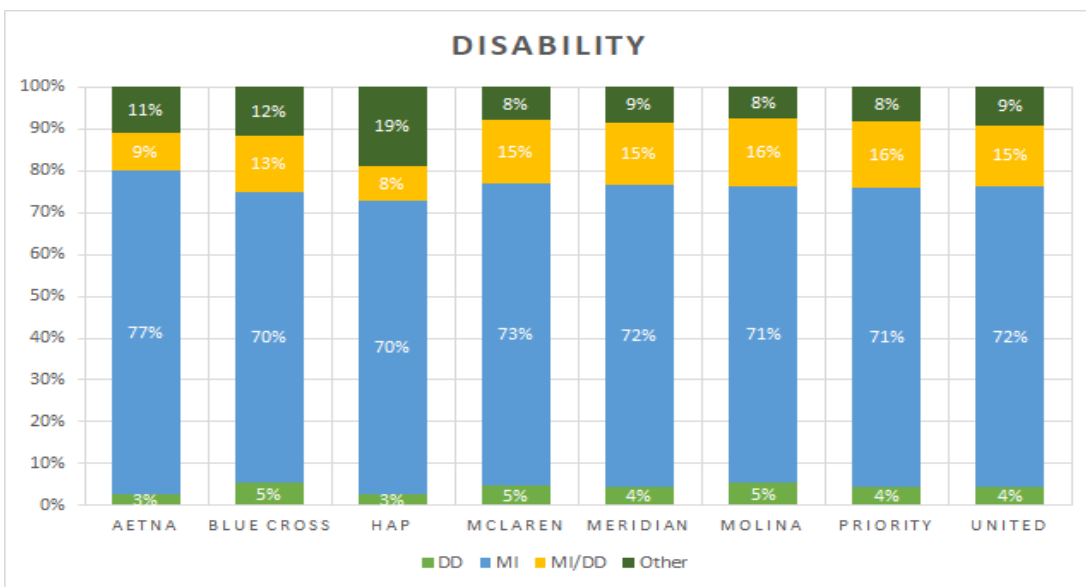


Figure 4: Behavioral Health Disability Designations by Medicaid Health Plan



¹ The designations are based upon the diagnoses attached to Medicaid claims in the past 12 months for all individuals included. If there is an attached I/DD, MI or combination of diagnoses it makes up the first three categories. If there is no I/DD or MI diagnosis in the timeframe attached to a Medicaid claim, the individual is listed as other.

Epidemiology & Preventable Morbidity

The 2019 *America's Health Ranking* report rated the State of Michigan's overall health at 32nd, in the bottom 30% of the country. Factors that had the most significant impact on the rating included:

- Adult obesity rate of 33%
- 8.8% low birthweight (defined as under 5lbs)
- Cardiovascular death rate of 300 per 100,000 population

The County Health Rankings data produced in collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute measure a number of health risk factors and health outcome factors to determine overall health of a county. **Length of life** (premature death) and **quality of life** (health status, percent of low birthweight of newborns) are also measured for each county.

MSHN counties that ranked in the **10 most healthy Michigan counties** are:

- Clinton #3
- Midland #8
- MSHN counties ranked in the **10 least healthy Michigan counties** are:
- Claire #75
- Saginaw #77

According to the World Health Organization, people with severe mental health disorders have a higher prevalence of many serious chronic diseases and are at a higher risk for premature death as a result of those diseases than the general population. Current data suggests that adults in the U.S. living with serious mental illness die on average 25 years earlier than others. The premature mortality rate among people with behavioral health problems is largely explained by the high prevalence of preventable illnesses² such as cardiovascular, respiratory, and metabolic diseases. (In this context, the term metabolic disease is a collective term referring to diabetes, hypertension, and weight gain.

Population analysis data in CareConnect 360 indicates that the population served by MSHN experiences higher than average rates of the following chronic conditions compared to populations served by other Michigan PIHPs:

- Asthma (Highest rate among PIHPs)
- Chronic Obstructive Pulmonary Disorder (Highest rate among PIHPs)
- Diabetes (3rd Highest rate among PIHPs)
- Hypertension (2nd Highest rate among PIHPs)
- Obesity (2nd Highest rate among PIHPs)

Research consistently shows individuals suffering from chronic psychiatric disorders and concurrent chronic lifestyle related physical illnesses consume exponentially more health resources while experiencing significantly diminished health outcomes. A Milliman study (2014) concluded that the existence of chronic illness³. By addressing behavioral and physical conditions, behavioral health

² Parks, J., et al., (2006) Morbidity and Mortality in People with Serious Mental Illness. Retrieved from: <http://www.nasmhpd.org/sites/default/files/Mortality%20and%20Morbidity%20Final%20Report%208.18.08.pdf>

³ Milliman 2014 American Psychiatric Association Report

symptoms associated with impaired compliance or self-care may be better addressed. This may lead to improved management or treatment of the preventable conditions.

Figure 5: Displays the top 5 Behavioral Health Chronic Conditions by the percentage of Medicaid individuals served by CMHSPs within the MSHN region in the past 12 months. (Population: 39,656)

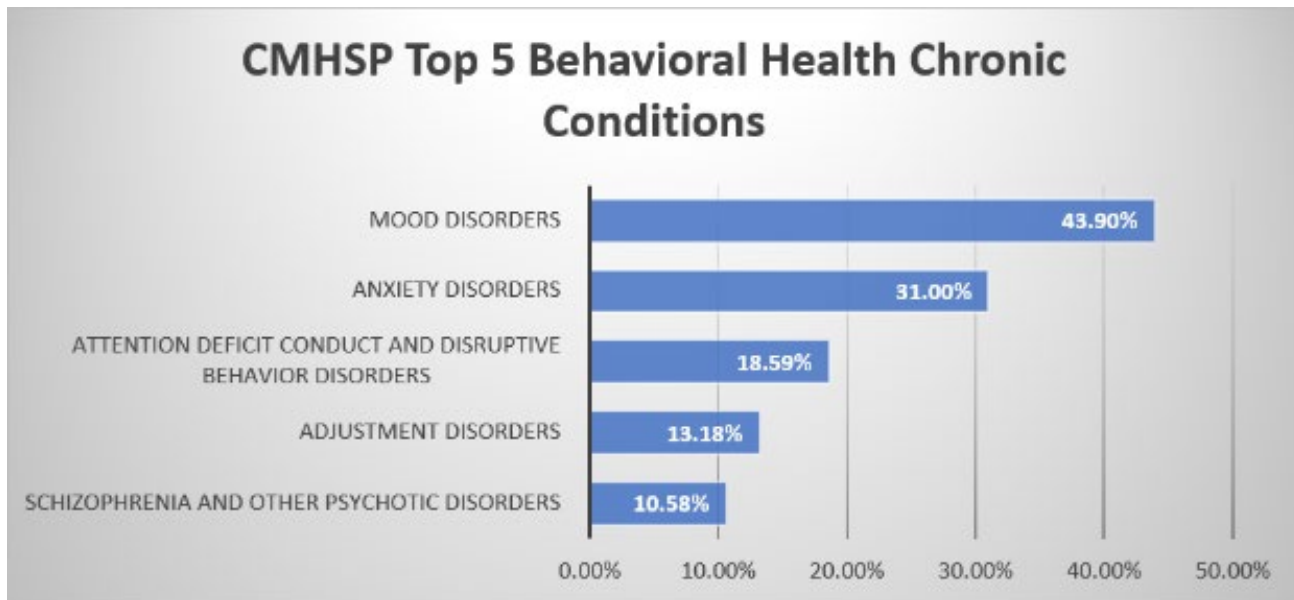


Figure 6: Displays the top 5 Behavioral Health Chronic Conditions by the percentage of Medicaid individuals served by SUD providers within the MSHN region in the past 12 months. (Population: 9,283)

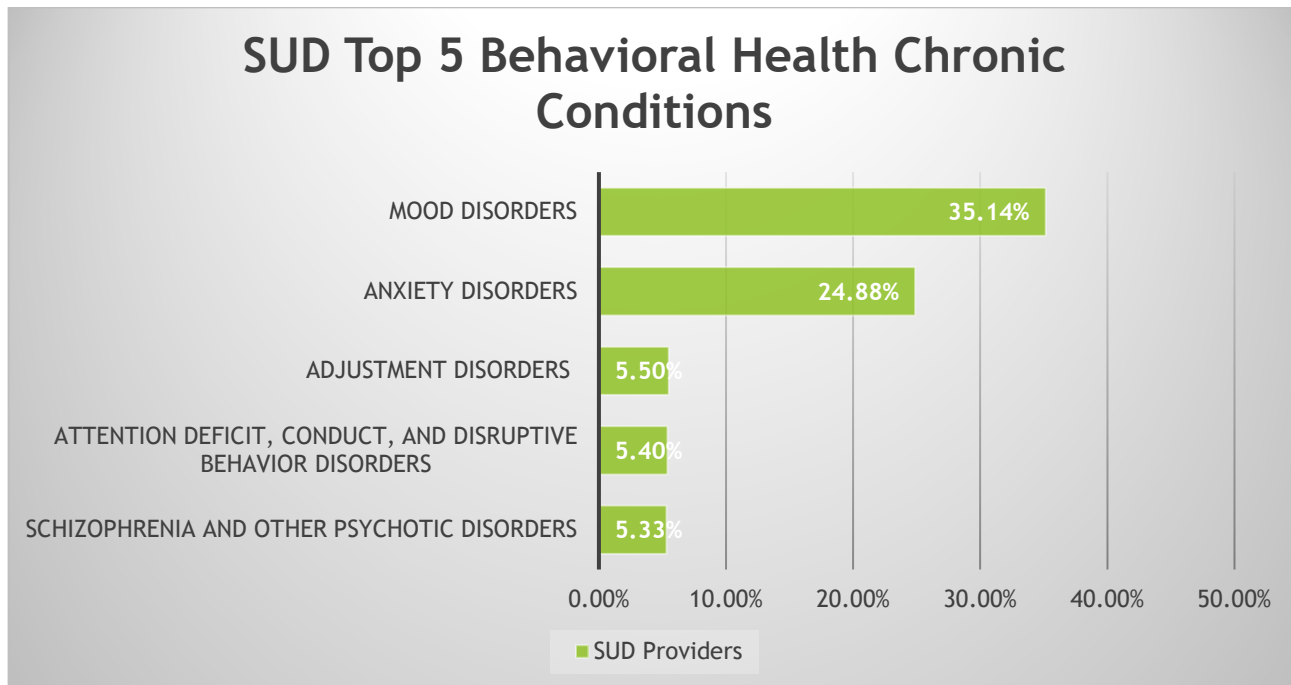


Figure 7: Displays the top 5 Physical Health Chronic Conditions by the percentage of Medicaid individuals served by CMHSPs within the MSHN region in the past 12 months. (Population: 39,656)

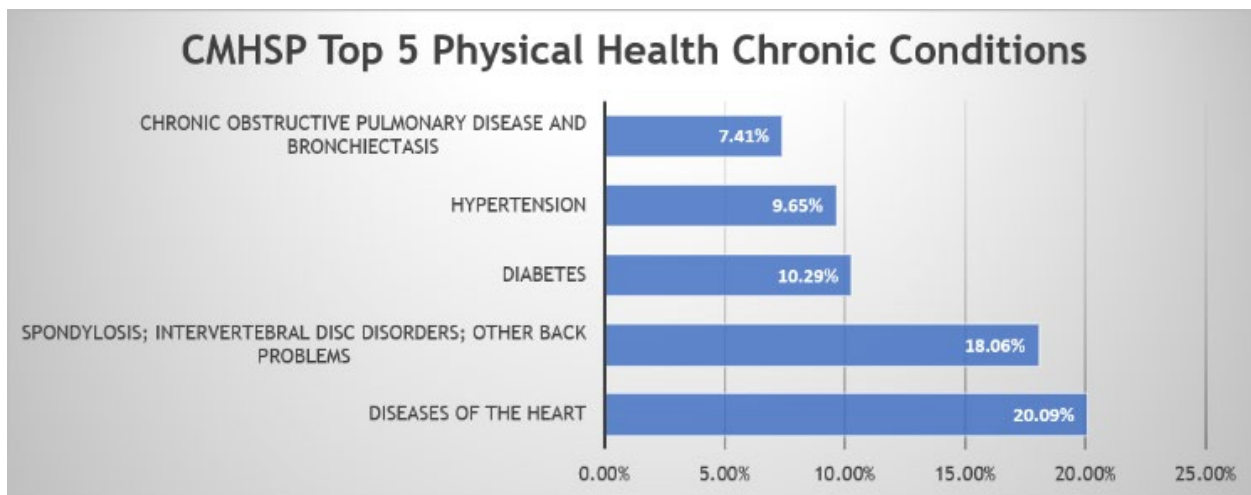
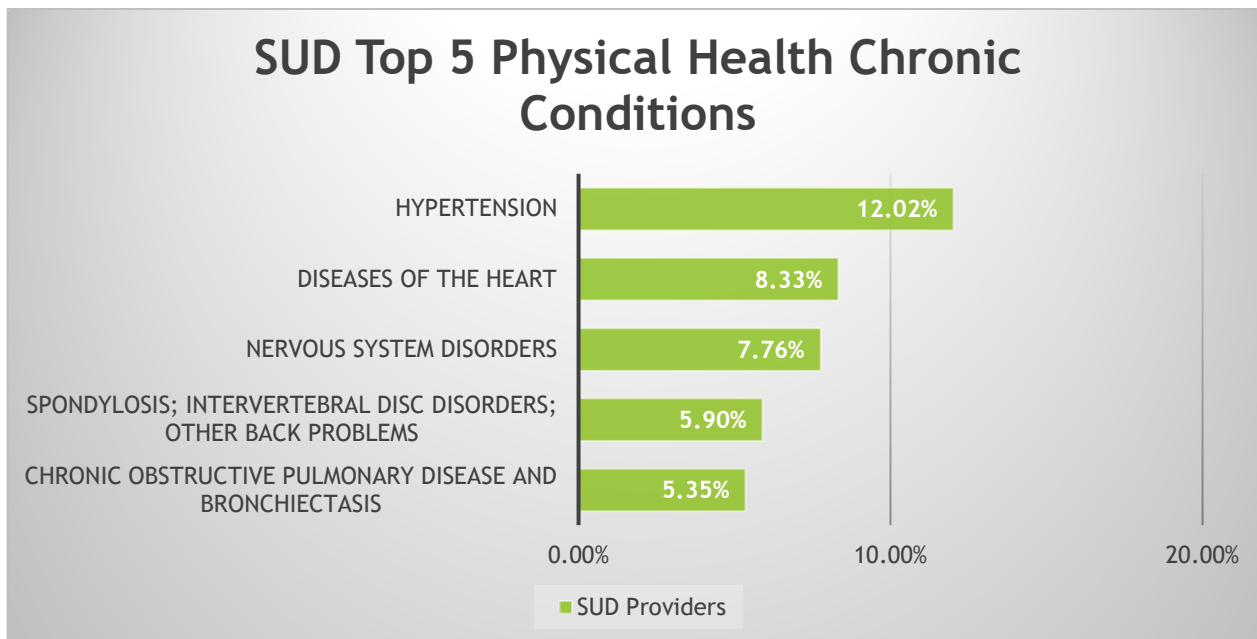
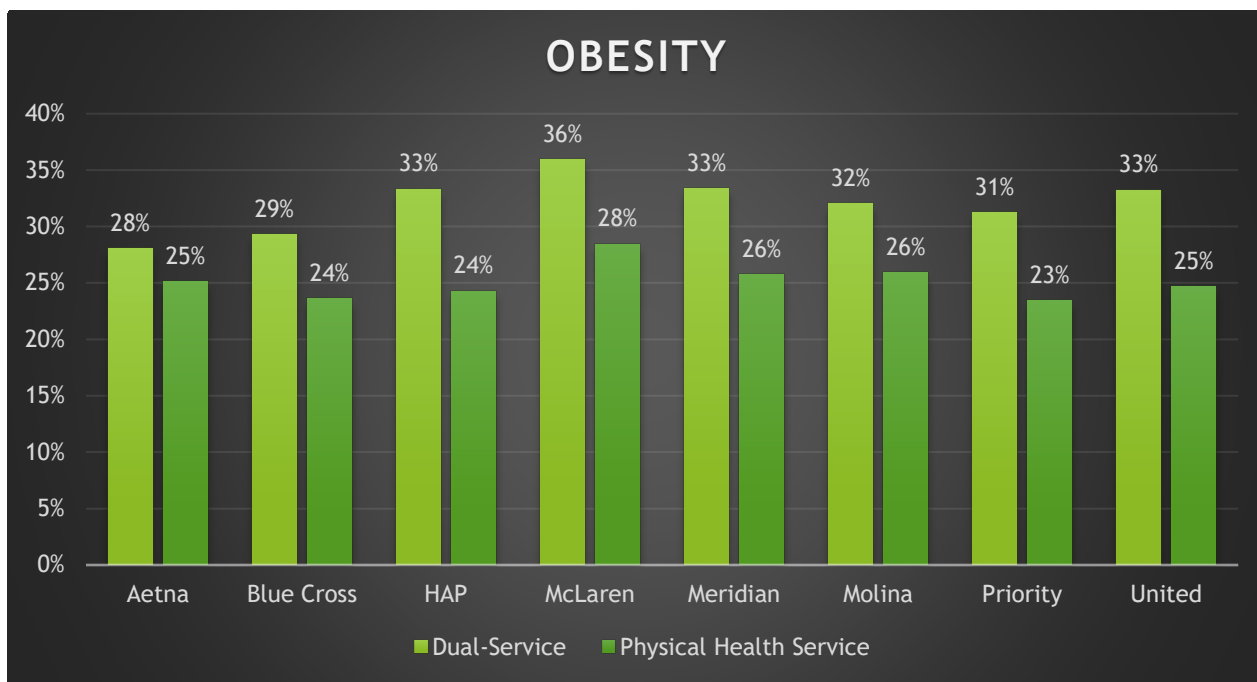
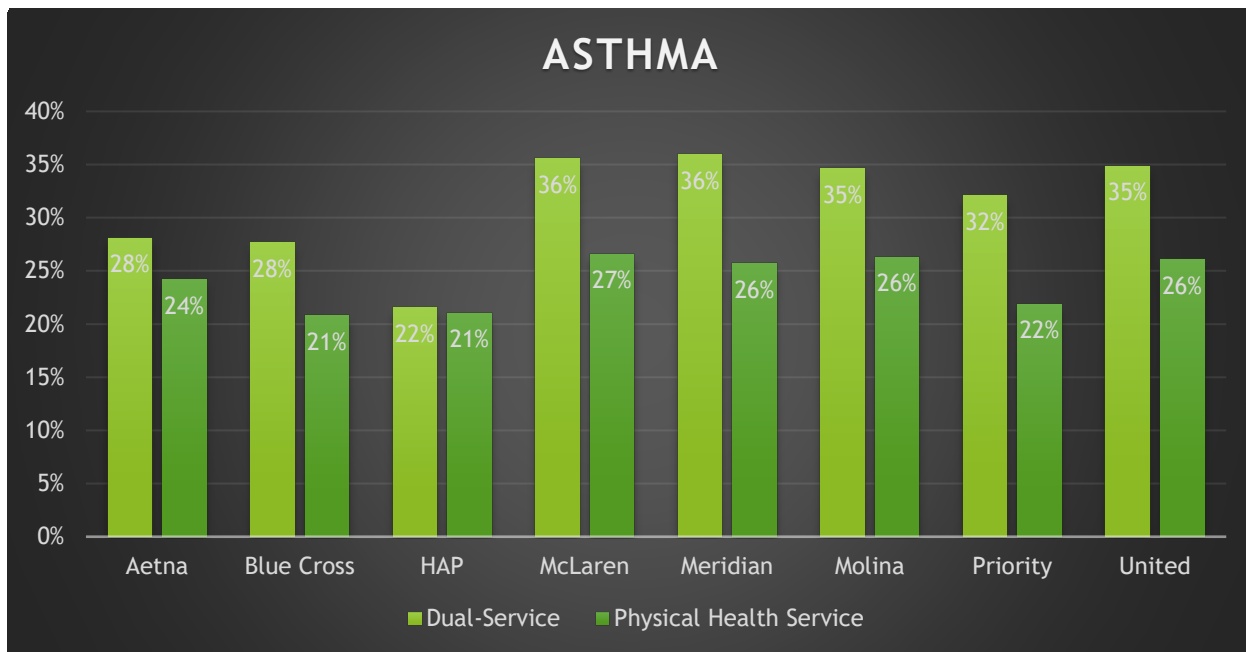
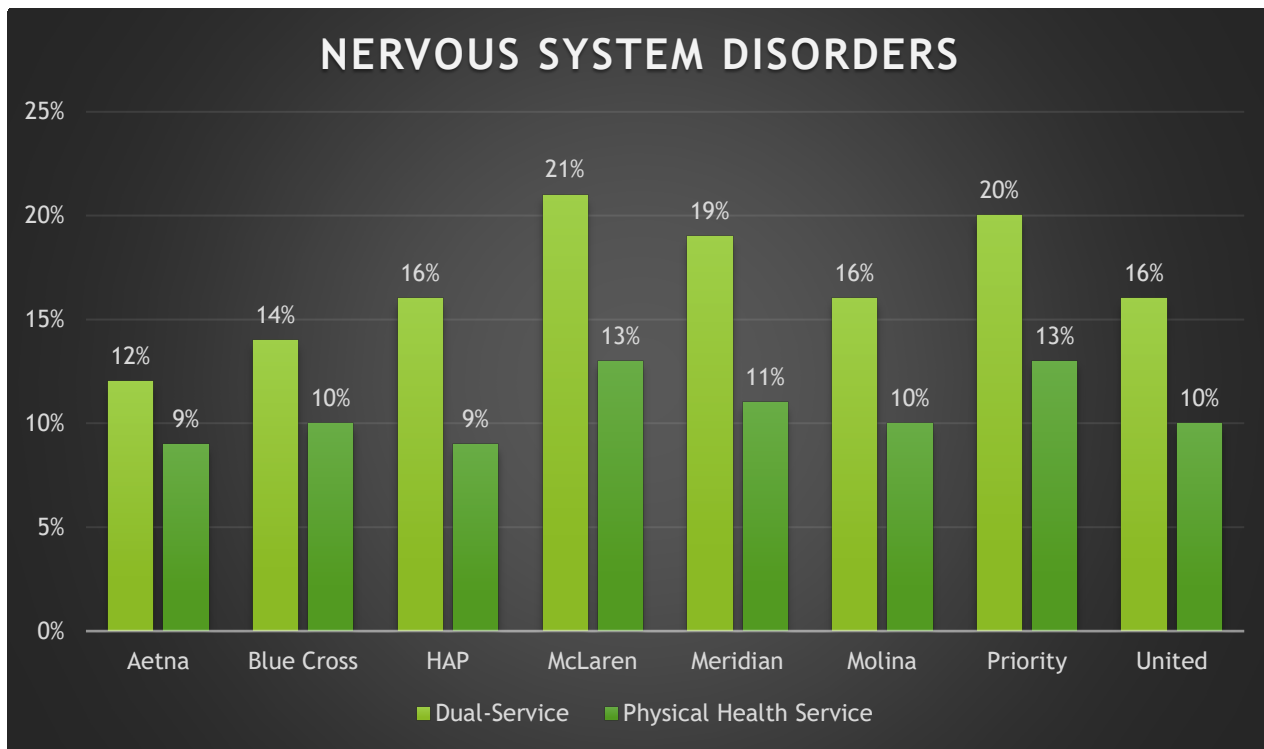
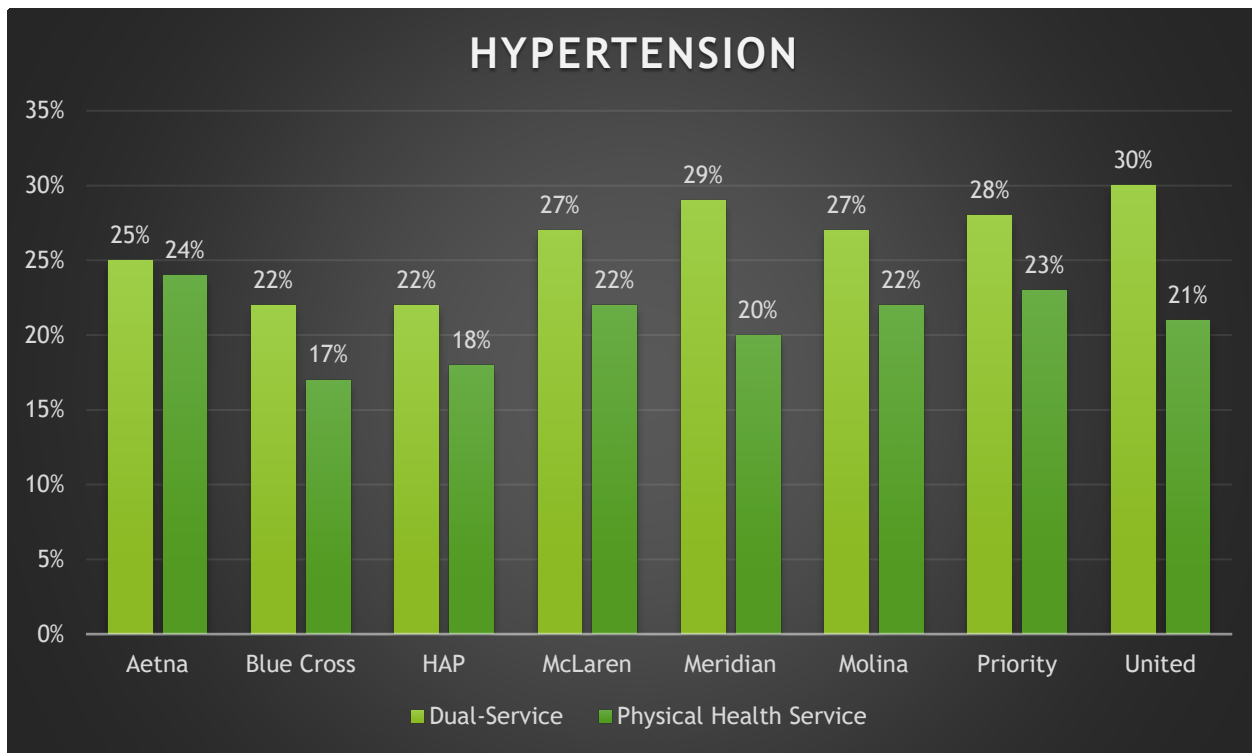


Figure 8: Displays the top 5 Physical Health Chronic Conditions by the percentage of Medicaid individuals served by SUD providers within the MSHN region in the past 12 months. (Population: 9,283)

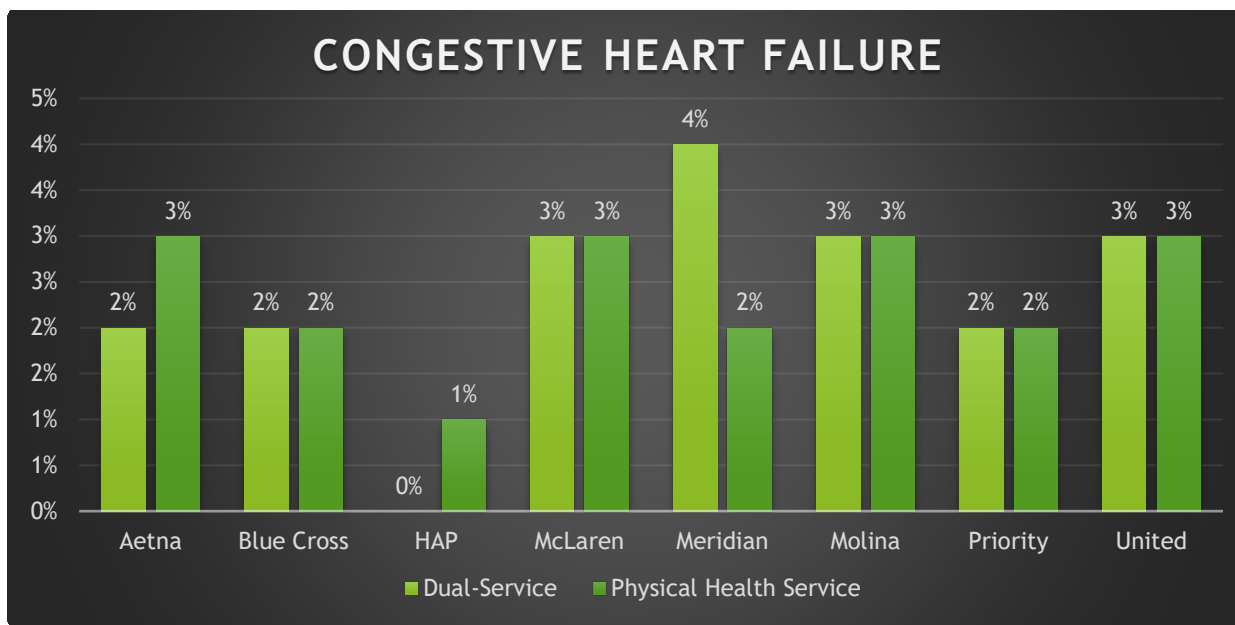
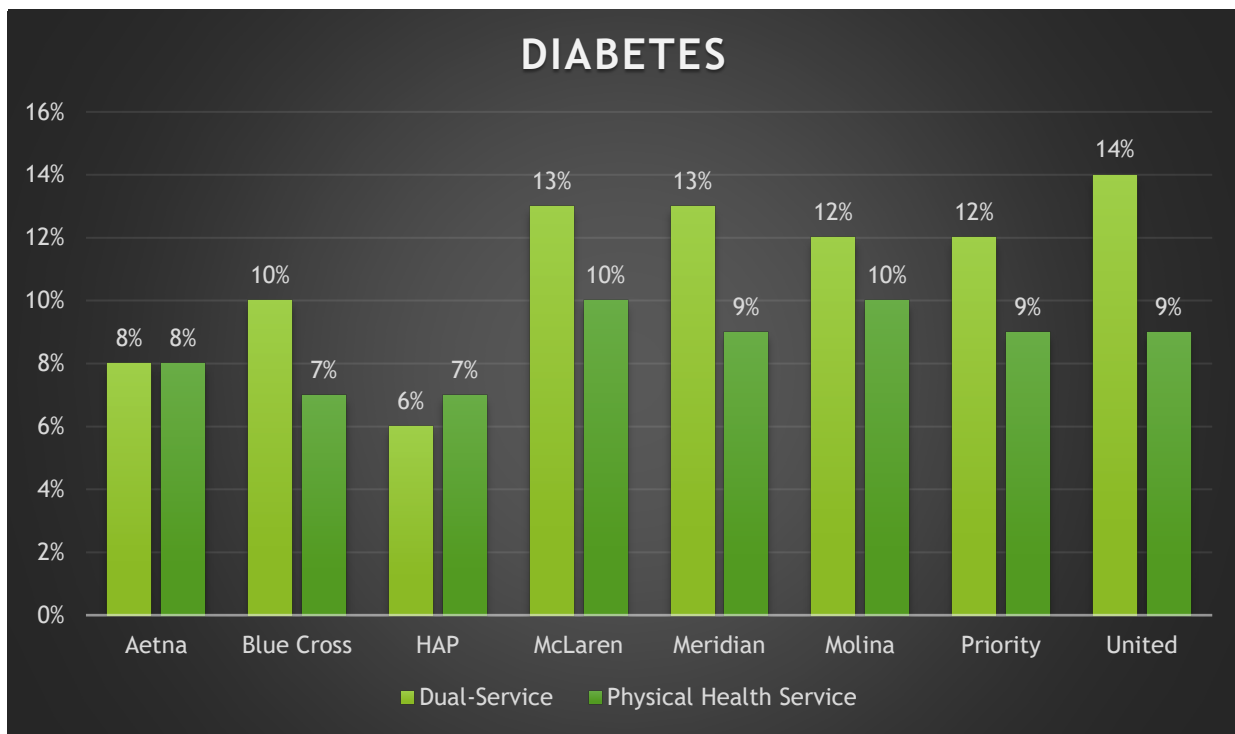


Figures 9-14: Depict the rates of specific chronic diseases in the physical-health Medicaid enrollee population in the MSHN region (n = 355,099) compared to the dual-service Medicaid enrollee population in the MSHN region (n = 38,361).





⁴ Refer to Appendix B for full Nervous System Disorders Code Set



Given that individuals with severe mental illness and intellectual and developmental disorders experience higher than average rates of chronic health conditions it is important for MSHN to examine population health strategies, social determinants of health, and opportunities for integrated health service delivery. Improved care management with the Medicaid Health Plans is also vital in order to decrease inappropriate and disjointed care for dual-service members who often experience multiple chronic physical and behavioral health conditions.

V. Population Health and Health Equity

In the United States, health has long been looked at from an individual level and addressed by traditional sectors – governmental public health agencies and the health care delivery system. While that may be beneficial for the problem at hand, treating the sick individual, it does little to address the reasons why a person may fall ill in the first place. A different approach, population health, involves a more holistic, preventative look at health and includes sectors that may not have been traditionally involved to improve health outcomes of the communities these sectors serve. This broader perspective allows for a more conclusive look at the many reasons why specific groups have poorer health outcomes than others. Collectively, these reasons are called the social determinants of health (SDH).

According to the Centers for Disease Control and Prevention (CDC), social determinants of health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. Examples of social determinants of health include things such as: the availability of resources to meet basic needs (e.g. safe housing and food); access to healthcare service; level of education; employment; transportation; social support; language and literacy; and economical and financial resources. SDH are not generally included in the traditional health care service delivery system, yet they strongly influence the overall health outcomes of individuals or populations.

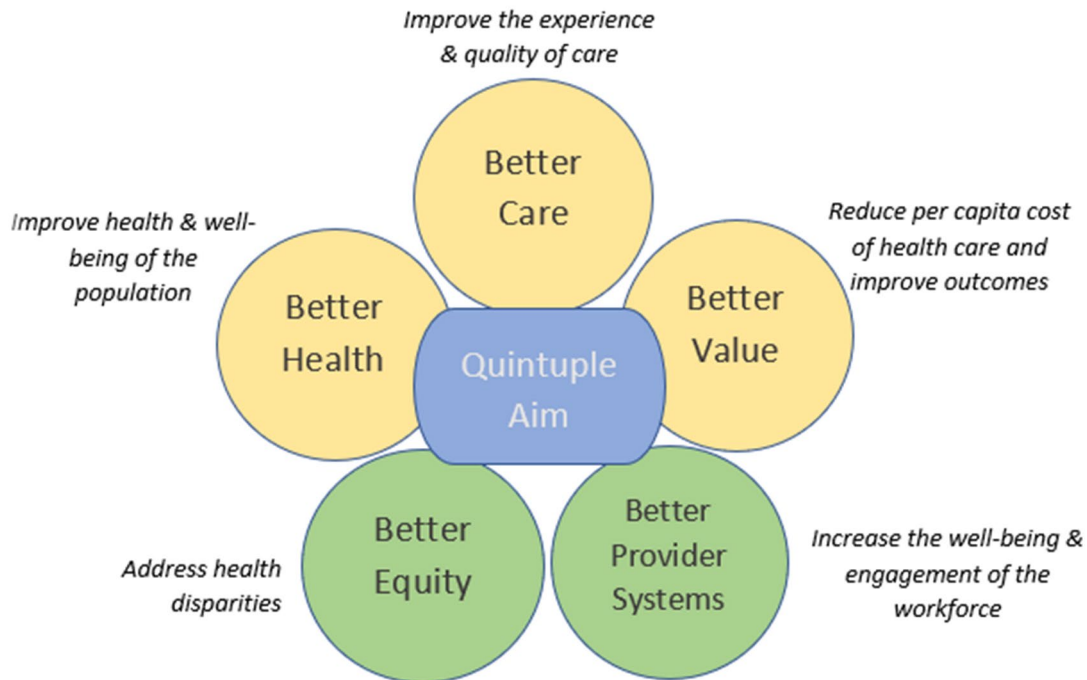
SDH also contribute to health inequities. Health inequities are the “unfair and avoidable differences in health status seen within and between communities” (WHO). Health equity occurs when nobody is denied the opportunity to be healthy even if they belong to a socially disadvantaged group. The achievement of health equity can be measured by the presence or absence of health disparities. The CDC describes health disparities as “preventable differences in the burden of disease, injury, violence, or in opportunities to achieve optimal health experienced by socially disadvantaged racial, ethnic, and other population groups, and communities”. Fewer health disparities represent a movement toward health equity.

In general, the availability of and access to high-quality education, nutritious food, decent and safe housing, affordable and reliable public transportation, health insurance, and clean water and air all influence a person’s health. In addition, race, socioeconomic status, literacy levels, and discrimination all play significant roles in a person’s or population’s opportunities to be healthy. Creating solutions to these differences will lead to a healthier overall population.

Addressing population health is the key to reducing health disparities and achieving health equity. By studying the overall health of a specific group, MSHN and its CMHSP participants can work on reducing the impacts that race, home environment, income, and education have on a person’s health. Therefore, implementing effective population health strategies can specifically impact individuals’ health and lead to overall better health outcomes regardless of one’s social standing. This conceptualization of total person well-being for all individuals regardless of race, income, social standing, gender, sexual orientation or other factors is the foundation for the MSHN vision statement:

The vision of Mid-State Health Network is to continually improve the health of our communities through the provision of premier behavioral healthcare and leadership. Mid-State Health Network organizes and empowers a network of publicly-funded community partnerships essential to ensure quality of life while efficiently and effectively addressing the complex needs of the most vulnerable citizens in our region.

MSHN has developed and implemented a regional strategic plan using the model of the Healthcare Quintuple Aim:



The successful achievement of the Quintuple Aim requires highly effective healthcare organizations to implement population health and integrated care systems. The backbone of any effective healthcare system is an engaged and productive workforce/provider network that finds joy and meaning in their work. The Quintuple Aim would add a focus on achieving health equity by addressing health disparities.

VI. Foundational Components of Effective Population Health

MSHN identified three core elements of an effective Population Health Plan:

- Systematic effort to improve health outcomes in sub-populations that share multiple clinical and social attributes
- Reflects the interdependence of biology, behaviors, social, cultural, economic, and environmental factors that impact well-being
- Compels healthcare and social service providers and the insurer to envision and develop organized and integrated delivery systems capable of achieving the Quintuple Aim.

Below are core foundational components that enable organizations to be successful in population health and care management, as well as a brief description of MSHN’s efforts and activities in each foundational area. (Note: These foundations were presented at the American CMH Association Symposium for Behavioral Health and Primary Care in Washington, DC on January 20,2016. They have been modified here to illustrate MSHN’s organizational readiness and current efforts in the areas of population health and integrated care.)

Figure 15: Summary of MSHN Activity in Core Areas of Population Health

FOUNDATIONAL AREA	MSHN READINESS
Data Informed Strategy	<ul style="list-style-type: none"> • MSHN utilizes multiple data sources and risk-stratification models to identify target sub-populations and understand issues impacting health outcomes • Development of Population Health and Integrated Care Plan to articulate strategy toward managing population health concerns • Research and develop a predictive modeling approach to population health
Compensation/Reimbursement and incentives (to move from Volume to Value)	<ul style="list-style-type: none"> • Current value-based purchasing pilots with select SUD service providers • CMHSP sub-capitation supports value-based managed care efforts by giving CMHSP participants the flexibility to engage in VBP arrangements with their provider networks.
Information Technology	<ul style="list-style-type: none"> • Utilize Integrated Care Delivery Platform (ICDP) and Admission/Discharge/Transfer (ADT) feeds from participating hospitals to obtain alerts and notifications • Participate in Health Information Exchanges (HIE) such as VIPR and MiHIN • FY20-21 plans for implementation of ADT feeds for all SUD Providers • Utilize HIE to monitor real-time data related to COVID-19 spread and testing • Support CMHSP ADT feeds to MiHIN
Identification and management of high-risk and at-risk members	<ul style="list-style-type: none"> • MSHN utilizes CC360 for identification and care management of shared high-risk members with Medicaid Health Plans • Employs utilization management practices to identify under and over-utilization in the population • Utilize ICDP to obtain full picture of high utilizers (including SUD claims)
Development of Person-Centered Plan, health goals.	<ul style="list-style-type: none"> • Person-Centered Planning occurs at the local level with CMHSP and SUD service providers within the MSHN region • Additional individual care planning for highest-risk members occurs on a monthly ongoing basis in collaboration with MHP partners • MSHN offering Whole Health Action Management (WHAM) regional trainings in FY21 to increase workforce competency in developing person-centered health goals
Care coordination; community support referrals and connections.	<ul style="list-style-type: none"> • Policies and procedures ensure care coordination and community referrals happen consistently throughout the region • Community resources available on website; linking occurring with MHPs, CMHSPs, SUD Providers

FOUNDATIONAL AREA	MSHN READINESS
	<ul style="list-style-type: none"> • Memorandums of understanding with all Medicaid Health Plans in region
<p>Follow disease management protocols, clinical pathways and evidence-based clinical practices/guidelines.</p>	<ul style="list-style-type: none"> • Identified specific disease management performance metrics (HEDIS measures) and developed corresponding clinical protocols • Coordination with MHPs to develop protocols for hospital readmissions and transitions of care
<p>Clinical Monitoring and Interventions</p>	<ul style="list-style-type: none"> • Clinical monitoring and interventions occur at local level through partner CMHSP participants and SUD providers. • All CMHSPs and SUDSPs ensure coordination with primary care physicians for persons served; encourage annual wellness exams for all individuals • CMHSPs and SUD (Pilots) utilizing ICDP for care alert monitoring and interventions
<p>Self-management including prevention and wellness.</p>	<ul style="list-style-type: none"> • CMHSPs & SUD providers supporting health education and communication to beneficiaries • Required annual testing and follow up if not present by primary care physician. Monitoring for testing through ICDP. • MSHN offering Whole Health Action Management (WHAM) regional trainings in FY21, an evidence-based model that uses peer workforce to engage persons served in chronic disease self-management
<p>Multi-Media Support for Patient Care – Information Therapy</p>	<ul style="list-style-type: none"> • Use of tele-psychiatry services in all CMHSP and SUDSP organizations • Use of automated call reminders through EHR vendor in CMHSP participant organizations. • Web-based provider directory available for all CMHSP and SUDSP services
<p>Focus on health determinants</p>	<ul style="list-style-type: none"> • Health determinants routinely screened by CMHSPs and SUDSPs (such as smoking, high-risk factors for communicable diseases) • Members with identified health determinants are offered supportive wellness services and/or referrals as part of the person-centered planning process • Future risk stratifications to include health determinants
<p>Team-based care; integrated care</p>	<ul style="list-style-type: none"> • CMHSPs participate in a variety of local-level integrated care activities include patient-centered medical home practices. Described in further detail later in this plan. • Increased engagement of SUD service providers in integrated care strategies for co-morbid physical, behavioral health and substance use disorder concerns
<p>Relationships and Partnerships</p>	<ul style="list-style-type: none"> • Strong collaborative relationships with all 8 MHPs that serve the 21-county MSHN region • CMHSP participants have local partnerships with community health centers, hospitals and primary care practices • Increased care management and care coordination between MHPs, CMHSPs and SUD providers • MSHN actively participates in community prevention coalitions in all 21 counties in the region
<p>Transitional Care</p>	<ul style="list-style-type: none"> • CMHSP and SUD providers coordination of care between levels of care

FOUNDATIONAL AREA	MSHN READINESS
	<ul style="list-style-type: none"> Enhanced follow-up protocols and data sharing between MSHN and MHPs for individuals when they are discharged from hospital
Complex case (Care) Management Programs	<ul style="list-style-type: none"> Local-level complex case management occurs within CMHSP participants and SUDSPs. Participates in plan-to-plan level care management with MHPs for highest-risk shared members; develop coordination goals and share with CMHSP and SUD providers CMHSPs utilize ICDP to monitor health conditions and use to educate and follow up on alerts Protocols used to implement clinical best practices for high-risk individuals (ie: diabetes screening protocols)
Quality: Evaluation; Performance metrics.	<ul style="list-style-type: none"> Measurement portfolio includes performance metrics related to population health and integrated care. Performance metrics reviewed by MSHN leadership councils and committees; provide change strategy recommendations for improvement

VII. MDHHS Integrated Health Performance Requirements

Figure 16: The below table indicates the required FY21 PIHP/MHP Joint Metrics for the Integration of Behavioral Health and Physical Health Services

Category	Description	Criteria/Deliverables
J.1. Implementation of Joint Care Management Processes (35 points)	Collaboration between entities for the ongoing coordination and integration of services	Each MHP and Contractor will continue to document joint care plans in CC360 for members with appropriate severity/risk who have been identified as receiving services from both entities. The risk stratification criteria is determined in writing by the Contractor-MHP Collaboration Workgroup in consultation with the State. Quarterly, the State will select beneficiaries at random and review their care plan in CC360.
J.2. Follow-up After Hospitalization (FUH) for Mental Illness within 30 Days using HEDIS descriptions (40 points)	The percentage of discharges for members six years of age and older who were hospitalized for treatment of selected mental illness diagnoses and who had an outpatient visit, an intensive outpatient encounter or partial hospitalization with	<ol style="list-style-type: none"> The Contractor must meet set standards for follow-up within 30 Days for each rate (ages 6-17 and ages 18 and older. The Contractor will be measured against an adult minimum standard of 58% and a child minimum standard of 70%. Measurement period will be July 1, 2020-June 30, 2021. Data will be stratified by race/ethnicity and provided to plans. The Contractor will be incentivized to reduce the disparity between the index population and at least one minority group. Measurement period for addressing racial/ethnic disparities will be a comparison of calendar year 2019 with July 1, 2020-June 30, 2021.

	<p>mental health practitioner within 30 Days.</p>	<p>The points will be awarded based on MHP/Contractor combination performance measure rates.</p> <p>The total potential points will be the same regardless of the number of MHP/Contractor combinations for a given entity.</p> <p>See MDHHS BHDDA reporting requirement website for measure specifications (query, eligible population, and additional details) and health equity scoring methodology, at https://www.michigan.gov/mdhhs/0,5885,7-339-71550_2941_38765---,00.html</p>
<p>J.3. Follow-Up After (FUA) Emergency Department Visit for Alcohol and Other Drug Dependence (25 points)</p>	<p>Beneficiaries 13 years and older with an Emergency Department (ED) visit for alcohol and other drug dependence that had a follow-up visit within 30 days.</p>	<p>Data will be stratified by the State by race/ethnicity and provided to plans. The Contractor will be incentivized to reduce the disparity between the index population and at least one minority group.</p> <p>Measurement period for addressing racial/ethnic disparities will be a comparison of calendar year 2019 with July 1, 2020- June 30, 2021.</p> <p>The points will be awarded based on MHP/PIHP combination performance measure rates.</p> <p>The total potential points will be the same regardless of the number of MHP/PIHP combinations for a given entity.</p> <p>See MDHHS BHDDA reporting requirement website for measure specifications (query, eligible population, and additional details) and health equity scoring methodology, at https://www.michigan.gov/mdhhs/0,5885,7-339-71550_2941_38765---,00.html</p>

Implementation of Joint Care Management Process

The Medicaid Health Plan (MHP) and Pre-Paid Inpatient Health Plan (PIHP) Integrated Health Workgroup identified and agreed to the inclusion of the following stratified risk criteria for the selection of persons requiring the most thoughtful and well-coordinated care between the MHPs and PIHPs:

- Number of emergency department visits in previous 12 months
- No visits to a primary care physician within the last year
- Number of chronic conditions (physical health and behavioral health)
- Number of psychiatric/physical health hospitalizations within the last 12 months

MSHN participates in monthly care management meetings with each of the 8 MHPs in the region for coordinated service planning and care management activities for shared members who meet established risk criteria.

The risk criteria are retrievable through Care Connect 360 (CC360) which results in a list of consumers whose interface (or lack thereof) with the healthcare system as well as the presence of chronic health conditions amounts to ongoing issues related to social determinants of health/wellness, poor access to

care, increased risk of utilization of higher cost services, and increased chances of a general worsening of overall physical and psychological well-being.

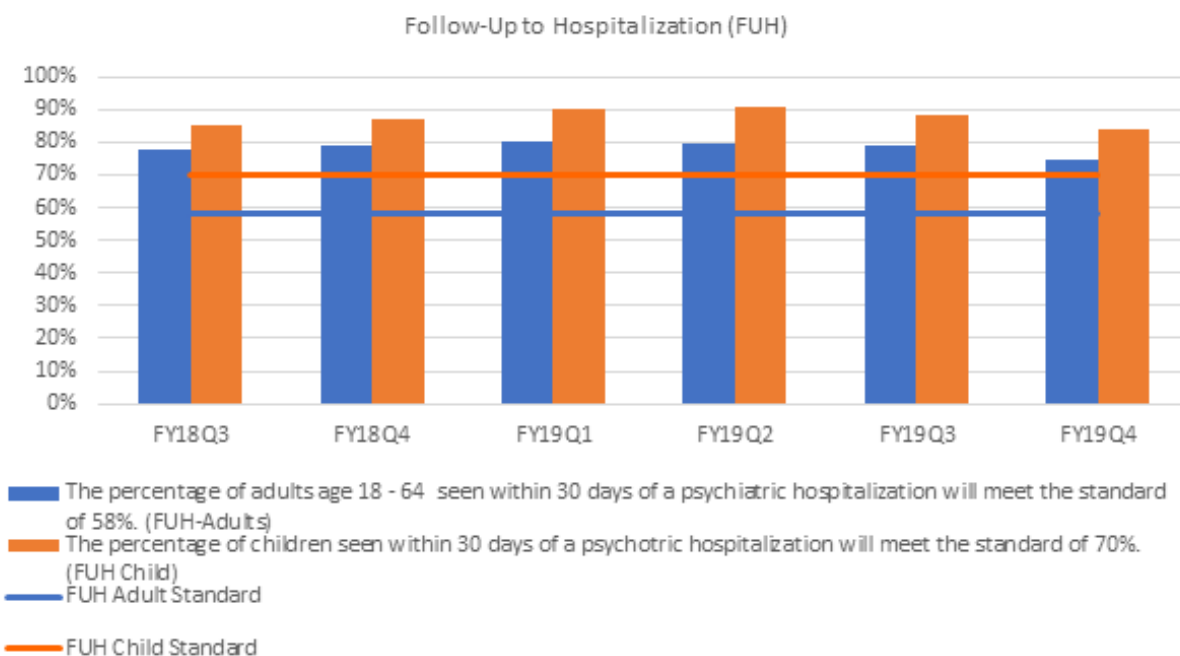
MSHN tracks and monitors the following outcome measures related to care management for high-risk shared members.

- Reduction in number of visits to ER
- Reduction in hospital admissions for psychiatric/physical health reasons
- Number of chronic conditions – Measure of stability, improvement and/or remission
- Percent of consumers who have had a PCP visit in the last twelve months
- Reason for closure of care management case
- Amount of time (in days) spent in a care management plan arrangement

Follow-Up After Hospitalization for Mental Illness

In addition to the monthly care coordination meetings for shared high-risk members, MSHN also participates in ongoing targeted care coordination efforts with its MHP partners to provide comprehensive follow-up care for shared members after an inpatient psychiatric hospitalization when people are often most vulnerable. In partnership with local CMHSP’s, MSHN provides inpatient admission notification for shared members to each of its 8 MHP partners within 5 business days. MSHN and the MHP care managers coordinate to determine which plan will be responsible for providing follow-up care within designated timeframes. The MSHN Quality Improvement Council monitors this metric on a quarterly basis and participates in quality improvement activities when adverse trends are identified. Historically, MSHN as a region has always exceeded the benchmark rates for both adults and children on this measure.

Figure 17: MSHN Historical Performance on FUH Metric



Follow-Up After Emergency Department Visit for Alcohol or Other Drugs (FUA)

According to Michigan Medicaid claims data there were 18,479 emergency room visits related to a primary substance use disorder reason statewide during 2018. Only 5,027 of these visits (27.20%) resulted in a follow-up service to address the substance use concern within 30 days following the ER visit. Additionally, there is a significant racial disparity when looking at the rates of follow-up between African-American individuals (14.81%) and White individuals (32.34%) statewide. The rates of follow-up for individuals in the MSHN region during this same time period was slightly higher than the statewide data with an overall follow-up rate of 28.93%, follow-up rate for African-American individuals of 18.46%, and follow-up rate for White individuals of 31.43%.

MSHN is committed to ensuring that Medicaid-eligible individuals in its service region who may be experiencing, or at-risk of, a substance use disorder are identified earlier and provided with appropriate options for treatment and recovery resources. One of the ways MSHN proposes to accomplish this is through the use of Project ASSERT (Alcohol & Substance Abuse Services Education Referral Treatment) interventions in hospital emergency rooms in its 21 counties. During FY21 MSHN integrated health staff will facilitate meetings with administrators of each hospital emergency room in its 21-county region. These meetings will also include key personnel from the local Community Mental Health organization for the county where the hospital is located. The purpose of each meeting is to develop a local strategy for use of Project ASSERT in the ER (where it does not already exist), and to clarify the referral pathway from the ER to the appropriate behavioral health and SUD treatment and recovery resources. This will allow MSHN and its network of service providers to intervene with at-risk individuals prior to discharge from the ER so that key demographic data and contact information can be gathered in order to perform outreach and follow up for referrals.

Addressing Racial and Ethnic Disparities

MDHHS has incentivized PIHPs and MHPs to reduce racial disparities on 3 health performance metrics during FY21 (Follow-Up After Hospitalization for Mental Illness, Plan-All Cause Readmission, and Follow-Up After Emergency Department Visit for Alcohol and Other Drug Dependence.)

MSHN will utilize 2018-2019 Medicaid Claims Data to conduct a health equity analysis pertaining to possible reasons for the existing racial disparities in the region. Factors that will be considered include: county-level demographics, rural vs urban settings, availability of culturally-responsive treatment and recovery resources in each community, and workforce diversity. Insights obtained from the data review and health equity analysis will be shared with MSHN regional councils and committees and used to inform strategies for increasing levels of engagement in treatment services for individuals belonging to racial minority groups. Appendix D includes the penetration rate for each CMHSP by race/ethnicity of persons served.

Beyond the requirement to address racial and ethnic disparities on the contractually required metrics, MSHN is committed to identifying and addressing other health disparities where they exist in the region and ensuring all individuals have the resources and opportunities needed to be healthy, even if they

belong to a socially disadvantaged group. During FY21-22 MSHN will endeavor in the following tasks toward reducing health disparities:

- Continue to gather and analyze regional data on health disparities
- Form focus groups and learn from people of color and other at-risk groups who experience health disparities with negative health outcomes
- Seek to listen and to understand the lived experience of people in the region as it relates to accessing treatment services, supports, and barriers to treatment and recovery
- MSHN will work with community partners, people in recovery, and its CMHSP and SUDSP networks to form additional focus groups as needed
- Consider establishing an advisory group that provides input regarding strengths and opportunities for improvement in our system.

VIII. Other Population Health & Integrated Care Initiatives

COVID-19 Impact & Regional Response

The global COVID-19 pandemic of 2020 has resulted in an unprecedented historical context for all. During the development of this plan, profound health and economic impacts are unfolding across Michigan's landscape in ways that are evolving day to day. The coronavirus pandemic has had and continues to have devastating and, at this point, unquantifiable effects on Michigan's social determinants of health, leading to poor outcomes across multiple health indicators. Health experts warn of an impending behavioral health epidemic within the COVID-19 pandemic including inevitable spikes in mental illness, suicides, substance use driven by mass unemployment, economic instability, social isolation, increased domestic and sexual violence, and other negative health indicators ranging from rising infant mortality to decreasing life expectancy.

At the outset of the pandemic in March 2020, MSHN immediately implemented wide-ranging and comprehensive response strategies to mitigate the spread of the virus for persons receiving services as well as protect and preserve the behavioral health and SUD treatment provider workforce. Led by the MSHN Regional Medical Director, Dr. Zakia Alavi, and the Medical Directors from the 12 CMHSP organizations, COVID-19 response efforts include:

- Development of a MSHN COVID-19 Website
 - Daily updates to include the most current CDC guidance; Substance Abuse and Mental Health Services Administration (SAMHSA) resources; Michigan Department of Health and Human Services (MDHHS) bulletins; Frequently Asked Questions (FAQ); and Provider Status Updates
 - Consumer page including resources and safety information as well as offering the MyStrength application (provided by Saginaw County Community Mental Health Authority)
 - CMHSP secure page for in-region guidance, status of Personal Protective Equipment (PPE) supplies, reporting COVID Tier status for each community, and provider operational status
- Development of comprehensive best practice guidance documents for the provider network:
 - [MSHN COVID-19 Tier System](#)
 - [MSHN Residential Homes Crisis Plan for COVID-19](#)
 - [MSHN Guidance for Network Reopening](#)
 - [MSHN Guidance for SUD Reopening](#)
- Procurement and Deployment of regional Personal Protective Equipment (PPE) supplies

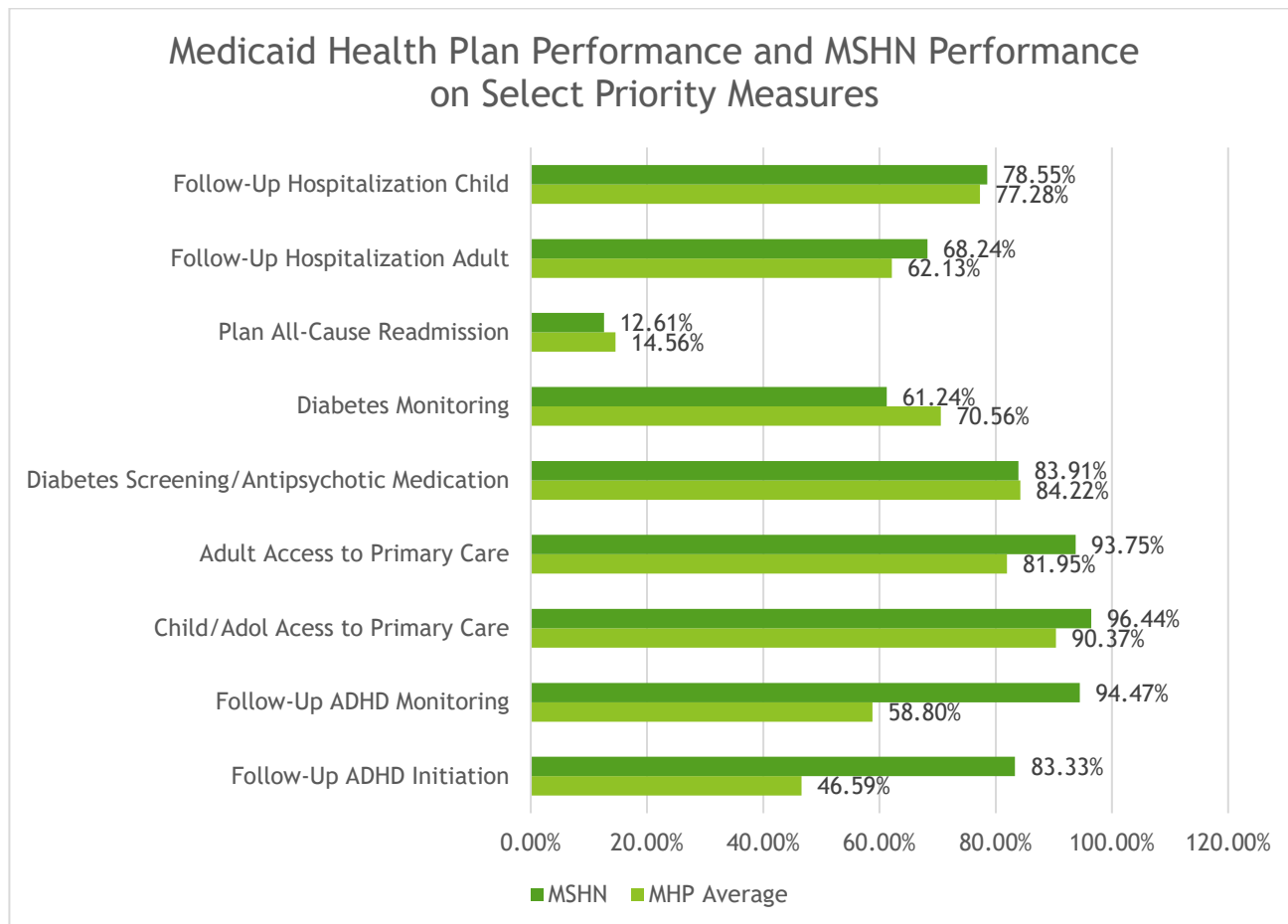
- Transition of service delivery to telehealth wherever feasible
- Development of a COVID-19 Data Dashboard including county-level metrics to monitor rate of disease transmission and community testing

The short and long-term impacts on the physical and emotional health of already vulnerable populations in MSHN’s twenty-one counties are likely to be dramatic and to require a ramping up of services and supports even as Michigan’s economy moves deeper into a recession. MSHN will need to engage in continuous monitoring of the changing needs of the population and workforce in response to COVID-19 throughout FY21-FY22.

Population Health & Integrated Care Measurement Portfolio

With input from its regional councils and committees, MSHN developed a performance measure portfolio based on national healthcare industry standards. MSHN utilizes data analytics software to monitor and track these measures regionally as well as by individual performance of each CMHSP. CMHSPs have access to and can view their CMHSP-specific data. Metrics are reviewed quarterly, if not more frequently, by regional MSHN councils and committees for ongoing input into performance improvement strategies. Expanded descriptions for each performance measure, rationale for selection, and accompanying clinical protocols are contained in **Attachment B** of this document.

Figure 18: Comparison of Medicaid Health Plan average performance with MSHN regional performance on selected MSHN Priority Measures during 2019



*(*Note: Cardiovascular Screening is not included in the Medicaid Health Plan Performance Report and thus is not depicted in this graph)*

Value-Based Purchasing Pilot Projects for Substance Use Disorder Services

Mid-State Health Network (MSHN) is currently engaged in a pilot project to improve the quality and efficiency of substance abuse treatment through a value-based purchasing model for Substance Use Disorder (SUD) services. These incentive-based contracts include additional responsibilities in the continuing treatment and wellness of clients. Engaging clients in a continuous care relationship and encouraging providers to strengthen care coordination are two objectives of this pilot project, both supported by research literature on successful value-based purchasing implementations. Additional objectives of this pilot project include:

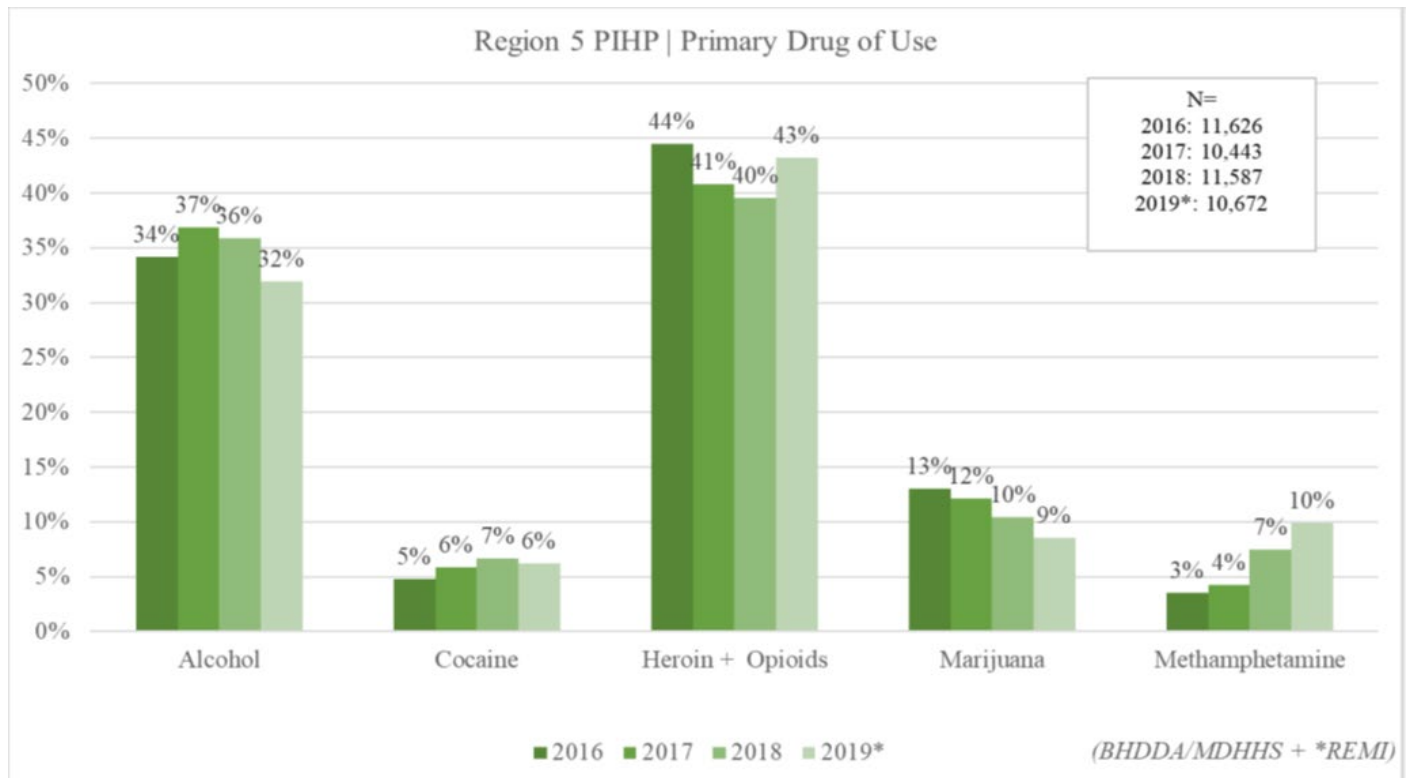
- Improved clinical outcomes for at-risk populations
- Expanded care coordination between providers at all levels
- Consistent engagement in an SUD treatment and recovery relationship
- Engagement with primary care
- Reduction in unnecessary emergency department use
- Reduction in inpatient psychiatric care

The pilot project model includes four phases of implementation to fully incentivize participants in model development: Pay for Participation, Pay for Reporting, Pay for Performing, Pay for Success. Provider participation will be incentivized at each phase, with financial incentives evolving from planning, infrastructure development and information gathering, to full implementation of the clinical model. It is anticipated that the pilot will reach full implementation (Pay for Success) in FY21.

Regional Substance Use Disorder Strategic Plan

In 2019, Mid-State Health Network provided SUD treatment services for 12,646 individuals (unduplicated) receiving an admission for substance use disorder services, a 21% increase since 2015. This is not an indication of overall prevalence of people meeting a DSM-V diagnosis for a substance use disorder, but the number of admissions for people accessing SUD services with a DSM-V axis I substance use disorder.

Figure 19: Displays the identified Primary Drug for individuals upon admission to a SUD treatment program in FY 2019 compared to FY 2017:



The MSHN FY21-23 SUD Strategic Plan contains a comprehensive epidemiological profile describing substance use disorder patterns as well as other health variables for MSHN's 21-county region. The data contained in the SUD Strategic Plan establishes a baseline for evaluation, planning, and monitoring of the interventions MSHN and its SUDSP network are engaged in relative to improving outcomes related to substance use in the region's population.

MSHN prevention and community SUD recovery services operate from the guiding principle to serve individuals and communities wherever they are across the entire spectrum of preventative care/services. In addition to this holistic philosophy, MSHN has placed a priority emphasis on reducing health disparities among high-risk populations receiving prevention and community recovery services and increasing access to prevention services for older adults (age 55 and older). Goals identified in the SUD Strategic Plan include:

1. Reduce underage drinking and reducing heavy and/or binge drinking among MSHN region adults age 55+;
2. Reduce marijuana use among youth and young adults;
3. Reduce opioid prescription abuse; including a reduction in the misuse and abuse of opioids for non-medical purposes for two specific populations – youth; and older adults (age 55+); and
4. Reduce youth tobacco access and tobacco use including electronic nicotine devices and vape products.
5. Increase access to services including:
 - Expand access to Medication-Assisted Treatment (MAT)
 - Expand access to treatment of stimulant addictions
 - Expand access to Women's Specialty Services (WSS)
 - Expand access to jail-based services

- Expand trauma-informed care across the treatment system
6. Increase penetration rates for older adults, adolescents and veterans/military families
 7. Increase cultural competence and reduce health disparities

The full MSHN FY21-23 SUD Strategic Plan can be found [HERE](#) on the MSHN website

Whole Health Action Management (WHAM)

During FY21-22, MSHN intends to utilize Mental Health Block Grant (MHBG) funding for the purpose of providing training and professional development to its region-wide peer support specialist workforce as health coaches in order to support integrated behavioral health and physical health services for persons served.

MSHN has contracted with the National Council for Behavioral Health to offer 3 train-the-facilitator opportunities in Whole Health Action Management (WHAM) during FY 2021. WHAM is a peer-support model developed by the National Council's SAMHSA-HRSA Center for Integrated Health Solutions to promote whole health self-management. Current health literature and research consistently identify numerous positive outcomes for individuals who practice chronic disease self-management. WHAM training opportunities would be offered to peer specialists working with adults with serious mental illness including those with co-occurring substance use disorders.

Anticipated outcomes as a result of implementing WHAM include:

- Inclusion of whole health goals in person-centered planning for individuals with chronic conditions
- Increased sense of self-efficacy and empowerment for persons served leading to better medication adherence and improved health outcomes
- Improved meaningful engagement with medical professionals leading to increased frequency and quality of care coordination

CMHSP Integrated Health Initiatives

There is a large variance across the CMHSPs in the MSHN region regarding size, resources, and number of persons served. Some CMHSPs have the ability to participate in a large number of activities to affect population health while others have fewer resources. The following regional best practices are the minimal integrated health activities each CMHSP is engaged in:

- Verify consumer self-reported health conditions either through ICDP, CC360 or direct contact with primary care⁵
- Inform every consumer that the CMHSP is required to coordinate care with their primary care physician.⁶

⁵ MDHHS Medicaid Managed Specialty Supports and Services Concurrent 1915(b)/(c) Waiver Program - 8.4.2 Contract Withholds

⁶ MDHHS Medicaid Managed Specialty Supports and Services Concurrent 1915(b)/(c) Waiver Program - 7.4 Integrated Physical and Mental Health Care; 19.5 Primary Care Coordination;

- Meet the measurements identified through Meaningful Use for patient portals.
- Each CMHSP will identify its high-risk utilizers and develop a plan for stratification as locally determined and defined. MSHN monitors and defines its risk stratification as defined in this plan as high-risk. (*Consumers identified as having 1 or more emergency department visits, no primary care visit within the previous 12 months, 2 or more chronic conditions, psychiatric or physical hospitalization within the previous 12 months*).
- Care Coordination occurs with primary care and behavioral health care.
- At least once annually (typically during the pre-planning for person centered planning), staff will utilize electronic data feeds to determine the last time the individual had contact with their primary care physician.
- Each CMHSP will work with its medical directors to review and discuss MSHN priority measures that are measured and tracked as a region.
- Each CMHSPs Information Technology Directors and EMR vendors will work together to embed ICDP/CC360 into the electronic medical record to facilitate easier access to integrated health data for practitioners.

In addition to the regional integrated health best practices, many CMSHPs participate in extensive additional population health and integrated care activities in their local communities, as resources allow. Annually, MSHN compiles a narrative report for submission to MDHHS summarizing the broad-level population health activities performed by the PIHP as well as the extensive integrated health efforts and achievements of MSHN's member CMHSP organizations. The annual reports can be accessed on the [MSHN Website- Population Health & Integrated Care](#).

Summary & Recommendations

MSHN is a leader among Michigan PIHPs in the areas of Population Health and Integrated Care. The region collectively and all 12 CMHSP participants individually have consistently exceeded nationally normed health quality metrics since 2016. MSHN's Population Health program utilizes advanced healthcare data technology to better understand the healthcare needs of the region's population, identify gaps in care, and inform strategies to improve services. MSHN together with its CMHSP participants and provider networks remain committed to the goals of providing quality supports and services that help individuals achieve whole-person wellness, reducing health disparities for marginalized and vulnerable populations, and continuous improvement in health equity.

In furtherance of these goals, recommendations for FY21-22 include the following:

- **Evaluate need for a regional Population Health Committee; Committee responsibilities might include:**
 - Oversight and monitoring of the MSHN Population Health & Integrated Care Plan
 - Oversight and monitoring of all MDHHS Integrated Health Performance Metrics; quality improvement efforts to address any areas of undesirable performance

- Monitoring health data to identify and prioritize health needs of covered beneficiaries in the region
 - Development of regional population health protocols to address identified needs of the covered beneficiaries in the region
 - Consider committee composition to include CMHSP Medical Directors and Medicaid Health Plan Medical Directors for more coordinated population health efforts for shared populations
- **Continue to explore technology platforms that leverage the use of data for predictive modeling of health outcomes**
 - **Fully implement the use of ADTs with MSHN's SUDSP network**
 - Develop clinical protocols around the use of ADTs and expectations of providers relating to care coordination with physical healthcare providers
 - **Consider additions to the current Measurement Portfolio for FY21-22. Priority areas to consider include:**
 - Prevention efforts targeted at reducing adult and childhood obesity
 - Suggested HEDIS Measure: Adult BMI Assessment (ABA)
 - Suggested HEDIS Measure: Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents (WCC)
 - Suggested HEDIS Measure: Reduction in Emergency Department Use
 - **Continue to gather and analyze regional data on health disparities**
 - Gather stakeholder input about factors that contribute to health disparities in their communities through use of focus groups
 - Consider development of a regional advisory group such as a Health Equity Committee to provide guidance related to reducing health disparities
 - **Continue to evaluate long-term effects of COVID-19 on other health outcomes in region**
 - **Monitor potential increased behavioral health and SUD treatment needs of population in response to COVID-19 pandemic; build infrastructure to support increased service needs**
 - **Expand existing SUD Value Based Purchasing arrangements; consider use of performance metrics with all SUD providers to incentivize quality outcomes**
 - Suggested HEDIS Measure: Initiation and Engagement of Alcohol or Other Drug Abuse or Dependence Treatment
 - Suggested HEDIS Measure: Adult Access to Primary Care
 - Suggested Metric: Withdrawal Management and/or Residential Treatment Recidivism
 - **Continue to evaluate the effectiveness of telehealth services and the impact on engagement/retention in services**
 - Consider the value of continuing to use telehealth for provision of particular services post-COVID 19 pandemic

- **Consider regional training support for CMHSP and SUDSP workforce in care management, transitions of care, and effective coordination with MHPS and physical healthcare systems**

References and Related Documents

American's Health Rankings, 2019 Michigan Annual Report,

<https://www.americashealthrankings.org/explore/2019-annual-report/state/MI>

County Health Rankings & Roadmaps, 2020 Michigan Annual Report,

<https://www.countyhealthrankings.org/reports/state-reports/2020-michigan-report>

<http://www.improvingpopulationhealth.org/blog/what-is-population-health.html>

Centers for Disease Control and Prevention, Disparities, Retrieved from:

<https://www.cdc.gov/healthyouth/disparities/index.htm>

Centers for Disease Control and Prevention, Social Determinants of Health, 2017

Frankish, CJ et al. "[Health Impact Assessment as a Tool for Population Health Promotion and Public Policy](#)".

Vancouver: Institute of Health Promotion Research, University of British Columbia, 1996.

<https://www.nami.org/Learn-More/Mental-Health-By-the-Numbers#sthash.uqTNJccu.dpuf>

Michigan Department of Health & Human Services, Medicaid Managed Specialty Supports and Services
Concurrent 1915(b)/(c) Waiver Program

Mid-State Health Network Care Coordination Policy & Procedure

Mid-State Health Network Care Management Considerations, Health Management Associates,
14 June 2016

Milliman 2014 American Psychiatric Association Report

Pathway to Integration, State of Michigan Proposed 1115 Waiver Demonstration

Population Health Symposium for Behavioral Health and Primary Care, ACMHA, Jan 20, 2016, Washington,
DC.

Southwest Michigan Behavioral Health *Population Health & Integrated Care Tactical Plan*,
1 July 2016-31 December 2017

United States Census Bureau, 2016 Census Report

World Health Organization, Premature Death Among People with Severe Mental Disorders, retrieved from:

http://www.who.int/mental_health/management/info_sheet.pdf

World Health Organization, Social Determinants of Health, retrieved from:

https://www.who.int/social_determinants/sdh_definition/en/

Appendix A: MSHN Population Data, Per County

County	2016 Population Census	Percent Persons in Poverty	County Health Ranking
Arenac	14,883	15.90%	62
Bay	103,923	15.60%	36
Huron	30,981	12.60%	44
Tuscola	52,245	12.70%	29
Saginaw	190,539	17.00%	77
Gladwin	25,449	15.60%	65
Midland	83,156	11.30%	8
Clare	30,950	20.60%	75
Isabella	69,872	23.40%	54
Gratiot	40,711	16.20%	30
Osceola	23,460	17.60%	57
Mecosta	43,453	18.40%	24
Montcalm	63,888	14.30%	42
Newaygo	48,980	15.60%	38
Ionia	64,697	9.90%	18
Clinton	79,595	7.50%	3
Shiawassee	68,122	10.80%	41
Eaton	110,268	9.30%	14
Ingham	292,406	18.10%	59
Jackson	158,510	13.70%	64
Hillsdale	45,605	13.50%	28
TOTAL	1,641,693	Compared to National Poverty Level of 11.8% (2018)	N/A

US Census Bureau Quick Facts, www.census.gov/quickfacts

County Health Rankings: <http://www.countyhealthrankings.org/app/michigan/2017/overview>

Appendix B: Nervous System Disorders Code Set

The following were the top 10 frequently occurring ICD-10 diagnostic codes classified as “Nervous System Disorders” as represented in the table on page 15 of this plan:

ICD Code	Name
G43909	MIGRAINE, UNSPECIFIED, NOT INTRACTABLE, WITHOUT STATUS MIGRAINOSUS
G40909	EPILEPSY, UNSPECIFIED, NOT INTRACTABLE, WITHOUT STATUS EPILEPTICUS
H2513	AGE-RELATED NUCLEAR CATARACT, BILATERAL
G894	CHRONIC PAIN SYNDROME
H903	SENSORINEURAL HEARING LOSS, BILATERAL
G43009	MIGRAINE WITHOUT AURA, NOT INTRACTABLE, WITHOUT STATUS MIGRAINOSUS
G5601	CARPAL TUNNEL SYNDROME, RIGHT UPPER LIMB
G35	MULTIPLE SCLEROSIS
G809	CEREBRAL PALSY, UNSPECIFIED
G629	POLYNEUROPATHY, UNSPECIFIED

Appendix C: MSHN Performance Measure Portfolio

Context

In order to support a comprehensive approach to performance measurement, Mid State Health Network (MSHN) is proposing a portfolio approach to ensure a well-balanced set of measurements aligned with the region's strategic aims. This summary identifies an initial set of measures for inclusion in this portfolio.

Criteria for Selection

The following criteria were used in selecting measures for use by MSHN. Measures were considered for inclusion if they were:

- Built with Existing Claims Data
- Nationally Standardized Measures
- Aligned with the Triple Aim
- Used in Multiple National Initiatives
- Aligned with the MSHN Strategic Plan

Measures

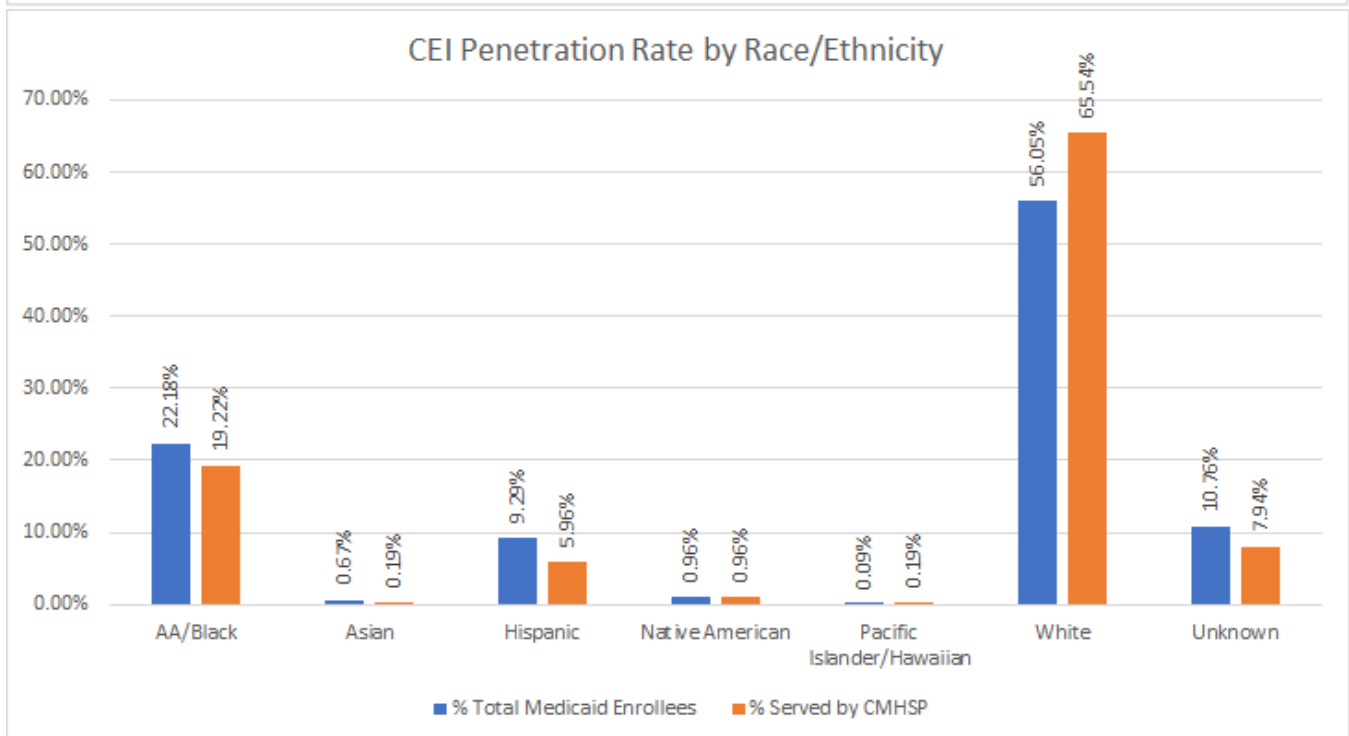
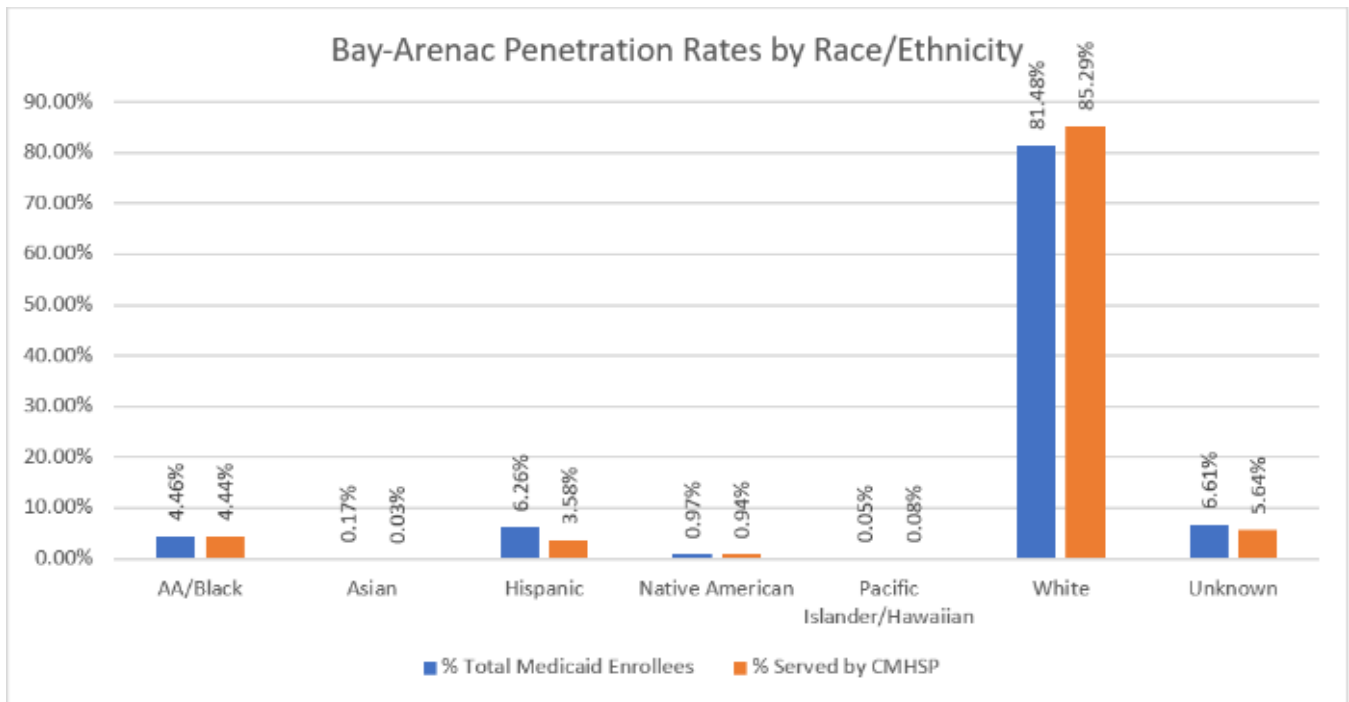
The following table summarizes the nine measures initially selected for the portfolio. These include five measures that are currently available for reporting and four new additions. Currently available measures are *shown in italics*:

Category	Measure Title	NQF #	Description
Screening and Monitoring for Common Comorbid Health Conditions	<i>Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)</i>	1932	Percent of adults with schizophrenia or bipolar disorder, taking certain anti-psychotic medications, who received a diabetes screening to identify metabolic side effects.
	<i>Cardiovascular Health Screening for People with Schizophrenia or Bipolar Disorder Who Are Prescribed Antipsychotic Medications</i>	1927	Percent of adults with schizophrenia or bipolar disorder, taking certain anti-psychotic medications, who received a screening to identify potential side effects on the cardiovascular system.
	<i>Diabetes Monitoring for People with Diabetes and Schizophrenia (SMD)</i>	1934	Percent of adults with schizophrenia and diabetes who had both a cholesterol and diabetes test.
Engaging Primary Care	<i>Children and Adolescents Access to Primary Care Practitioners</i>	N/A	Percent of children who had a visit with a primary care practitioner (PCP).

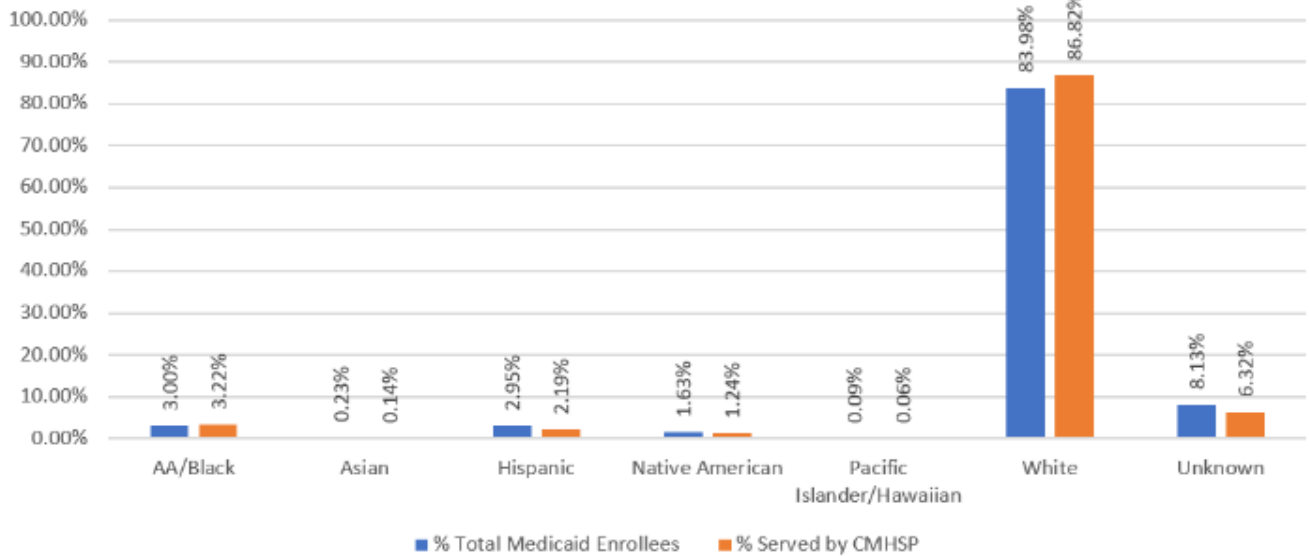
MSHN POPULATION HEALTH AND INTEGRATED CARE PLAN

	<i>Adult Access to Primary Care</i>	<i>N/A</i>	Percent of adults who had an ambulatory or preventive care visit.
Acute Care	<i>Follow Up After Hospitalization for Mental Illness</i>	<i>0576</i>	Percent of discharges from psychiatric hospitalizations with a timely follow-up outpatient visit to prevent readmission.
	<i>Plan All-Cause Readmissions (PCR)</i>	<i>1768</i>	Percent of acute inpatient stays that were followed by an unplanned readmission for any diagnosis within 30 days.
Alcohol Prevention & Intervention	<i>Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (IET)</i>	<i>0004</i>	Percent of patients with new episode of alcohol or other drug (AOD) dependence receiving timely substance abuse services and continuing engagement during initial visits.
Management of ADHD	<i>Follow-Up Care for Children Prescribed ADHD Medication (ADD)</i>	<i>108</i>	This measure reports the percentage of children newly prescribed ADHD medication who received at least three follow-up visits.

Appendix D: CMH Penetration Rate by Race/Ethnicity



CMH for Central Michigan Penetration Rates by Race/Ethnicity



Gratiot Penetration Rates by Race/Ethnicity

