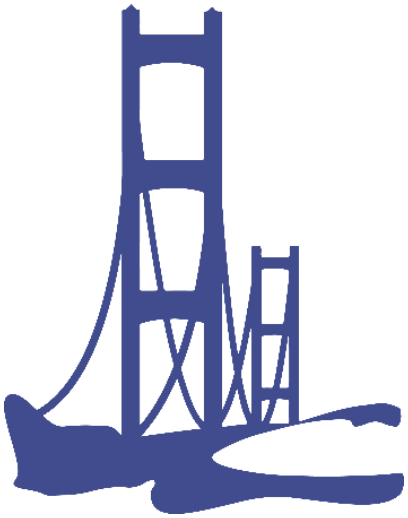
NorthCare Network

Demand and Capacity Report

FY18 Review and Analysis



Index

Introduction: NorthCare Network

Description

The Michigan Department of Health and Human Services (MDHHS) awarded NorthCare Network (NorthCare) the contract to serve as the Prepaid Inpatient Health Plan (PIHP) for all Upper Peninsula Medicaid recipients requiring specialty mental health services, or substance use services, and to provide services and support for persons with intellectual/developmental disabilities. The contract became effective October 1, 2002. The contract is updated and renewed annually. Specifically:

> *"The Michigan Department of Health & Human Services (MDHHS) hereby enters into a contract with the specialty Prepaid Inpatient Health Plan (PIHP)…. Under approval granted by the Centers for Medicare and Medicaid Services (CMS), MDHHS operates a Section 1915(b) Medicaid Managed Specialty Services and Support Program Waiver. Under this waiver, selected Medicaid state plan specialty services related to mental health and developmental disability services, as well as certain covered substance abuse services, have been "carved out" (removed) from Medicaid primary physical health care plans and arrangements. The 1915(b) Specialty Services Waiver Program operates in conjunction with Michigan's existing 1915(c) Habilitation Supports Waiver for persons with developmental disabilities. From the Healthy Michigan Amendment: In addition, CMS has approved an 1115 Demonstration project titled the Healthy Michigan Plan which provides health care coverage for adults who become eligible for Medicaid under section 1902(2) (10) (A)(i) (VIII) of the Social Security Act. Such arrangements have been designated as Concurrent 1915(b)/(c) Programs by CMS. In Michigan, the Concurrent 1915 (b)/(c) Programs and the Healthy Michigan Plan are managed on a shared risk basis by specialty Prepaid Inpatient Health Plans (PIHPs), selected through the Application for Participation (AFP) process. Further, under the approval of SAMHSA, MDHHS operates prevention and treatment program under the SUD Community Grant.*
>
> *The purpose of this contract is to obtain the services of the selected PIHP to manage the Concurrent 1915(b)/(c) Programs, the Healthy Michigan Plan and SUD Community Grant Programs, and relevant I Waivers in a designated services area and to provide a comprehensive array of specialty mental health and substance abuse services and supports as indicated in this contract." Medicaid Managed Specialty Supports and Services Concurrent 1915(b)/(c) Waiver Program FY 18 (October 1, 2017 through September 30, 2018)."*

On January 1, 2014 NorthCare Network PIHP was reconfigured as an independent regional entity under Section 1204(b) of the Michigan Mental Health Code. NorthCare is governed by a Board of Directors with representation from the regions five affiliate Community Mental Health Service Programs (CMHSPs), also referred to as Community Mental Health (CMH). In 2014 NorthCare Network earned URAC Health Plan Accreditation, demonstrating our commitment to quality performance in the management of specialty mental health services in all 15 counties of Michigan's Upper Peninsula.

NorthCare Network is responsible to assure a network of providers sufficient to provide access to all medically necessary services covered under the Specialty Services and Supports Contract between MDHHS and the PIHP. To maintain adequate capacity, NorthCare considers the following:

- The anticipated Medicaid enrollment.

- The expected utilization for services, considering Medicaid enrollee characteristics and health care needs.
- The numbers and types (in terms of training, experience, and specialization) of providers required to furnish the contracted Medicaid services.
- The number of network providers who are not accepting new patients.
- The geographic location of providers and Medicaid enrollees, considering distance, travel time, the means of transportation ordinarily used by enrollees, and whether the location provides physical access for persons with disabilities. The Upper Peninsula is held to the 60-mile rural rule for service availability.

Approach

The populations eligible to receive ongoing Medicaid services are defined by the Michigan Mental Health Code, the Michigan State Medicaid Provider Manual, the Medicaid Managed Specialty Supports and Services Contract, and the 1915(b)/(c) Waiver Program Master Contract. Specialty services provided by the CMHs are directed toward the following priority populations: youth with Serious Emotional Disturbances (SED); adults who have a Serious Mental Illness (SMI); individuals with Intellectual/ Developmental Disabilities (I/DD); and those individuals who experience Co-Occurring Disorders (COD) involving any of the above with a Substance Use Disorder (SUD). In addition, NorthCare also provides screening and referral services for individuals to access SUD residential treatment. These providers are outside the CMH system.

To guarantee NorthCare's ability to serve the above individuals, there are two contract provisions regarding administrative personnel and the provider network.

- **6.2 Administrative Personnel**
  The PIHP shall have sufficient administrative staff and organizational components to comply with the responsibilities reflected in this contract. The PIHP shall ensure that all staff has training, education, experience, licensing, or certification appropriate to their position and responsibilities.
- **7.0 Provider Network Services**
  The PIHP is responsible for maintaining and continually evaluating an effective provider network adequate to fulfill the obligations of this contract. The PIHP remains the accountable party for the Medicaid beneficiaries in its service area, regardless of the functions it has delegated to its provider networks.

Seven essential administrative functions facilitate meeting NorthCare's mission which is that: *NorthCare Network ensures that every eligible recipient receives quality specialty mental health and substance use disorder services and supports through the responsible management of regional resources.*

- Customer Services
- Provider Network Management
- Management Information Systems
- Financial Management
- Quality Assessment & Performance Improvement
- Service & Utilization Management
- Regulatory Management

NorthCare achieves these contract requirements and sufficient administrative capabilities through internal and regional committees. Regional committees are composed of staff from the affiliate CMHs, interested consumers and stakeholders, with PIHP staff as the committee lead. The five affiliate CMHs share

resources, experiences, and skills to drive performance improvement across the Region. The CMHs use a common electronic health record system and access screening center. They have consolidated certain other administrative functions such as: contracting with Gryphon, an after-hours telephone crisis response provider for all 15 counties and substance use disorder consumers, and a common software program, Great Plains, for financial management. Dial Help was used for crisis services for SUD providers. The Medicaid requirements are managed through contract, policy, and annual site reviews. The regional committees noted below provide the opportunity to continually explore further administrative efficiencies and review demand and capacity:

Performance Management Committee **(PMC)** is configured with CEO representation from the CMHs and the PIHP. This committee ensures the representation of local needs and focuses on performance improvement, compliance, service availability and accessibility, and consumer and stakeholder satisfaction. Each of the NorthCare administrative areas provides a monthly report and presentations as requested to the PMC. The PMC and Governance Board are instrumental in the pursuit of consolidation of authority and core PIHP functions while also promoting local service responsiveness.

Quality Improvement Committee is charged to engage consumers and staff in an accurate, data-driven region-wide process, resulting in quality and performance improvement, the achievement of standards, and the establishment of new standards. Its primary charge is to implement the Quality Assessment and Performance Improvement Plan (QAPIP). The committee works to establish a culture based on the continuous quality improvement model to develop and implement improvement processes and monitor their ongoing success. Data-driven reporting is used to ensure progress toward quality improvement and compliance. The committee recommends processes and practices for ensuring overall regulatory compliance and focuses on compliance in a proactive, preventative manner. The committee identifies, monitors, and controls risks associated with complex duties, obligations, rules, regulations, and requirements. The Quality Improvement Committee refers identified compliance issues to the NorthCare Network Leadership and/or Compliance Team as appropriate.

Clinical Practices Quality Improvement Committee and its subcommittees and workgroups (Jail Diversion, Autism Workgroup, and Regional Employment Leadership Team) are charged with ensuring the full array of services are provided according to best clinical practices by a qualified workforce that supports the recovery of the individuals and families served in accordance with the Michigan Mental Health Code, Michigan Medicaid Provider Manual and MDHHS Technical Requirements attached to the MDHHS/PIHP contract. The Committee moves forward through data-driven efforts to improve clinical services as new trends and needs emerge among the populations we serve. Other workgroups are developed as needed.

Utilization Management Committee and its workgroups (Regional Emergency Services and Inpatient Quality Improvement) are charged with monitoring utilization of clinical resources and providing supports that ensure services are used only for authorized purposes, are uniformly available to eligible persons, and are provided in an effective and efficient manner. NorthCare Network operates a centralized screening and access center to ensure uniform application of eligibility criteria while avoiding potential conflicts of interest in the determination of eligibility. Face-to-face assessments are conducted locally at the respective affiliate CMHs. Inpatient continued-stay reviews are also conducted by NorthCare Network staff to ensure consistent application of ongoing eligibility standards.

Provider Network Management Committee ensures adequate provider capacity throughout the NorthCare Network to meet current and anticipated demands for provision of services. The committee monitors

network capacity and establishes processes and practices for ensuring overall compliance of Network Providers. It provides final review and approval for network provider performance reviews and makes recommendation to the Credentialing Committee and Quality Oversight and Monitoring Committee as appropriate. This includes assisting the CFO in the development of RFI/RFPs as requested; credentialing of organizational providers in collaboration with HR, credentialing committee, and site review team(s); establishing best practices for efficient and effective management of network providers with a focus on common standards and reciprocity and assisting with the annual Demand and Capacity Report.

Finance Committee is charged with making recommendations on regional best practices for financial management that demonstrates our fiduciary responsibility as a "value purchaser".

Information Technology & Security Committee and its workgroups (Data and Analytics, Help Desk, Security Officers, Medical Records, and Regional ELMER Management) are charged to acquire and support systems which provide essential tools and data support to employees. The committee ensures information systems compliance with oversight agency requirements including HSAG, MDHHS and CMS/OCR.

Customer Services Committee and the Recovery Conference Workgroup are charged with oversight of regional consumer involvement activities. The committee ensures customer service functions delegated to affiliates are completed in a manner consistent with contract, regional, state, and federal mandates. This group reviews and provides input into applicable policies, printed materials, reports, performance indicators, and the consumer satisfaction survey process and results. It serves as a consumer advisory committee to the Quality Improvement Committee and Governance Board.

Methodology

To determine the ability for NorthCare to meet the anticipated demand, NorthCare analyzes data, looks at current trends, examines U.S. Census data, and reviews the World Health Organization facts. Both Medicaid and Healthy MI consumers are considered in this reports data. Healthy MI is a version of Medicaid available to those who do not qualify for regular Medicaid. MI Health Link, a combined Medicaid and Medicare program, will be denoted if the data is included. In addition to reviewing NorthCare data, such as the Mission-Based Performance Indicator System (MMBPIS), information is also received from the CMHs. The CMHs, comprised of:

- Copper Country Community Mental Health
- Gogebic County Community Mental Health
- Hiawatha Behavioral Health
- Northpointe Behavioral Health Services and
- Pathways Community Mental Health

have a significant role in assuring the capacity of the provider network by annually assessing the emerging needs in the counties they serve. Each year they are required to submit to MDHHS an "Annual Submission Report". There are five requirements for the submission:

- Estimated Full-time Equivalents (FTEs)
- Request for Service and Disposition of Requests
- Summary of Current Contracts for Mental Health Service Delivery
- Waiting List
- Needs Assessment

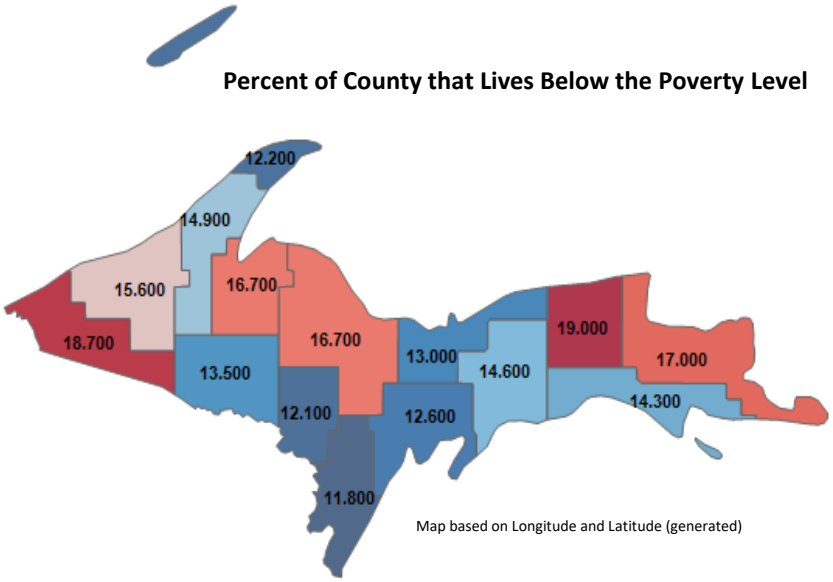
These reports help inform NorthCare of the demand and capacity across the region. This information also provides a framework to guide future service delivery efforts within the Upper Peninsula. In FY18, the CMH's annual submission report needs assessment identified the following needs:

- More local inpatient and outpatient programs
    - Increased access to mental health services
    - Increased access to psychiatric services
- Further mental health services for children 0-18 years old including early intervention and prevention
    - Addressing depression and anxiety in children
    - Reduce bullying in schools
    - Increase in parent training, education, and support groups for parenting skills
- Ability to provide services to mild/moderate populations
- Increased community education regarding CMH criteria
    - Community education regarding crisis and trauma services
    - Increase public awareness of all services/providers in area and referral process
- Additional local substance use providers
    - Increased education and understanding regarding substance use disorders
- Amplified community inclusion via supported employment, volunteering, or other activities
    - Increase in community partnerships
    - Increase consultation with primary care physicians
- A system for data driven decision making
- Identify how to bolster workforce maintenance and continued development
- Safe transportation and secure housing

Anticipated Medicaid Enrollment

Medicaid/ Healthy Michigan

In 2018, the federal poverty income level was $12,140 for an individual (see chart below). The poverty income levels are used to determine Medicaid eligibility. Income below 138% of the federal poverty level would qualify an individual for Healthy MI insurance. Poverty Solutions at the University of Michigan combined publicly available data from the US Census, United Way, Institute for Health Metrics and Evaluation, Community Health Indicators and the Robert Wood Johnson Foundation to compile state and region-wide poverty data.



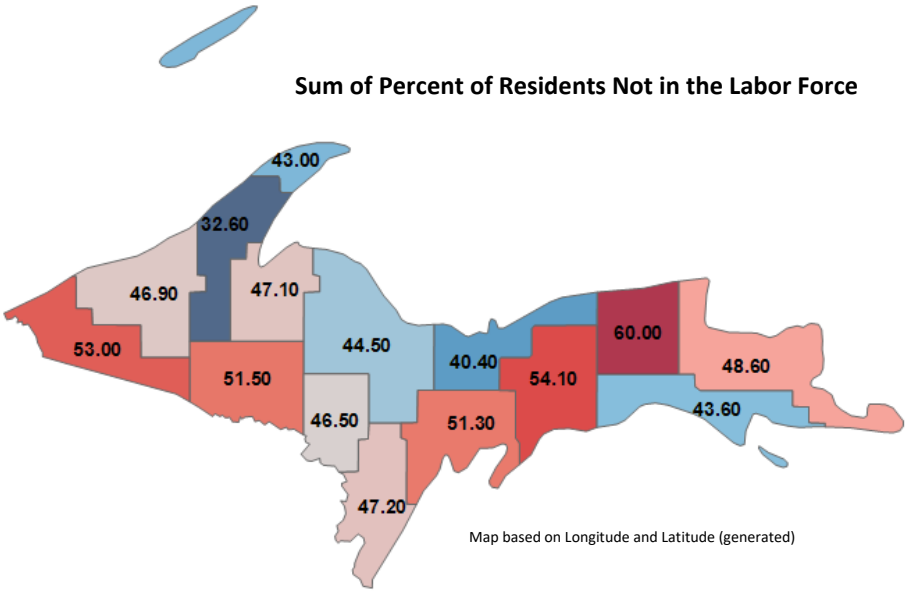
Statewide, 14% of Michigan individuals are below poverty. Alarmingly, 26.6% of Michigan households are working but unable to afford the necessities of housing, food, health care, child care, and transportation. In the Upper Peninsula, shown above, the percent of individuals/households below poverty ranges from 11.8 to 19% (U of M Poverty Solutions). Further, 29.9% of households are working but unable to afford the necessities.

The unemployment rate in the Upper Peninsula is higher than the statewide average. As of December 2018, the Michigan average unemployment rate was 4% according to the Bureau of Labor Statistics (BLS). Thirteen of the 15 Upper Peninsula counties had a higher unemployment rate than the state average (BLS). Only Dickinson county was below the state unemployment average.

Additionally, as shown in the map on the next page, Poverty Solutions at the University of Michigan indicates that an average of 50.27% of individuals in the Upper Peninsula are not in the labor force. Therefore, they would likely not be considered in the unemployment rate calculated by the Bureau of Labor Statistics. County unemployment numbers are shown in the table (right).

2018 Federal Poverty Level	
Family Size	Income in USD
1	12,140
2	16,460
3	20,780
4	25,100
5	29,420
6	33,740
7	38,060
8	42,380
*Source: HealthCare.gov	

BLS (Un)Employment Numbers, Averaged 2018				
County	Labor Force	Employed	Unemployed	Unemployment Rate (%)
Alger County, MI	3,243	2,989	254	7.8
Baraga County, MI	3,176	2,982	194	6.1
Chippewa County, MI	16,312	15,231	1,081	6.6
Delta County, MI	17,030	16,125	905	5.3
Dickinson County, MI	12,449	11,970	479	3.8
Gogebic County, MI	6,207	5,890	317	5.1
Houghton County, MI	16,179	15,355	824	5.1
Iron County, MI	5,147	4,860	287	5.6
Keweenaw County, MI	882	821	61	6.9
Luce County, MI	2,417	2,267	150	6.2
Mackinac County, MI	5,129	4,634	495	9.7
Marquette County, MI	32,422	30,839	1,583	4.9
Menominee County, MI	11,019	10,573	446	4.0
Ontonagon County, MI	2,110	1,945	165	7.8
Schoolcraft County, MI	3,387	3,145	242	7.1
*Source: Bureau of Labor Statistics				

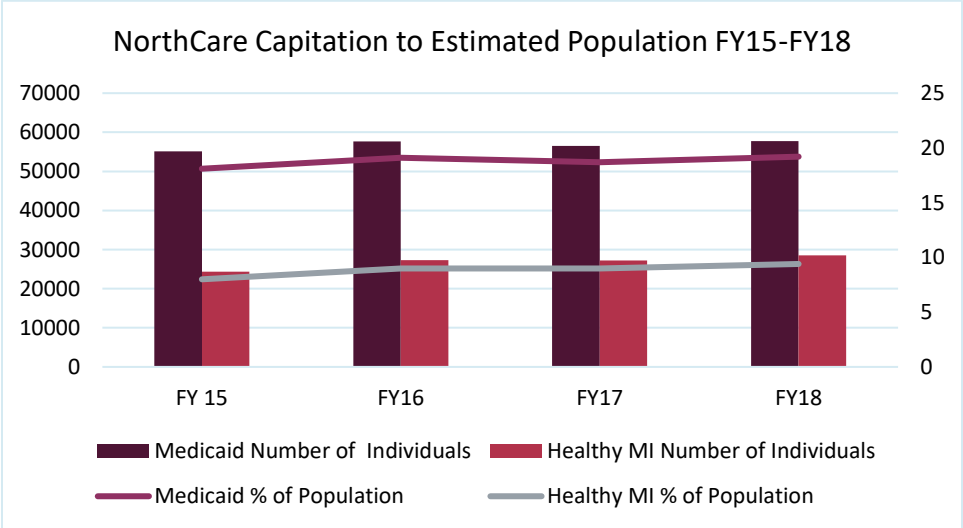


Percent of Residents with No Health Insurance	
Alger	9.2
Baraga	6.8
Chippewa	8.7
Delta	7.5
Dickinson	7.7
Gogebic	10.6
Houghton	8
Iron	8.2
Keweenaw	10.9
Luce	9
Mackinac	12.3
Marquette	4.5
Menominee	6.3
Ontonagon	13.2
Schoolcraft	8.1
Average	**8.7**

*Source: UofM Poverty; ACS

There are many reasons a person may not be in the labor force; including retired status, youth that are not of an age to work or who are students, homemakers, or those no longer seeking employment although they may be of a typical working age. Some of these individuals may be the same individuals who do not have insurance. Others that may not have insurance might be those who are self-employed and haven't purchased insurance. While it is a mandate to have health insurance, there is still approximately 8% of the population that does not have insurance coverage, as shown by individual county above (U of M Poverty Solutions). Ontonagon County has the highest percent of residents without health insurance, while Marquette has the lowest rate. It is possible that some of these individuals without insurance would be eligible for Medicaid.

The anticipated Medicaid enrollment in the Upper Peninsula over the past three years has been around 56,000 individuals; 18.75% of the total population as based on Census data. The Healthy MI enrollment has been around 27,000 individuals; 8.75% of the total population. In FY18, NorthCare capitation included 57,722 Medicaid individuals and 28,508 Healthy MI individuals out of a total UP population of 301,151; 19.2% and 9.0% respectively.



MHL

In FY15, MI Health Link (MHL) was started as a pilot project in 4 of the 10 PIHP regions. This insurance program is for adults who have Medicare and Medicaid insurances. MHL combines the Medicare and Medicaid insurances so individuals have one card. The goal of the program is to improve the quality of care for those individuals by having one plan and one card for primary health care, behavioral health care, home and community-based services, nursing home care and medications. Members have a care coordinator through Upper Peninsula Health Plan (UPHP), the Medicaid Health Plan in Region 1. The care coordinator helps to link and coordinate with providers serving the member, helps with scheduling appointments, arranges transportation, and assists in the development of the care plan. Members can enroll or disenroll at any time. Individuals who disenroll would revert to Medicare and Medicaid insurances. Monthly, newly eligible individuals are passively enrolled in the program by MDHHS.

Due to limited providers, individuals with MHL insurance that only have mild to moderate symptomology are eligible for limited service provision though the CMH system. Services provided are based on medical necessity; and therefore, are less intense and less frequent than what would typically be provided for someone that was seriously mentally ill. Additionally, inpatient psychiatric care is managed by the PIHP for individuals with MHL insurance rather than Medicare.

The number of consumers enrolled in MHL changes month to month, as the program allows individuals to enroll and disenroll at any time. The table below shows the number of MHL enrollees and numbers served, per month, in FY18.

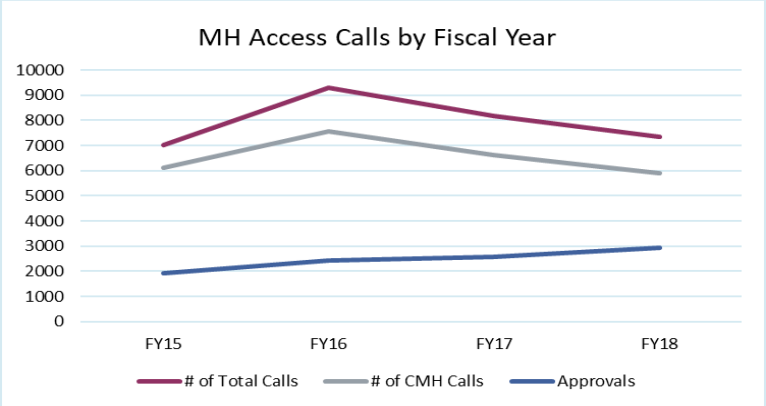
MHL Enrollees in the UP, Number Enrolled and Served												
	2017			2018								
	October	November	December	January	February	March	April	May	June	July	August	September
MHL Enrollees in UP	4285	4320	4301	4110	4280	4297	4247	4454	4383	4328	4266	4157
MHL Served	1111	1112	1130	1120	1083	1098	1103	1143	1147	1140	1147	1128

Expected Utilization of Services

Mental Health Access

NorthCare Network Mental Health Access Department had a total of 7359 calls in FY18; 5914 of which were affiliated with any CMH in the region. The other calls may have been general inquires or calls from out of the area. Of those calls affiliated with the CMH, 2937 resulted in an approval for an intake assessment at the CMH local office. There was a spike in calls in FY16, but since then, overall call volume to Access has consistently decreased. Scheduled appointments have continued to increase.

MH Access by FY			
Year	# of Total Calls	# of CMH Calls	Approvals
FY15	7021	6115	1942
FY16	9284	7577	2432
FY17	8190	6614	2587
FY18	7359	5914	2937
*FY17 Demand and Capacity Report numbers corrected			



Approximately 35-40% of the total number of individuals who walk in or call the CMH are scheduled by NorthCare Network Access Department for an assessment at the CMH. This percentage is heavily skewed low because these numbers are duplicated and because not everyone who walks in or calls the CMH is seeking ongoing CMH services.

Once approved by NorthCare Network Access Department, individuals are assessed face to face at the CMH to further determine eligibility for specialty mental health services. CMH's report, via the Annual Submission Report, the number of individuals found eligible for ongoing CMH services by category.

Approximately 75% of CMH assessments are determined to meet CMH criteria to enter CMH services. This ranges from 65% at Gogebic CMH to 92% at Pathways CMH.

CMH Request for Service and Disposition (duplicated count)					
	I/DD	**SMI**	**SED**	**Other**	**Total**
Number of people who telephoned or walked in					
Copper Country	38	253	97	611	999
Gogebic	9	148	80	481	718
Hiawatha	33	213	161	873	1280
Northpointe	41	456	237	972	1706
Pathways	76	799	397	2053	3325
Number of people scheduled for assessment					
Copper Country	38	212	96	0	346
Gogebic	9	130	77	0	216
Hiawatha	28	213	161	127	529
Northpointe	41	385	226	0	652
Pathways	76	702	384	0	1162
Number of people that met CMHSP criteria					
Copper Country	35	169	86	0	290
Gogebic	9	75	57	0	141
Hiawatha	24	126	120	79	349
Northpointe	35	252	171	0	458
Pathways	72	642	359	0	1073

Once consumers are determined eligible for CMH services, they are assigned to a level of care. The Level of Care categories provide a general description of symptom severity, functional capacity as measured by evidence-based assessment tools, and typically indicated supports needed to the consumer. Each level of care contains a preapproved package of services tailored to match the treatment needs generally associated with the symptom severity in each level of care. These are a guide and not intended to trump the person-centered planning process. Medical necessity determines what services a consumer is eligible for and the intensity of those services. The benefit plan associated with a level of care is a guide for initiating the planning process and allows for regional monitoring of eligibility determinations for over- and under- utilization of services. Clinical judgement allows the ability to offer services from a different level of care if the service is medically necessary.

The Level of Care guidelines were updated in January 2017 to include a section for the mild to moderate subset of MI Health Link consumers. While this is not reflected in the next table, it is an available level of care for that specific population. The mild to moderate Level of Care allows for limited services, generally less than a year and less than weekly service provision, for those demonstrating mild or moderate psychiatric symptoms or signs of sufficient intensity to cause subjective distress or mildly disordered behavior, with minor or temporary functional limitations or impairments, or for those who previously were considered to have a serious mental illness however symptoms of the former serious disorder have substantially moderated or remitted and prominent functional disabilities or impairments related to the condition have largely subsided for the past 12 months.

In FY19, the Levels of Care may change again to meet statewide parity standards. The parity standards hope to improve consistency across the state in service provision. The goal is to more accurately reflect and align the scores from evidenced-based tools with the assigned level of care and the service authorization allocated. For example, the Level of Care Utilization System (LOCUS) is an evidenced-based tool for

measuring the level of care an individual may need for someone who has a serious mental illness. This tool has 6 levels of care. While NorthCare also has 6 levels of care for SMI individuals, they do not match the LOCUS exactly. Future revisions will harmonize these three elements of service provision. All Level of Care determinations must comply with the integration mandate of the Americans with Disabilities Act, specifically that services be provided "in the most integrated setting appropriate to the needs of qualified individuals with disabilities." NorthCare has the following levels of care:

Levels of Care within the CMHSP System		
Adult with MI	Level 1: Brief Intervention and Supports Maintenance	Functional impairments in daily living skills, social/interpersonal functioning and/or educational/occupational role performance may be sporadically and temporarily evident but the individual has access to, and uses supports when needed
	Level 2: Community Support Services- Limited/Low Intensity Supports/Case Management	Psychiatric signs and symptoms are currently, or recently (within the past 12 months) evident and considered moderate in severity/intensity and stable. Clinical instability (risk of harm to self/others) is low.
	Level 3: Community Support Services- Moderate Intensity Supports/Case Management	Psychiatric signs and symptoms are currently, or recently (within the past 12 months) evident and considered moderate in severity/intensity. Risk of harm to self/others is moderate.
	Level 4: Community Support Services- High Intensity Supports/Case Management	Psychiatric signs and symptoms are currently, or recently (within the past 12 months) evident and considered severe and persistent. Risk of harm to self/others is considered moderate as evident in any of the following: current suicidal or homicidal ideation but without intent or plan, and without past history.
	Level 5: Assertive Community Treatment- ACT	Psychiatric signs and symptoms include acute and substantial disturbance of cognition, memory, mood/affect, perception and/or behavior due to severe emotional distress or mental illness. Symptom acuity does not pose an immediate risk of danger to self or others, but risk of harm would likely be substantial if intensive services are not available.
	Level 6: Specialized Residential/Special Contract AFC Services	Psychiatric signs and symptoms include prominent disturbance in cognition, perception, or affect and/or severely disordered/bizarre behavior sufficient to interfere with an individual's ability to carry out activities of daily living or impair ability to meet social/educational/vocational role performance expectations.
Adult with I/DD	Level 1: Limited Services- Basic Support	Meets criteria as an individual with an intellectual/developmental disability. Housing needs are met in the family home, General AFC, or independent housing.
	Level 2: Enhanced Support Services	Meets criteria as an individual with an intellectual/developmental disability. Individual has medical necessity for and desires to be involved in additional support and specialty services beyond basic supports. Housing, entitlements, natural supports and other coordination and linking needs may not otherwise be met without Supports Coordination.
	Level 3: Habilitation/Supports Waiver (HSW) Enrollee Services/Autism Benefit	Meets criteria as an individual with an intellectual/developmental disability. Residential needs are met via Specialized Residential contract group home, family home with CLS and/or Respite supports, semi-independent living arrangements with multiple weekly supports.
	Level 4: Specialized Residential and Support Services	Meets criteria as an individual with an intellectual/developmental disability. Residential needs are met via Specialized Residential contract group home with 24-hour awake staff. Risk of harm to self or others is minimized with this intensive level of support.
Children with I/DD, SED, and Co-occurring Disorders	Level 1: Limited Services- Basic Support	Natural supports are able to adequately provide for the child's basic needs without the need for professional supports.
	Level 2: Enhanced Support Services	Treatment goals focus on reduction/remission of presenting symptoms and/or improved level of functioning. There is minimal immediate risk of self-harm or harm to others with natural supports and professional in place.
	Level 3: Habilitation Supports (HSW)- Children's Waiver Program (CWP) Services/ Autism Benefit	Supports/services focus primarily on improved level of functioning (community inclusion and participation, independence, and/or productivity) however; reduction/remission of presenting symptoms may also be a focus of clinic services. There is no immediate risk of self-harm or harm to others with natural supports and professional in place.
	Level 4: Home-based/ Wraparound/ Intensive Residential and Support Services/ Autism Benefit	The child/family qualifies for home-based, specialized residential, MST or wrap-around services. Symptom severity does not pose immediate risk of harm but risk would be substantially greater if specialty supports were not in place.

While the previous chart indicates overall Levels of Care, the following table shows the actual services that CMH consumers received in FY18 and the number of unduplicated consumers who received that service. The color shows a heat map of the percentage of consumers receiving that service. Therefore, a service that is pink is more heavily utilized than a service that is blue. Some popular services are a result of the CMH system, including *mental health service plan development by non-physician*, also known as treatment planning. This informs overall treatment and is completed early in services for everyone entering CMH services. The highest utilized service in FY18 is *Assessment by Non-physician*, followed by *supports coordination,* which was the highest in FY17. Also, the percent difference between FY17 and FY18 is shown in the last column. Some services, such as *Infant Mental Health*, which have relatively small utilization had a large increase in utilization from last year. Some services had a decrease in utilization. Any services marked with NA were not an active service last fiscal year.

Number and Percent with Services Provided to Consumers, by Type, with Percent Change	**Unduplicated CMH Consumers FY18**	**% of Total Consumers**	**% Change FY17 to FY18**
Adaptive behavior treatment by protocol administered by technician each additional 30 minutes	82	1.10%	20.59%
Adaptive behavior treatment by protocol administered by technician first 30 minutes	82	1.10%	20.59%
Adaptive behavior treatment with protocol modification and clinical observation & direction administered by qualified professional first 30 minutes	80	1.07%	17.65%
Adaptive behavior treatment with protocol modification and clinical observation & direction administered qualified professional each additional 30 minutes	80	1.07%	17.65%
Assertive community treatment face-to-face per 15 minutes	223	2.99%	13.20%
Assessment - Developmental Testing	2	0.03%	0.00%
Assessment by Non-Physician; use ST for trauma assessment	2960	39.64%	82.83%
Behavior identification assessment includes interpretation of results and development of the behavioral plan of care.	66	0.88%	-5.71%
Behavioral Health Screening by non-physician	100	1.34%	-4.76%
Behavioral Health; Short-Term Residential; non-hospital resident treatment	17	0.23%	240.00%
Behavioral follow-up assessment (FBA) each additional 30 minutes	8	0.11%	-27.27%
Behavioral follow-up assessment (Functional Behavior Analysis/FBA)	8	0.11%	-27.27%
Body Position: changing and maintaining body position function limitation projected goal status at therapy episode outset	1	0.01%	NA
Body Position: changing and maintaining body position functional limitation at therapy episode outset	1	0.01%	NA
CLS - Comprehensive Community Support Services p/15 minutes	1072	14.36%	12.02%
CLS Per Day - Comprehensive community supports services p/diem in specialized residential and other settings	547	7.33%	0.00%
CLS/Supported Housing p/diem; non-licensed independent settings or own home per day	58	0.78%	-7.94%
Community-based Wrap-Around services, per diem (SEDW only)	5	0.07%	-16.67%
Comprehensive Multidisciplinary Evaluation; does not require face to face with beneficiary	77	1.03%	1.32%
Crisis Intervention Services p/15 minutes	2169	29.05%	31.14%
Dialectical Behavioral Therapy (DBT)	66	0.88%	-14.29%
Domiciliary/rest home, new pt. 3 of 3 key components, typically 60 min	1	0.01%	NA
Domiciliary/rest home; est pt. 2 of 3 key components, typically 15 min	20	0.27%	-37.50%

Drop-In center attendance; encounter	82	1.10%	30.16%
Durable medical equipment, miscellaneous	10	0.13%	11.11%
ECT	2	0.03%	0.00%
Evaluation of speech fluency, e.g. stuttering, cluttering	1	0.01%	0.00%
Evaluation of speech sound production	3	0.04%	-62.50%
Evaluation of speech sound production expanded	27	0.36%	35.00%
Exposure adaptive behavior treatment with protocol modification requiring two or more technicians for severe maladaptive behavior (s); each additional 30 minutes of technician's time, face to face with child.	4	0.05%	33.33%
Exposure adaptive behavior treatment with protocol modification requiring two or more technicians for severe maladaptive behavior (s); first 60 minutes of technician's time, face to face with child.	4	0.05%	33.33%
Family Psycho-education: family educational groups (either single or multi-family)	8	0.11%	-33.33%
Family Psychoeducation Joining	3	0.04%	-62.50%
Family Training & Family Parent Training as TFCBT	132	1.77%	40.43%
Family behavior treatment guidance administered by qualified professional. Untimed typically 60 - 75 min	54	0.72%	14.89%
Family or TFCBT therapy with consumer present	203	2.72%	22.29%
Family or TFCBT therapy without consumer present	141	1.89%	1.44%
Foster care, therapeutic, child, per diem (use for CCI) Licensed settings only. Report only for per diem bundled rate that does not include Medicaid-funded personal care and/or community living supports	1	0.01%	-50.00%
Group adaptive behavior treatment by protocol administered by technician additional 30 minutes	3	0.04%	50.00%
Group adaptive behavior treatment by protocol administered by technician first 30 minutes	3	0.04%	50.00%
Group therapy adult or child (other than of a multiple-family group)	145	1.94%	-1.36%
Home Based Services or Home-Based Trauma Focused TFCBT; Community psychiatric supportive treatment, face-to-face with child or family; p/15 minutes	340	4.55%	-4.76%
Home Care Training, Non-Family (Children's Waiver Service Only)	6	0.08%	-53.85%
Home Modifications, Per Service.	5	0.07%	25.00%
Home visit, est pt. 2 of 3 key components, typically 15 min	6	0.08%	-40.00%
Home visit, est pt. 2 of 3 key components, typically 25 min	6	0.08%	NA
Hospital Discharge Day	3	0.04%	0.00%
Individual Therapy Adult or Child or TFCBT Therapy 16-37 minutes	895	11.99%	12.58%
Individual Therapy Adult or Child or TFCBT Therapy 38-52 minutes	1144	15.32%	14.74%
Individual Therapy Adult or Child or TFCBT Therapy 53 + minutes	1535	20.56%	19.64%
Infant Mental Health; Approved MDHHS models only	46	0.62%	253.85%
Initial Nursing Facility care day; low complexity	1	0.01%	NA
Injection, Haloperidol Decanoate, Per 50 mg	1	0.01%	0.00%
Inpatient Hospitalization - All Inclusive Room & Board Plus Ancillaries	599	8.02%	21.50%
Intensive Crisis Stabilization Team Service	7	0.09%	NA
Medical nutrition therapy reassessment & intervention, individual, face-to-face with patient 15 minutes	38	0.51%	-17.39%
Medical nutrition therapy, initial assessment & intervention, individual face-to-face with the patient	72	0.96%	-7.69%
Medication Administration by injection	402	5.38%	14.86%

Medication training and support p/15 minutes	17	0.23%	-37.04%
Mental Health Clubhouse Services	92	1.23%	24.32%
Mental health service plan development by non-physician	2595	34.75%	11.76%
Miscellaneous Therapeutic Items & Supplies, NOC	167	2.24%	1.83%
Mobility: walking and moving around functional limitation; current status...	17	0.23%	NA
Mobility: walking and moving functional limitation, projected goal status.	16	0.21%	NA
Mobility: walking and moving functional limitations, discharge status	14	0.19%	NA
Neuro-psychological testing p/hr.	2	0.03%	0.00%
New patient office or outpatient (Certification exam)	2	0.03%	NA
Non-emergency transportation services; ancillary; parking fees, tolls, other	1	0.01%	0.00%
Non-Emergency Transportation; Patient Attendant/Escort	1	0.01%	-99.23%
Nursing Assessment	142	1.90%	9.23%
Nutritional Counseling, Dietician Visit	16	0.21%	6.67%
OT/PT Aquatic therapy individual per 15 minutes	1	0.01%	-50.00%
OT/PT Gait training (includes stair climbing) individual p/15 minutes	2	0.03%	0.00%
OT/PT Individual Sensory Integrative Techniques	6	0.08%	-40.00%
OT/PT Individual Therapeutic Activities p/15 minutes	15	0.20%	66.67%
OT/PT Manual Therapy Individual	5	0.07%	-16.67%
OT/PT Neuromuscular reeducation individual p/15 minutes	1	0.01%	NA
OT/PT Self-care home management training; individual p/15 minutes	6	0.08%	0.00%
OT/PT Strength ROM - Individual	3	0.04%	-62.50%
OT/PT Wheelchair Management/Propulsion Training	3	0.04%	-25.00%
OT/PT physical or manipulative therapy performed for maintenance rather than restoration	4	0.05%	0.00%
Occupational Therapy Evaluation - High Complexity - typically 60 minutes	27	0.36%	22.73%
Occupational Therapy Evaluation - Low Complexity - typically 30 minutes	67	0.90%	4.69%
Occupational Therapy Evaluation - Moderate Complexity - typically 45 minutes	67	0.90%	21.82%
Occupational Therapy Re-Evaluation - typically 30 minutes	82	1.10%	46.43%
Office outpatient/new; 3 key components face to face; 45 minutes	13	0.17%	225.00%
Office/outpatient/established; 10 minutes (Certification exam)	90	1.21%	-24.37%
Office/outpatient/established; 2 of 3 key components; 25 minutes	1719	23.02%	1.48%
Office/outpatient/established; 2 of 3 key components; 40 minutes	350	4.69%	4.79%
Office/outpatient/established; 5 minutes	19	0.25%	-77.65%
Office/outpatient/estb; 2 of 3 key components; 15 minutes	1966	26.33%	5.59%
Office/outpatient/new; 3 key components, face to face 60 minutes	98	1.31%	-18.33%
Office/outpatient/New; 3 key components 30 minutes face to face	9	0.12%	200.00%
Other PT/OT Functional Status, Current Status	3	0.04%	NA
Other SLP: functional limitation, current status, at therapy episode outset, and at reporting intervals	1	0.01%	NA
Other SLP: functional limitation, discharge status, at discharge from therapy or to end reporting	1	0.01%	NA
Other SLP: functional limitation, projected goal status, at therapy episode outset, at reporting intervals, at discharge or to end reporting	1	0.01%	NA
Out of Home Pre-Vocational (HSW Only)	9	0.12%	-10.00%

PASARR Level II	4	0.05%	NA
PERS Maintenance	2	0.03%	0.00%
PT/OT Other Functional Limitation, Discharge Status	3	0.04%	NA
PT/OT Other Functional Limitation, Projected Goal Status	3	0.04%	NA
PT/OT Self Care Functional Limitation, Discharge Status	13	0.17%	NA
Parent Education	21	0.28%	-27.59%
Partial Hospitalization	1	0.01%	NA
Patient Education, NOC, Non-Physician, Group	43	0.58%	4.88%
Patient Education, NOC, Non-Physician, Individual	6	0.08%	-50.00%
Peer specialist services provided by certified per specialist; p/15 minutes	255	3.42%	2.00%
Personal Care Per Diem	541	7.25%	-0.18%
Personal care item, NOS	5	0.07%	66.67%
Physical Therapy Evaluation - High Complexity - typically 45 minutes	9	0.12%	80.00%
Physical Therapy Evaluation - Moderate Complexity - typically 30 minutes	5	0.07%	NA
Physical Therapy Re-Evaluation - typically 20 minutes	3	0.04%	200.00%
Physician services provided in inpatient hospital care. Initial p/30 minutes	2	0.03%	-75.00%
Physician services provided in inpatient hospital care. Initial p/50 minutes	6	0.08%	50.00%
Physician services provided in inpatient hospital care. Subsequent care p/15 minutes	5	0.07%	-28.57%
Physician services provided in inpatient hospital care. Subsequent care p/25 minutes	7	0.09%	-22.22%
Physician services provided in inpatient hospital care. Subsequent care p/35 minutes	6	0.08%	100.00%
Private Duty Nursing, habilitation supports waiver (individual nurse only) 21 years and over ONLY (LPN)	3	0.04%	0.00%
Psychiatric Diagnostic Evaluation (no medical services)	174	2.33%	-16.35%
Psychiatric Diagnostic Evaluation (with medical services)	486	6.51%	14.89%
Psychological Testing by psychologist or physician p/hr.	55	0.74%	-26.67%
RN services, up to 15 minutes	181	2.42%	-9.95%
Recoding SALs of INACTIVE staff	6	0.08%	NA
Respite Care Services, day in an out of home setting	19	0.25%	-57.78%
Respite care p/15 minute	244	3.27%	-3.56%
S&L Treatment of function for swallowing; individual	1	0.01%	NA
SIS Assessment Denied by Consumer	7	0.09%	NA
Screening to Determine Appropriateness of Inpatient Hospitalization	935	12.52%	19.41%
Self-Care Functional Limitation, Current Status	13	0.17%	NA
Self-Care Functional Limitation, Projected Goal Status	13	0.17%	NA
Skill Building Assistance; use TT modifier when multiple consumers are served	548	7.34%	-15.17%
Specialized Medical Equipment, NOS	2	0.03%	-66.67%
Specialized Supply, NOS	19	0.25%	-26.92%
Specialized Wraparound Facilitation	43	0.58%	-15.69%
Speech Indirect/Documentation	1	0.01%	NA
Speech and Language Evaluation of oral & pharyngeal swallowing function	9	0.12%	28.57%
Speech and language therapy, individual	10	0.13%	25.00%

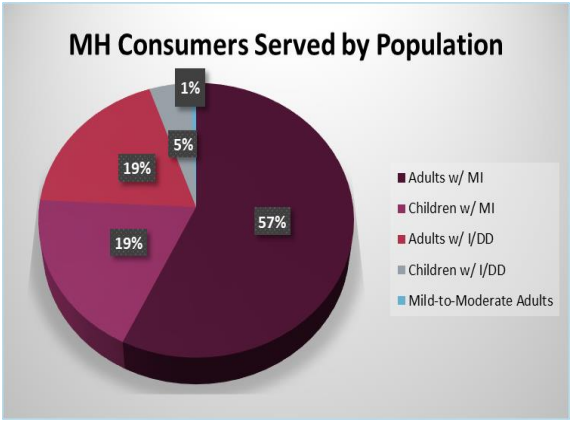
Spoken Language Expression: functional limitation, projected goal status, at therapy episode outset, at reporting intervals, at discharge or to end therapy	1	0.01%	NA
Spoken Language Comprehension: functional limitation, current status, at therapy episode outset, and at reporting intervals	1	0.01%	NA
Spoken Language Comprehension: functional limitation, projected goal status, at therapy episode outset, at reporting intervals, at discharge or to end reporting	1	0.01%	NA
Spoken Language Expression: functional limitation, current status at therapy episode outset, and at reporting intervals	1	0.01%	NA
Subsequent Nursing Facility care day; problem focused interval history	1	0.01%	NA
Subsequent Nursing Facility care day; comprehensive interval history	1	0.01%	NA
Subsequent Nursing Facility care day; detailed interval history	1	0.01%	NA
Subsequent Nursing Facility care day; expanded problem focused	3	0.04%	200.00%
Supplies NOS. Goods and Services	1	0.01%	NA
Supported Employment	245	3.28%	-8.24%
Supports Coordination	2809	37.62%	6.32%
Swallowing: functional limitation, current status, at therapy episode outset, and at reporting intervals	5	0.07%	NA
Swallowing: functional limitations, projected goal status at therapy episode outset, at reporting intervals, at discharge or to end reporting	5	0.07%	NA
Targeted Case Management	881	11.80%	8.63%
Targeted Case Management Services - Child Waiver only.	15	0.20%	-11.76%
Telehealth Originating Site Fee	1712	22.93%	18.23%
Therapeutic Camping, Day	16	0.21%	77.78%
Therapeutic Camping, Overnight	23	0.31%	-8.00%
Vehicle Modifications	2	0.03%	NA
Waiver Service NOS	143	1.92%	10.85%

Categorically, service provision is broken down by population type and by age. While each consumer is different and may have a different level of care or different services authorized, generally each person fits into an overall grouping. Individuals may be classified as adults with serious mental illness, children with serious emotional disturbance, adults with intellectual and/or developmental disability, and children with intellectual and/or developmental disability. Also, any of those categories may also be co-occurring with substance use disorders or have medical conditions that may factor into the illness. For those that have the MI Health Link insurance program, there is also the mild-to-moderate adult category. The following tables and graph show the utilization of each category in FY18.

Consumers Served by Population	Adults w/ MI	Children w/ MI	Adults w/ I/DD	Children w/ I/DD	Mild-to-Moderate Adults
Copper Country	525	114	197	31	9
Gogebic	259	80	99	26	3
Hiawatha	651	248	217	55	7
Northpointe	817	291	268	91	2
Pathways	1595	514	472	105	19
NorthCare (unduplicated)	3732	1231	1238	305	40

Diver / FY18 Service Model / Medicaid = 'Y' / Service Reportable = 'Y' / Population (group by broad level) / AffiliateName

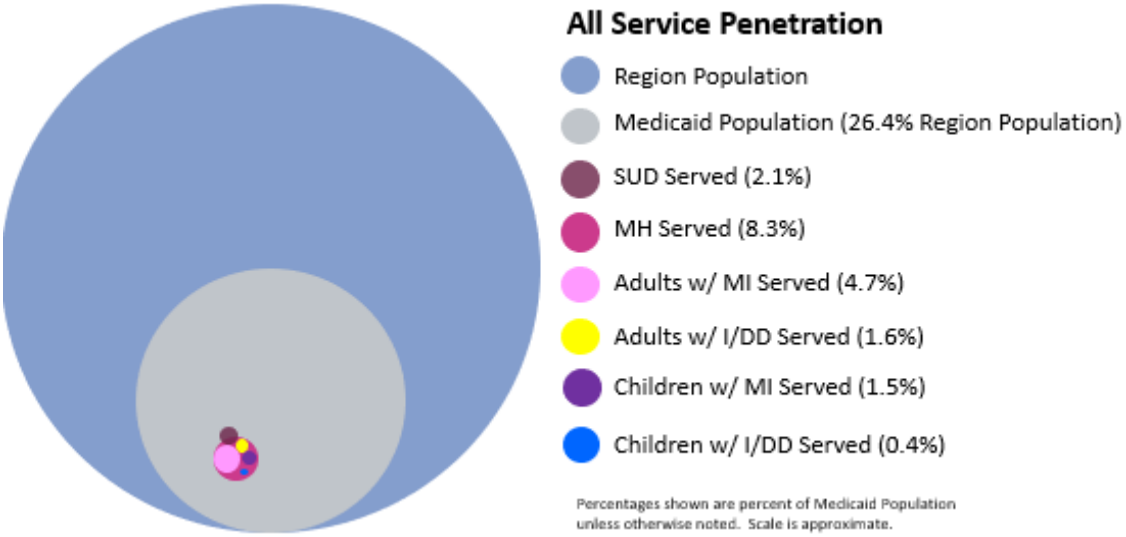
(MMD defined as consumer who had a Level of Care of Mild to Moderate at the end of the Fiscal Year, had Medicaid any time during the fiscal year, and had a reportable service any time during the fiscal year



Consumers Served by Age							
Population	Age 3 & Under	4-5 Years of Age	6-17 Years of Age	18-21 Years of Age	22-64 Years of Age	65+ Years of Age	Total Consumers
I/DD	23	33	249	141	950	151	1547
MI	59	85	1087	413	3107	208	4959
MMD	0	0	0	0	32	8	40
MH Totals	82	118	1336	554	4089	367	6546
SUD Totals	0	0	39	88	1548	0	1675
CMH Source: Diver / FY18 Service Model / Medicaid = Y / Service Rpeortable = Y / Population							
SUD: Source: SQL Query - Consumers with a NC SUD Encounter any time in the FY who were also Medicaid eligible any time during the FY							

Each CMH provides information about numbers of consumers on waiting lists in the annual submission report. While Medicaid consumers cannot be placed on waiting lists, the fact that there are waiting lists shows that demand exceeds capacity for certain services in certain areas. Copper Country is the only CMH that listed a wait for consumers to receive clinic services such as case management. There were 13 people on the waiting list.

The SAMHSA Center for Behavioral Health National Survey on Drug Use and Health from 2014-2016 indicates an average rate of 4.59-5.05% of adults age 18+ in the Upper Peninsula had a serious mental illness in the past year and that 16-18% have any mental illness in the past year, and 16-18% received mental health services in the past year. While this data is a couple of years old, there is nothing to indicate these numbers would no longer be accurate. The Venn Diagram below shows FY18 service penetration for the region.



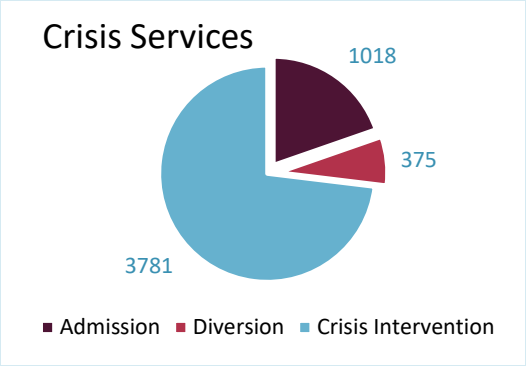
Some services are provided by contracted providers, including inpatient psychiatric services, residential services and supported employment services. Other services such as mobile intensive crisis stabilization for children and veteran services involve populations of interest that may impact future demand for services and therefore are further discussed below.

Psychiatric Services

Inpatient/ Crisis Services

NorthCare must ensure access to crisis services for all citizens of the Upper Peninsula in accordance with the regulations outlined in the Michigan Mental Health Code. Crisis intervention services are available in each county for all individuals in that county. Screening for inpatient psychiatric hospitalization services are

available for Medicaid consumers through CMH emergency services staff in each county. Admission into the psychiatric unit for Medicaid consumers is authorized by the Emergency Services (ES) staff for 24 hours. Following admission, NorthCare Utilization Management completes continuing stay reviews for verification of additional authorization. Reviews are completed for all primary Medicaid (including Healthy MI) and MI Health Link consumers.



Count of Preadmission Screenings by Disposition		
Affiliate	Disposition	Total
Copper Country CMH	Diversion	33
	Hospital Admission	102
Copper Country CMH Total		133
Gogebic CMH	Diversion	44
	Hospital Admission	64
Gogebic CMH Total		107
Hiawatha Behavioral Health	Diversion	56
	Hospital Admission	221
Hiawatha Behavioral Health Total		277
Northpointe BHS	Diversion	52
	Hospital Admission	149
Northpointe BHS Total		201
Pathways CMH	Diversion	190
	Hospital Admission	452
Pathways CMH Total		669
Grand Total		**1393**

In FY18, there were 1393 Preadmission Screenings for inpatient psychiatric services for all insurance types including no insurance/ General Fund. There were 3781 crisis intervention encounters. Crisis intervention notes are used for consumers who are in crisis but are not interested in, nor need, hospitalization. All individuals living in the Upper Peninsula are ensured crisis intervention services. Preadmission screenings are completed with those individuals who want, or may need, to be hospitalized on a psychiatric unit. NorthPointe Behavioral Health and Gogebic Co. CMH enter preadmission screenings for all individuals regardless of insurance. Hiawatha Behavioral Health, Pathways CMH, and Copper Country CMH's complete preadmission screenings for individuals with Medicaid, regardless if Medicaid is the only payor or a secondary payor. The ER's in these catchment areas have alternative arrangements for screening individuals with only private insurance which is allowed via the Michigan Mental Health Code as no state, county, or community mental health funds are being utilized. However, if a private insurance individual does come to the agency in crisis they are not denied crisis services based on insurance in accordance with the MI Mental Health Code 330.1208 (4).

Of the preadmission screenings completed, 1018 resulted in inpatient psychiatric admission and 375 were diverted. Admissions to crisis residential (12) are counted as an inpatient diversion. Of the 1018 admissions to inpatient psychiatric care, 92 admissions were covered as MHL insurance. At the time of the screening 160 admissions had no Medicaid insurance, although it is possible that some of these admissions may have received retrospective Medicaid.

In FY18 there were 704 encounters reported across 26 hospitals, excluding MHL. Encounters would include any inpatient admission that utilized Medicaid dollars, including through coordination of benefits. There were 107 single case agreements with non-contracted hospitals.

For some residents, the closest inpatient psychiatric program is over 100 miles away, and distances increase significantly for children. There continues to be no youth psychiatric beds in the Upper Peninsula since Upper Peninsula Health Systems-Marquette closed its adolescent unit in July 2016. In FY18,

Hospital Admissions FY18	**Encounters**
Alpena Regional Medical Center	9
BCA Stonecrest Center	6
Bellin	8
DLP Marquette General Hospital, LLC	260
Forest View	23
Harbor Oaks Hospital	12
Havenwyck Hospital	12
Healthsource Saginaw (White Pine)	17
MidMichigan Medical Center - Gratiot	5
Pine Rest Christian	49
St. Mary's Health Care	6
St. Mary's Hospital	40
War Memorial Hospital	191
Willow Creek Behavioral Health	43
Other Facilities	23
Total Admissions	704

Source: SQL query of Electronic Health Record Data

NorthCare added contracts with 2 more hospitals for a total of 5 hospitals; Forestview, Stonecrest, Upper Peninsula Health Systems-Marquette, War Memorial Hospital, and Pine Rest. Contract negotiations with Willow Creek hospital also began. A contract with Bay Haven Crisis Residential was also signed in July 2018.

Bay Haven Crisis Residential is a 6-bed unit for consumers who meet the inpatient level of care, however are voluntary and willing to go to the unlocked crisis residential unit. Medicare does not pay for this service, so any MHL consumers are considered Medicaid. There were twelve admissions, 3 of which were MHL, at Bay Haven Crisis Residential in FY18, with an average length of stay of 5 days.

Recidivism and 7-day follow up are two performance indicators associated with inpatient hospitalization. Recidivism measures readmission of a consumer to a hospital psychiatric unit within 30 days of discharge from a previous psychiatric unit. Seven day follow up measures the percent of consumers who are scheduled to follow up with the local CMH provider within 7 days of discharge. NorthCare was within the standards for all quarters in FY18 for adult 7-day follow up; however, struggled for youth 7-day follow up. Recidivism was a problem for individual CMHs in two quarters for adults and in every quarter for children. In one quarter the region was out of compliance for children. Corrective Action Plans are completed through NorthCare's Quality Improvement team when CMH's are out of compliance for two quarters in a row.

The percent of children and adults readmitted to an inpatient psychiatric unit w/in 30 days of discharge.

Standard is 15% or less w/in 30 days

FY18	Quarter 1						Quarter 2						Quarter 3						Quarter 4					
	NC	CC	GO	HBH	NP	PW	NC	CC	GO	HBH	NP	PW	NC	CC	GO	HBH	NP	PW	NC	CC	GO	HBH	NP	PW
Children																								
# of Discharges	19	1	2	3	3	10	17	1	2	5	4	5	26	1	3	9	2	11	13	0	0	4	3	6
# of D/C Exceptions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# readmitted w/in 30days	1	0	0	0	1	0	3	0	0	1	1	1	2	1	0	1	0	0	1	0	0	0	1	0
% readmitted w/in 30days	5%	0%	0%	0%	33%	0%	18%	0%	0%	20%	25%	20%	8%	100%	0%	11%	0%	0%	8%	0%	0%	0%	33%	0%
Total per spreadsheet	5	0	0	0	33	0	18	0	0	20	25	20	8	100	0	11	0	0	8	-	-	0	33	0
Adults																								
# of Discharges	85	10	2	17	11	45	82	14	1	18	11	38	72	12	4	10	15	31	88	12	11	18	15	32
# of D/C Exceptions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# readmitted w/in 30days	4	0	0	0	0	4	4	0	0	0	2	2	2	0	0	1	1	0	9	0	1	3	2	3
% readmitted w/in 30days	5%	0%	0%	0%	0%	9%	5%	0%	0%	0%	18%	5%	3%	0%	0%	10%	7%	0%	10%	0%	9%	17%	13%	9%
Total per spreadsheet	5	0	0	0	0	9	5	0	0	0	18	5	3	0	0	10	7	0	10	0	9	17	13	9

Key: NC= NorthCare, CC= Copper Country CMH, GO= Gogebic Co. CMH, HBH= Hiawatha Behavioral Health, NP= Northpointe Behavioral Health, PW= Pathways CMH

The percent of discharges from a psychiatric inpatient unit who are seen for follow-up care within 7 days

State Standard is 95%

FY18	Quarter 1						Quarter 2						Quarter 3						Quarter 4					
	NC	CC	GO	HBH	NP	PW	NC	CC	GO	HBH	NP	PW	NC	CC	GO	HBH	NP	PW	NC	CC	GO	HBH	NP	PW
Children - MH/DD																								
# Discharges	19	1	2	3	3	10	17	1	2	5	4	5	26	1	3	9	2	11	13	0	0	4	3	6
# D/C Exceptions	5	1	0	1	0	3	7	0	0	3	1	3	4	0	1	1	0	2	5	0	0	2	1	2
# D/C F/U wi/in 7 days	14	0	2	2	3	7	10	1	2	2	3	2	22	1	2	8	2	9	8	0	0	2	2	4
% Seen w/in 7days	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%	100%	100%	100%
Total per spreadsheet	100	-	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	-	-	100	100	100
Adults - MH/DD																								
# Discharges	81	10	2	17	9	43	81	14	1	17	11	38	68	9	4	10	14	31	85	12	11	16	14	32
# D/C Exceptions	31	3	1	8	3	16	23	2	0	6	1	14	21	5	1	3	4	8	19	5	3	4	1	6
# D/C F/U wi/in 7 days	47	6	1	8	6	26	57	12	1	11	10	23	41	4	2	6	9	20	64	6	7	12	13	26
% Seen w/in 7days	94%	86%	100%	89%	100%	96%	98%	100%	100%	100%	100%	96%	87%	100%	67%	86%	90%	87%	97%	86%	88%	100%	100%	100%
Total per spreadsheet	94	86	100	89	100	96	98	100	100	100	100	96	87	100	67	86	90	87	97	86	88	100	100	100

Key: NC= NorthCare, CC= Copper Country CMH, GO= Gogebic Co. CMH, HBH= Hiawatha Behavioral Health, NP= Northpointe Behavioral Health, PW= Pathways CMH

Outpatient Services

After hospitalization or at any other time where medication training and support may be useful, CMH's can offer medication education to consumers by a nurse or physician's assistant. Seventeen consumers had this service (H0034) in FY18.

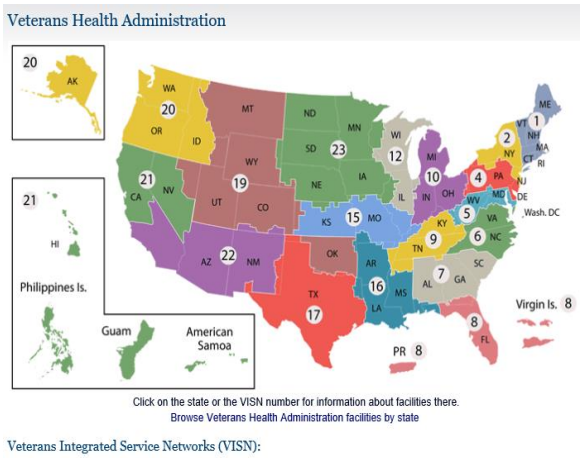
For individuals outside of the CMH system, psychiatry can be difficult to find. Many providers have resorted to telehealth. The Upper Peninsula Health Plan (UPHP) lists 31 psychiatry providers within their network of

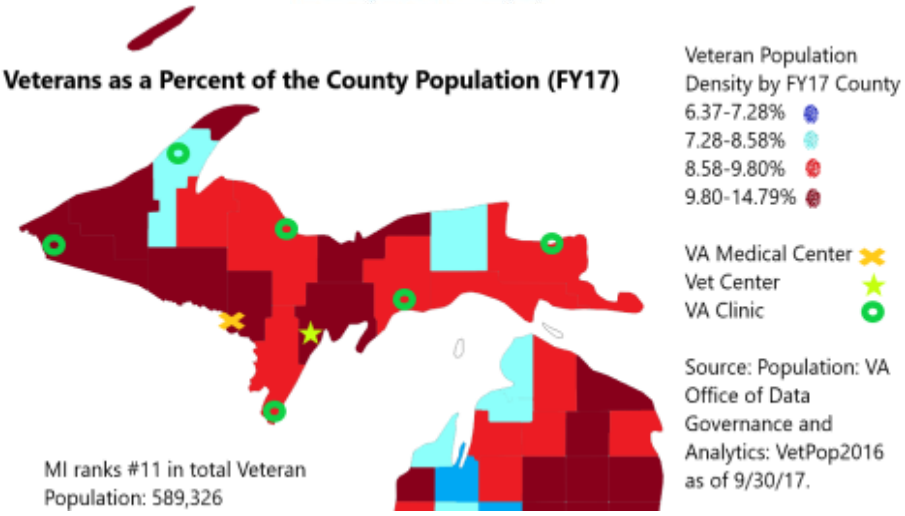
Medicaid and Healthy MI providers. Some of these providers serve multiple counties or work in multiple locations, including the CMH. Four counties; Alger, Luce, Keweenaw, and Ontonagon have no psychiatry providers listed. When removing the CMH's as providers; there are only 24 psychiatry providers in network.

Lack of outpatient psychiatry is a major barrier. Some individual's medication needs are never addressed due to the inexperience of the primary care doctor, inadequately managed, or abruptly stopped with prescribing changes or changes in prescriber. In August 2018, Pathways CMH partnered with the University of Michigan to offer the MC3 program. This program supports local primary care providers who treat children, adolescents, and young adults through age 26 with mental health issues. It also covers women contemplating pregnancy, pregnant, or postpartum women with children for up to a year. Same day telephone consultation is available of symptoms with no personal health information identified to ensure confidentiality remains protected. This service will hopefully assist primary care providers in feeling more comfortable providing psychiatric medications to consumers they serve.

Veterans Services

The Upper Peninsula is part of the Veteran Health Administration's Region 12 Veteran Integrated Service Network (VISN), which is connected to WI and part of Illinois. This means that VA-eligible veterans in the UP are "in network" when they receive inpatient/residential mental health and substance use disorder services in WI. These services and facilities do not currently exist within the UP. VA hospital staff can also refer veterans downstate if there are hospital beds there. According to the Veterans Administration, there are 4.7 million veterans living in rural areas throughout the country. The VA reports that 18% of rural veterans have at least one service connected condition, 6% are women, and 52% earn less than $35,000 annually. Michigan ranks 11th in the total veteran population, with 586,326 veterans as of 9/30/17. The highest concentration of those veterans is in the Upper Peninsula, although the majority of VA treatment centers are downstate where the veteran population density is lowest.





Michigan has 6 inpatient care sites, 29 outpatient, and 8 vet centers. Six clinics, 1 vet center, and 1 hospital are in the UP. In the past year, Chippewa Co. has had an increase in the number of veterans living in that county.

As the VA typically only pays for inpatient psychiatric care in their own facilities, Veterans either have a great distance to travel to receive inpatient psychiatric care, or, if hospitalized locally, Medicaid dollars are used for the inpatient stay if the veteran also has Medicaid.

According to the VA National Suicide Data Report 2005-2016 (September 2018), suicide is the 10th leading cause of death and the suicide rate is 1.5 times greater for veterans in comparison to non-veteran adults. Veterans age 18-34 suicide rate significantly increased; 45 per 100,000, however, 58% of Veteran suicides were of Veterans over age 55 (Dept. of Veterans Affairs). The Veteran suicide rate in Michigan is comparable to the national average with 159 suicide deaths in 2016 (Dept. of Veteran Affairs).

Michigan, Mid-West, and National Veteran Suicide Data, 2016

Age Group	MI Veteran Suicides	MI Total Suicides	National Veteran Suicides	National Total Suicides	MI Veteran Suicide Rate	MI Suicide Rate	National Veteran Suicide Rate	National Suicide Rate
Total	159	1307	6079	43427	26.2	16.9	30.1	17.5
18-34	20	361	893	11997	44.4	16.2	45.0	16.1
35-54	46	468	1648	15467	33.3	18.7	33.1	18.6
55-74	65	369	2259	12162	23.0	15.8	25.9	17.3
75+	28	109	1274	3801	19.4	16.3	28.3	18.5

Source: US Department of Veteran Affairs

NorthCare has had a Veteran Navigator since September 13, 2017. Veteran Navigators meet monthly with the state and are developing more consistent relationships with providers, including those in the VA system to more readily access services for Veterans and their families. The Department is in year two of the three-year strategic plan and already have exceeded expectations in identifying and reaching out to Veterans not accessing behavioral health services. During FY18, NorthCare Veteran Navigator contacted 34 new Veterans, all of whom were male and retired or their service term had expired. A total of 39 referrals were made to agencies such as community mental health, SUD providers, hospital/medical providers, the regional Veteran's Community Action Team (VCAT), and other community resources. Referrals have increased throughout FY18, both direct and indirect, for Veterans, Military and Families seeking services. Involvement in the VCAT and other service organizations continues to increase. NorthCare Veteran Navigator is working on an in-reach program for incarcerated Veterans. Training opportunities across the Upper Peninsula have increased in the areas of behavioral health and suicide prevention.

Residential Services

AFC Homes

According to the Annual Submission Report, there are a total of 1462 licensed Adult Foster Care (AFC) beds in the Upper Peninsula. Residential homes may be operated by the CMH or subcontracted to a private provider. There are also consumers placed in homes downstate. The CMHs have developed and monitored placements for individuals who have resided in lower Michigan in FY18 (some for many years). Individuals live in placements in lower Michigan for a variety of reasons, including: challenging behaviors, training programs not available in the Upper Peninsula, insufficient bed capacity in the Upper Peninsula, and self-determined choice by the individual in placement. If possible, it is the goal to have UP consumers live in the UP.

Number of Licensed AFC Beds in Catchment Area	
Copper	146
Gogebic	76
Hiawatha	363
Northpointe	144
Pathways	733

Annual Submission Report

Adults Living in AFC Setting	
Copper	104
Gogebic	45
Hiawatha	127
Northpointe	121
Pathways	267
Totals	649

In FY 18, there were 748 consumers living in residential settings, including children. There were 649 adults living in AFC homes. Pathways is the only CMH

who reported a waiting list for Residential Living Services in FY18. There are 11 SMI and 16 I/DD adults awaiting supports for Residential Living.

Finding placement for consumers at times can be difficult due to the lack of available resources. This is especially true for consumers with complex needs. To ensure consumers rights and quality of life are protected, and to follow the Olmstead Act, MDHHS implemented Home and Community Based Services (HCBS).

HCBS

On March 17, 2014 the Center for Medicare and Medicaid (CMS) published a new set of rules for delivery of Home and Community Based Services (HCBS). An HCBS chapter was added to the Medicaid Provider Manual on January 1, 2018. Through these rules, the Centers for Medicare and Medicaid Services aim to improve the experience of individuals in these programs by enhancing access to the community, promoting the delivery of services in more integrated settings, and expanding the use of person-centered planning.

Michigan implemented the new rule in phases, starting with individuals who have Habilitative Supports Waiver (HSW) services in FY18. Providers completed Corrective Action Plans (CAPs) to come into compliance with HCBS rules. The table on the next page represents statewide compliance with the rule for HSW consumers as of September 15, 2018 for both residential and non-residential. Non-residential services would include skill building and supported employment. MDHHS plans to start CAPs for B3 consumers in FY19 and to obtain complete compliance with these new regulations by March 17, 2022.

While the goal of HCBS is to improve the quality of care for consumers, there is a very real and negative potential effect of the HCBS transition plan. For homes that cannot come into compliance with the rules of HCBS, Medicaid dollars will not be able to be used in those homes. As the MDHHS plan states,

> "When MDHHS receives notification that a provider does not intend to comply with the Rule, the region's PIHP will be notified. The PIHP will notify the CMHSP and supports coordinator working with the individual. Person Centered planning will begin with the individual, and his or her supports to develop a transition plan. The purpose of these planning sessions will be to identify the goals and wishes of the individual and identify settings and providers that are consistent with these goals and wishes. The PIHP will have a minimum of six months to develop and implement the transition plan with the individual. All individuals who wish to receive HCBS funding for their services must be receiving services from HCBS compliant providers no later than March 17, 2022…".

As there are already a lack of available specialty AFC beds, this is of extreme concern. Unless consumers have funds to pay for services themselves, HCBS non-compliance will result in the relocation of consumers, closure of provider AFC homes, and potential displacement and homelessness for consumers. Luckily, no providers in our region have indicated an unwillingness to compile with the new rules.

As the table on the following page shows, NorthCares percentage of completed Corrective Action Plans (CAPs) exceeds much of the rest of the state. NorthCare continues to work with CMHs and network providers to increase compliance with HCBS rules for all populations.

Statewide HCBS Data as of 9.15.18							
Region	**Month**	**Type of setting**	**# of CAPs required**	**CAPs not started**	**CAPs in progress**	**CAPs completed**	**% of CAPs completed**
1	**OCT**	**Residential**	**80**	**0**	**7**	**73**	**91%**
		Non-Residential	**30**	**0**	**0**	**30**	**100%**
2	OCT	Residential	116	4	30	82	71%
		Non-Residential	85	0	15	70	82%
3	OCT	Residential	149	0	41	108	72%
		Non-Residential	3	0	0	3	100%
4	OCT	Residential	225	10	waiting for provider	215	96%
		Non-Residential	37	0	0	37	100%
5	OCT	Residential	253	0	162	91	36%
		Non-Residential	180	0	88	92	51%
6	OCT	Residential	95	0	57	38	40%
		Non-Residential	134	0	79	55	41%
7	OCT	Residential	254	132	66	41	16%
		Non-Residential	401	77	158	132	33%
8	OCT	Residential	250	15	176	27	11%
		Non-Residential	503	0	383	49	10%
9	OCT	Residential	193	107	164	15	8%
		Non-Residential	253	2	313	226	89%
10	OCT	Residential	173	0	173	76	44%
		Non-Residential	290	0	290	156	54%
Statewide Total	OCT	Residential					**43%**
		Non-Residential					**44%**

Employment Services

Below is the utilization of skill building and supported employment in FY18 for Medicaid (pink) and Healthy MI (blue) consumers. Current contracted providers for these services include: Lakestate Industries, Goodwill, Trico, Highline, and Northern Transitions. Skill Building and Supported Employment are important services to bolster consumer independence, increase capacity, provide meaningful activity, and potentially lead consumers to financial independence. Northpointe Behavioral Health Services has heavily utilized both Skill Building and Supported Employment services in FY18.

H2014: Skill Building Utilization FY18 MEDICAID					
	Unique Cases Served	EPSDT Services Units (<21)	B3 Services	HSW Services	Total Medicaid Units
NorthCare	486	22522	636611	0	659133
CCCMH	76	645	120455	0	121100
Gogebic	37	514	90818	0	91332
HBH	29	0	27883	0	27883
Northpointe	200	21154	214691	0	235845
Pathways	145	209	182764	0	182973

H2014 HK: Skill Building Utilization FY18 (HAB Support) MEDICAID					
	Unique Cases Served	EPSDT Services Units (<21)	B3 Services	HSW Services	Total Medicaid Units
NorthCare	55	0	0	132034	132034
CCCMH	20	0	0	54139	54139
Gogebic	0	0	0	0	0
HBH	0	0	0	0	0
Northpointe	23	0	0	52704	52704
Pathways	12	0	0	25191	25191

H2023: Supported Employment Utilizations FY18 MEDICAID					
	Unique Cases Served	EPSDT Services Units (<21)	B3 Services	HSW Services	Total Medicaid Units
NorthCare	195	4011	96765	5412	106188
CCCMH	37	14	4698	708	5420
Gogebic	24	7	1315	0	1322
HBH	10	0	1011	0	1011
Northpointe	55	3937	63107	0	67044
Pathways	69	53	26634	4704	31391

H2014: Skill Building Utilization FY18		
	Unique Cases Served	Total Healthy MI Units
NorthCare	23	12332
CCCMH	5	2866
Gogebic	1	481
HBH	0	0
Northpointe	10	5971
Pathways	7	3014

H2023: Supported Employment		
	Unique Cases Served	Total Healthy MI Units
NorthCare	55	17589
CCCMH	13	28
Gogebic	8	199
HBH	0	0
Northpointe	16	12012
Pathways	18	5350

**Note: HAB support cases are likely not duplicated with non-HAB support cases; however, because someone could have become HAB support part way through the year these are calculated seperately. Source: FY2018 Munc Report

Family Involved Services

Family Psychoeducation (FPE) is a group-based treatment model that recognizes the knowledge, expertise,

and resources that families provide in the recovery of their loved ones with a mental illness. Currently, NorthCare contracts for FPE supervision. In 2018, three staff completed the year-long supervision requirement. In FY18, there were FPE groups running in Dickinson, Iron, and Houghton Counties. Marquette County was attempting to start a group. There were no skills workshops billed in FY18. Twelve unique consumers benefited from this service, a decline from FY17.

FY18 FPE Utilization, Number of Encounters		
County	Group (G0177)	Joining (T1015)
Dickinson	37	4
Iron	23	1
Houghton	10	0
Marquette	0	3

Peer Services

Peer Support Services are activities designed to help people in their recovery journey by individuals who have lived experience and are in recovery. Peers must pass specific training. There are 5 types of Peers listed in the Medicaid Provider Manual. They include:

- Youth Peer Support: designed to support youth with a serious emotional disturbance through shared activities and interventions.
- Parent Support Partner: designed to support parents and families of children with serious emotional disturbance.
- Peer Mentor: designed to support adults with an intellectual or developmental disability to achieve community inclusion.
- Peer Support Specialist: designed to provide adjunct support to outpatient services for adults with a serious mental illness.
- Peer Recovery Coach: designed to provide adjunct support to outpatient services for individuals with a substance use disorder.

There were 6,437 encounters in FY18 for Mental Health peer services. In Houghton County, two of those services were for youth peer support. Each CMH has Peer Support Specialist(s) and Parent Support Partner(s). Copper Country CMH had a youth peer support, which is an improvement from last year when there was no youth peer supports in the UP. None of the CMH's had a Peer Mentor. There were Peer Recovery Coaches available in Marquette, Dickinson, Delta, Luce, Houghton, and Chippewa counties.

Drop- In Centers

In FY18, there were 3478 claimed units of Drop-In Services being utilized. Drop-In centers are peer run and designed to provide an informal environment to assist those with mental illness in bolstering coping skills and self-esteem and encouraging an active role in their treatment.

Drop In Utilization FY18		
Center Location	Count of Encounters	Consumers Served
Brantley Drop In Center	802	13
Get Away Drop In Center	579	12
Gogebic- Serenity Center	1141	36
Our Place Community Center	398	4
Rainbows End Drop In Center	558	17

Clubhouse Services

Clubhouse is a community-based program for adults with serious mental illness. Clubhouse, by definition, is choice based. Members and staff work side by side to make daily decisions and in governance. The Clubhouse model includes working on employment services, educational services, and community, social, and wellness supports in the community setting. In FY18, there were 5676 clubhouse encounters serving 94 unique consumers across three clubhouse locations. Hiawatha Behavioral Health has added a clubhouse and expects to be approved at the end of January 2019. Gogebic County CMH received a waiver for this service in FY18.

Clubhouse Utilization FY18		
Location	Count of Encounters	Number of Consumers Served
Copper Country- Northern Lights Clubhouse	3618	45
Marquette- South Shore Place	936	25
Menominee- House of Dreams	1122	24

Legal Services

Jail Diversion

The table below represents the number of jail diversions in FY18. There were also 32 jail diversions in FY17; although the distribution of the diversions is different. Jail diversion staff work with area law enforcement to better serve individuals with a mental health need and provide them appropriate care, sometimes in lieu of legal ramification. Some ways that jail diversion staff do this is through training with local law enforcement and presentations and trainings offered to community members.

In addition to the 32 jail diversions, there were 7 times that jail diversion was denied by the court. Six of the 7 denied were affiliated with Pathways and one with Northpointe. There were also 15 contacts that were recorded as "communication only." This addresses the additional work that CMH staff do with consumers that isn't reflected as an actual 'jail diversion'.

CMHSPs	MICHIGAN DEPARTMENT OF COMMUNITY HEALTH Jail Diversion Reporting 10/01/17 to 9/30/18										
	Number of times people diverted Pre-Booking					Number of times people diverted Post-Booking					Total Pre & Post Booking
	Adults w MI	Adults w COD	Adults w/DD	Adults w DD & COD	Sub Total Pre-Booking	Adults w MI	Adults w COD	Adults w/DD	Adults w DD & COD	Sub Total Post-Booking	
Copper Country CMH	1				1	1				1	2
Gogebic CMH					0		1			1	1
Hiawatha CMH	4	1			5		2			2	7
Northpointe CMH	1	3			4	2	2			4	8
Pathways CMH	5	1			6	3	5			8	14
GRAND TOTAL	11	5	0	0	16	6	10	0	0	16	32

Pathways has a jail diversion room in Marquette County. The purpose of this room is to avoid the trauma of being lodged in the jail while awaiting booking. Individuals with a serious mental illness and/or an intellectual or developmental disability who have committed a non-violent crime and are not under the influence of substances or feeling suicidal are eligible. Pathways is also involved in a jail diversion project with Wayne State University Center for Behavioral Health and Justice. In this study, from March 2017- April 2018, a review of a subset of the population identified that 53% of the subsample had a Serious Mental Illness (SMI) and that individuals with SMI had longer jail stays (30 days) than those who are not SMI (13 days).

The Michigan Incident Crime Reporting 2017 Arrests by County data table (right) shows the number of arrests in each county, by each agency, for each type of crime. Number of arrests remain consistent in the Upper Peninsula. If the Wayne State University research indicating that approximately half of jail inmates have a serious mental illness is applicable to all regions; then it would be expected that approximately 4000 arrests were of individuals suffering from a serious mental illness. The National Alliance on Mental Illness reports 15% of men and 30% of women booked into jails are considered to have a SMI. Given this rate, that would mean 1500-2000 individuals jailed in 2017 in the UP had a serious mental illness.

Arrests by County			
	Total Arrests		
County	**2015**	**2016**	**2017**
Alger	237	254	218
Baraga	183	184	137
Chippewa	974	1052	843
Delta	1288	1392	1287
Dickinson	266	263	355
Gogebic	326	337	373
Houghton	664	532	532
Iron	331	293	309
Keweenaw	21	20	22
Luce	144	167	166
Mackinac	464	434	410
Marquette	1906	1989	2143
Menominee	852	774	895
Ontonagon	167	81	110
Schoolcraft	270	240	243
Total	**8093**	**8012**	**8043**
Source: Michigan Incident Crime Reporting			

Children's Services

Education

Fifty-six percent of third grade students in Michigan test below proficiency in Reading and 67% of eighth graders test below proficiency in Math (Kids Count). Both Luce and Schoolcraft counties were identified as being in the 5 worst counties for third grade proficiency in Reading and Luce, Schoolcraft, and Iron counties were identified in the 5 worst counties for eighth grade proficiency in Math. In a 2018 assessment of college readiness, it was found that 93.7% of Schoolcraft county children aren't college ready. The state average is 65.4%. Across Michigan 19.6% of kids didn't graduate on time, and 8.6% dropped out (Kids Count).

Statewide, there were 1,584,096 children enrolled in school in the 2017-2018 school year (MI School Data) and 207,341 (13.1%) were in special education. In the table below, you will see the number of children enrolled at the Intermediary School Districts during the 2017-2018 school year. Per the Annual Submission Report, Copper Country CMH had 55 students 'age out' or graduate from special education services. Gogebic CMH had 11, Hiawatha had 29, and Northpointe had 4. Numbers are unavailable for Pathways.

2017-18 Special Education Data Portrait: Disability Snapshot

	Total Special Ed Count	Autism	Cognitive Impairment	Deaf/Blind	Early Childhood Developmental Delay	Emotional Impairment	Hearing Impairment	Physical Impairment	Severe Multiple Impairments	Specific Learning Disability	Speech and Language Impairment	TBI	Visual Impairment	Other
Copper Country ISD	751	42	52	<10	38	30	11	<10	<10	246	167	<10	<10	156
Delta-Schoolcraft ISD	1003	62	51	<10	20	21	<10	<10	21	230	406	<10	<10	168
Dickinson-Iron ISD	898	67	59	<10	26	38	<10	<10	20	359	215	<10	<10	92
Eastern Upper Peninsula ISD	1011	113	95	<10	39	47	<10	<10	17	222	287	<10	<10	178
Gogebic-Ontonagon ISD	413	32	31	<10	30	21	<10	<10	<10	140	77	<10	<10	68
Marquette-Alger RESA	1634	112	64	<10	133	39	18	<10	21	539	509	<10	<10	190
Menominee ISD	332	18	23	<10	11	28	<10	<10	<10	102	82	<10	<10	56

*Source: MI School Data

Various CMH services were offered in the school setting. Many of these were ABA services for children with Autism. Other services included Community Living Supports, Case Management, Supports Coordination, Psychotherapy and more. Northpointe has utilized services in the school significantly in comparison to the rest of the region.

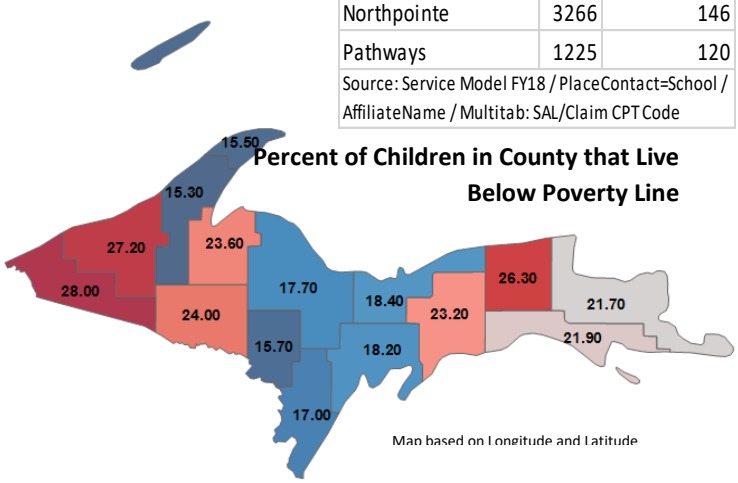
Number of School Based Services

	Units	Number of Unduplicated Consumers
Totals	**5906**	**397**
Copper Country CMH	449	38
Gogebic CMH	749	56
Hiawatha	184	38
Northpointe	3266	146
Pathways	1225	120

Source: Service Model FY18 / PlaceContact=School / AffiliateName / Multitab: SAL/Claim CPT Code

Poverty

An average of 19% of Michigan children live in poverty (Kids Count). Seven counties in the UP are below the Michigan average poverty rate for children, but eight are above. Per the Poverty Solutions at the University of Michigan data, Gogebic County has highest level of children living in poverty, at 28%, as represented by the heat map to the right. The blue areas of the map have the lowest level of children in poverty. Counties with a high number of children in poverty mirror the previous map on page 9 of all individuals in poverty.



Trauma

According to the 2019 Kids Count Data, 1 in 5 children in Michigan have experienced two or more adverse childhood experiences (ACE). There is a 90% probability of a child being diagnosed with a developmental disability if they have an ACE score of 6+ before the age of three (Grant, S. DD Conference). The rate of abuse and neglect for children has also continued to rise in Michigan with an increase of 30% between 2010 and 2017 (Kids Count). The 2017 Michigan average rate of abuse is 18.9 children per 1000 being confirmed victims of abuse or neglect. This impacts the rate of children placed out of the home. The table to the right shows the number and rate of abuse and out of home placements by county in 2017 and 2018. Cells indicated with an asterisk have a negligible rate. NorthCare provided Trauma Focused Cognitive Behavioral Therapy (TF-CBT), an evidence-based practice, in FY18 to 67 unduplicated children using TF-CBT.

		Confirmed Victims of Abuse and/or Neglect: Age 0-17		Out of Home Care: Age 0-17	
County	**Data Type**	**2017**	**2018**	**2017**	**2018**
Alger	Number	25	18	5	3
	Rate	18	13	*	*
Baraga	Number	33	35	7	5
	Rate	20.8	22.9	4.4	*
Chippewa	Number	179	188	39	49
	Rate	25.6	27.1	5.6	7.1
Delta	Number	151	140	52	55
	Rate	20.5	19.5	7.1	7.7
Dickinson	Number	69	88	32	32
	Rate	13.5	17.3	6.3	6.3
Gogebic	Number	89	93	50	45
	Rate	36.6	38.7	20.6	18.7
Houghton	Number	68	128	8	10
	Rate	9.2	17.5	1.1	1.4
Iron	Number	62	65	12	18
	Rate	33.7	35.7	6.5	9.9
Keweenaw	Number	1	3	0	2
	Rate	*	*	*	*
Luce	Number	36	29	13	5
	Rate	34	27.7	12.3	*
Mackinac	Number	23	33	10	12
	Rate	13.2	19.4	5.7	7
Marquette	Number	266	195	38	31
	Rate	22.1	16.2	3.2	2.6
Menominee	Number	85	73	29	21
	Rate	19.5	17.3	6.7	5
Ontonagon	Number	26	26	6	4
	Rate	35	35.2	8.1	*
Schoolcraft	Number	41	37	12	6
	Rate	30.3	27.4	8.9	4.4

Foster Care

In 2017, there were 5.1 children out of 1000 placed in out-of-home care (Kids Count). Gogebic County was ranked the worst of the 80 ranked counties with 20.6 kids per 1000 placed out of the home.

Kids Count data (2019) found that 58% of children leave foster care because they are emancipated or age out of the system without a recognized parental figure in their life. Children in foster care are more likely to have experienced trauma and may be more likely to be involved in the CMH system. The World Health Organization (WHO) reports that violence can lead to stress that impairs brain development. It can damage the nervous and immune systems. It could lead to physical injury, disability, or death and is associated with delayed cognitive development, poor school performance, mental health issues, suicide, and the continuation of a cycle of violence. Further, 1 in 4 adults report abuse as children and approximately 12% of children were sexually abused in the past year (WHO).

Mobile Intensive Crisis Services for Children

On 9/1/17, MDHHS required the implementation of intensive crisis stabilization services for children. This program is for children receiving CMH services when there is a crisis requiring assistance but not requiring immediate inpatient psychiatric hospitalization. During FY18 the program progressed from development to implementation stage. From 7.1.18 to 12.31.18 there were 15 requests for Mobile Crisis Services. This initial tracking period was also a time to adjust hours for the program, if needed.

ICSS- Mobile Crisis for Children			
Data from 7.1.18-12.31.18	**Hours of operation**	**Adjustments to the Hours of operation**	**Number of Requests**
Copper Country CMH	*8AM-5PM M-F*	*8AM-9PM M-F*	*5*
Gogebic CMH	*8AM-7PM M-F*	*No Adjustments*	*None*
Hiawatha Behavioral Health	*8AM-9PM M-F*	*No Adjustments*	*3*
Northpointe Behavioral Health	*8AM-5PM M-F*	*No Adjustments*	*4*
Pathways CMH	*8AM-5PM M-F*	*No Adjustments*	*3*

Assessment Scores

The local CMHs receive MDHHS Incentive Payments (DHIP) for children and youth that are served in the Michigan Foster Care or Child Protective Services system. The average initial Child and Adolescent Functional Assessment Scale (CAFAS) and preschool version (PECFAS) scores of the children and youth for which the incentive payment was received were compared to the average of the last CAFAS/PECFAS scores during a fiscal year. The graphs below depict the comparison between the initial and last scores. Below you will see that the last CAFAS/PECFAS scores trended lower than the initial scored, representing overall improvement in the children/youth's behavioral health.

FY18 DHIP Outcomes Reporting CAFAS					FY18 DHIP Outcomes Reporting PECFAS				
	Count of Consumers	Average of Initial Total Score	Average of Last Total Score	Average of Total Score Difference		Count of Consumers	Average of Initial Total Score	Average of Last Total Score	Average of Total Score Difference
Copper Country CMH	1	80	90	-10	Copper Country CMH	0	0	0	0
Gogebic Co. CMH	5	80	106	-32.5	Gogebic Co. CMH	0	0	0	0
Hiawatha Behavioral Health	2	115	885	60	Hiawatha Behavioral Health	0	0	0	0
Northpointe Behavioral Health	8	85	68.75	16.25	Northpointe Behavioral Health	3	106.67	110	-3.33
Pathways CMH	21	109	91.43	20.56	Pathways CMH	5	100	70	37.5
NorthCare (unduplicated)	**36**	**99.44**	**88.61**	**12.58**	**NorthCare (Region)**	**8**	**102.5**	**85**	**20**

ASD

Autism Spectrum Disorder (ASD) is growing in prevalence. The Centers for Disease Control (CDC) reports that in the year 2000, Autism was diagnosed at a rate of 1 in 150 children. By 2014 this was 1 in 59 children. In 2005 the average annual medical costs for Medicaid children with ASD was over $10,000 and behavioral interventions cost $40,000-$60,000 a year! According to a presentation by the Autism Alliance of MI, 95% of individuals with ASD have at least one co-occurring condition. More alarming, according to a Dutch study, individuals with autism die on average 18 years earlier than the general population, and those with autism and learning disabilities die 30 years earlier than the average for the general population (Autistica). Additionally, per a report by Hedley et al., 2017, republished by David Mandell in Sage Journals, 20-40% of adults with autism have considered suicide.

NorthCare served 111 consumers with Autism in FY18. Of those consumers, 66 are still open in FY19. The others may have disenrolled for a variety of reasons including voluntary disenrollment/declining services, relocation, and no longer meeting medical necessity criteria.

FY18 Autism Cases Total Count	
	# of Cases
Copper Country CMH	17
Gogebic CMH	14
Hiawatha Behavioral Health	13
Northpointe Behavioral Health	35
Pathways CMH	32
Grand Total	**111**
*Source: WSA	

Reasons for Closure post FY18	
Approved - Declined Services	7
Moved out of State	3
No Longer Eligible for Medicaid	2
Other	7
Re-Evaluation did not meet medical necessity	7
Voluntarily Disenrolled from Services	19
Grand Total	**45**
*Source: WSA	

FASD/ ND-PAE

Fetal Alcohol Spectrum Disorders (FASD) is a combination of 4 potential disorders defined by the Institute of Medicine of the National Academies: Fetal Alcohol Syndrome, Partial Fetal Alcohol Syndrome, Alcohol Related Neurodevelopmental Disorder, and Alcohol Related Birth Defects. With the DSM 5, the diagnosis of Neurobehavioral Disorder Associated with Prenatal Alcohol Exposure (ND-PAE) has been added as a psychiatric diagnosis. While each child may exhibit different symptoms, common symptomology includes

learning difficulties, trouble shifting attention, difficulty controlling emotions or communicating, and difficulties with activities of daily living such as feeding, bathing, and maintaining safety (NIAAA).

According to the CDC the prevalence of Fetal Alcohol Spectrum Disorders is estimated to be .2 to 1.5 infants for every 1000 live births; however, assessment of school aged children has put the estimate as high as 6 to 9 out of 1000 children. The state level estimates of alcohol use among women, a 2016 estimate from the Behavioral risk Factor Surveillance System (BRFSS), estimates that 57.3% of women in Michigan of childbearing age drink alcohol. Of those, 37.4% report binge drinking. Additionally, the BRFSS study from 2011-2013 also indicates that nationally 1 in 10 pregnant women reported alcohol use in the past 30 days, and 1 in 33 women reported binge drinking (four or more drinks on an occasion) in the past 30 days.

Integrated Health Care Services

Integrated care is a systemic change to current methods of treatment. There is vast evidence that the mind, body, and spirit all impact each other. Poor physical health can impact social and mental health. Similarly, poor mental health can impact physical or social health. Integrated care is often thought of as combining mental health and physical health. Co-occurring treatment is often thought of as combining mental health and substance use disorder services. Ultimately, they all interact. One person could live with mental health, substance use, physical health, dental, and social health concerns. SAMHSA reports that 68% of adults with mental illness have one or more chronic physical conditions and 1 in 5 have a co-occurring substance use disorder.

Typically, the first professional to recognize concerns in any health area for a consumer is a primary care doctor. About 91% of CMH consumers in the Upper Peninsula have a primary care doctor.

Primary Care Physician Utilization					
	Copper	Gogebic	Hiawatha	Northpointe	Pathways
Percent with a Primary Care Doctor	88%	89%	95.17%	95.5%	90.05%

Source: CMH Annual Submission Report

To increase integration, NorthCare staff and CMH staff meet with staff from the Upper Peninsula Health Plan (UPHP) to discuss the treatment of shared consumers who are “super-utilizers.” In the tables below, the chronic co-morbidity rates in each CMH area as well as the number of hospital visits for the co-morbid condition are depicted. Diagnoses of Hypertension and Pre-Diabetes had the highest number of hospital visits and were the highest category for relative hospital risk.

RELIAS

NorthCare - Hospital and ER Utilization Report for Co-Morbid patients

Includes data dates of service for 10/1/2017 through 9/30/2018

Total Unique Patients	ER Visits	Behavioral * ER Visits	Non-Behavioral ER Visits	% Behavioral ER Visits	% Non-Behavioral ER Visits	Hospital Admits	Behavioral * Hospital Admits	Non-Behavioral Hospital Admits	% Behavioral Hospital Admits	% Non-Behavioral Hospital Admits
1,952	5,639	793	4,846	14.1%	85.9%	989	315	674	31.9%	68.1%
Total with Medication Review	**Total with Psychiatric Evaluation**	**Total with ACT Service**	**Total with Case Management / Supports Coordination**	**Total with Crisis Contacts**	**% Medication Review**	**% Psychiatric Evaluation**	**% with ACT Service**	**% with Case Management / Supports Coordination**	**% With Crisis Contacts (H2011)**	**% With Crisis Contacts (T1023)**
47,259	971	6,406	17,768	1,620	98.2%	28.8%	5.5%	74.9%	24.0%	15.8%

RELIAS

Chronic Co-Morbidity Counts by NorthCare 10.1.17-9.30.18

PIHP Aggregated Data	Total	Pathways	Northpointe	Hiawatha	Copper	Gogebic	Total	Pathways	Northpointe	Hiawatha	Copper	Gogebic	N Hosp. Visits per 100 Pts	Relative Risk of Hosp.
No Chronic Co-Morbidity	2,346	889	581	368	333	175	55%	55%	56%	56%	52%	57%	16	1.38
Any Chronic Co-Morbidity	1,898	727	450	285	303	133	45%	45%	44%	44%	48%	43%	53	4.47
Hypertension and Pre-Diabetes	131	50	35	22	13	11	3%	3%	3%	3%	2%	4%	131	11.1
Epilepsy and Hypertension	105	41	22	20	15	7	2%	3%	2%	3%	2%	2%	113	9.63
Asthma and Pre-Diabetes	118	48	32	13	14	11	3%	3%	3%	2%	2%	4%	113	9.58
Hypertension and Past Tobacco Use	176	49	49	29	32	17	4%	3%	5%	4%	5%	6%	106	8.98
Chronic Pain and Diabetes	103	32	32	16	15	8	2%	2%	3%	2%	2%	3%	102	8.67
Chronic Pain and Migraine	107	41	25	9	20	12	3%	3%	2%	1%	3%	4%	102	8.66
Chronic Pain and Past Tobacco Use	128	39	41	14	21	13	3%	2%	4%	2%	3%	4%	98	8.3
Neurological Disorders and Any Other Chronic Condition	839	358	202	113	112	54	20%	22%	20%	17%	18%	18%	97	8.25
Chronic Pain and Hypertension	227	74	65	39	30	19	5%	5%	6%	6%	5%	6%	96	8.16
Asthma and Hypertension	313	116	66	51	52	28	7%	7%	6%	8%	8%	9%	96	8.15

This information comes from the Relias tool and is based on encounter data for individuals shared between NorthCare and UPHP. Individuals living in the Upper Peninsula but not affiliated with NorthCare or UPHP would not be considered in this data. ER visits and Hospital admissions are considered Behavioral when (a) they include a claim with a revenue code is that related to psychiatry, or (b) if most of the non-lab-imaging-surgery claim details in the event have a psychiatric diagnosis. Non-behavioral ER events are those that do not meet either of these conditions.

Overall data from Poverty Solutions at the University of Michigan shows concerning rates of obesity, physical inactivity, and smoking across the Upper Peninsula. Obesity is a cause of death for many and has been linked to diabetes, high blood pressure, high cholesterol, depression and overall poor health.

Dental

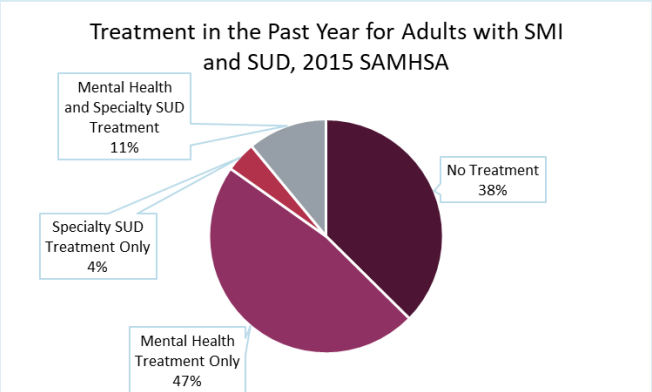
According to the Oral Health Foundation, mental illnesses such as anxiety, depression, eating disorders, and psychosis can negatively impact dental care. Negating daily dental care, possibly due to depression, can result in tooth decay. Those with anxiety may avoid going to the dentist. Purging associated with eating disorders erodes the tooth enamel due to the acidity of stomach contents. Finally, medications can cause dry mouth. Conversely, poor dental health can lead to mental health issues such as social anxiety due to poor condition of teeth and bad breath, impacts on speech, and decreased self-esteem. A study by Wey et. al (2015), found that individuals with mental illness rate of decayed, missing, or filled teeth was almost double that of the general population.

Health Report for All UP Residents			
County	% Adult Obesity	% Physically Inactive	% Adult Smokers
Alger	29.7	23.3	17.3
Baraga	33.7	23.3	19.4
Chippewa	35	27.8	21.9
Delta	31.8	21.5	19.8
Dickinson	29.1	22.5	19.3
Gogebic	33.4	23.3	19.8
Houghton	32.4	20.5	19.8
Iron	29.3	19.4	18.6
Keweenaw	30.1	22.7	17.4
Luce	33.7	26.3	21.1
Mackinac	30.1	23.7	19.3
Marquette	30.8	20.9	17.2
Menominee	34.1	24.5	18.5
Ontonagon	32.9	23.1	17.3
Schoolcraft	31.3	31.1	19.6
*Source: U of M Poverty; Robert Wood Johnson Foundation			

Co-Occurring Services

Co-occurring disorders can be hard to diagnose. Consumers may not always recognize their own symptoms, or, even if they do recognize them, be willing to disclose this information to providers. Substance use can guise symptoms of mental health. Mental health symptoms may look like substance abuse symptoms. Often, treating only one of the issues will lead to an increase in the other. Therefore, integrated care is especially important. Both mental health and substance use disorders should be treated at the same time by the same treatment team.

SAMHSA (2018), reports that 11% of all individuals 12 years old or greater who received mental health services during 2016 also received substance use disorder services. Similarly, in 2015 the Center for Behavioral Health Statistics and Quality also reported that 11% of those with a serious mental illness and substance use disorder had treatment for both (SAMHSA, 2016).



Per the 2015 SAMHSA data, 41.2% of adults with SUD also had a mental illness, although only 11.9% had a serious mental illness. In comparison, of those adults without a SUD diagnosis, only 15.8% had a mental illness. Conversely, 18.6% of adults with a mental illness also had a SUD diagnosis while only 5.8% of adults without a mental illness had a SUD diagnosis.

Affiliate Name	# clients with HH service	# of Clients Served	% w/ Co-occuring Services
Copper Country	137	898	15.26%
Gogebic	28	487	5.75%
Hiawatha	151	1195	12.64%
Northpointe	110	1502	7.32%
Pathways	201	2758	7.29%
NorthCare (unduplicated)	**627**	**6680**	**9.39%**

Diver/FY18 Service Model:Medicaid=Y/Service Reportable = Y/ Encounter code: Find all HH, group / AffiliateName Consumer is considered Medicaid if they were eligible at any time during the fiscal year. Services are encounters with HH modifier signifying Co-Occuring treatment.

In FY18, the CMH's within NorthCare Network provided co-occurring services to 9.39% of consumers. Every CMH had a decrease in the percentage of consumers served with co-occurring services, as indicated using the HH modifier. While any CMH eligible consumer that qualifies for services based on SMI, SED, or I/DD criteria can be provided co-occurring services; most services are likely to be provided to adults.

Substance Use Disorder Services

Substance Use Disorder Access

Substance Use Disorder (SUD) Medicaid services include assessment, individual and group therapy, intensive outpatient therapy, residential services, subacute and social detox services. Through Block Grant funding, additional specialty services are available and include case management, women and children's services, recovery housing and peer recovery services, and room and board for residential placement.

The American Society of Addiction Medicine (ASAM) separates Substance Use Disorder treatment into different levels of care ranging from *Early Intervention* for those at risk of use to *Medically Managed* services for individuals at risk of detox. The various levels provide a continuum of care allowing for consumers to move up and down the continuum as medically necessary.

ASAM Levels of Care	
Level .5 Early Intervention	Service for individuals at risk of developing a SUD
Level 1 Outpatient Services	Typically less than 9 hours a week for adults or 6 hours a week for adolescents of therapy
Level 2.1 Intensive Outpatient	More than 9 hours a week for adults and 6 hours a week for adolescents of therapy and encompassing services that are capable of meeting complex needs
Level 2.5 Partial Hospitalization	20 or more hours of service a week but not requiring 24 hour care
Level 3.1 Clinically Managed Low-Intensity Residential Services	24 hour living support with trained personnel and offers 5 hours of clinical services a week
Level 3.3 Clinically Managed Population-Specific High Intensity Residential Services	Adult only 24 hour care with trained counselors and capable of assisting those with cognitive or other impairments
Level 3.5 Clinically Managed Medium-Intensity Residential Services	24 hour care with trained counselors with the goal of outpatient treatment and utilizing the full milieu and therapeutic communities
Level 3.7 Medically Monitored High-Intensity Inpatient Services	24 hour nursing care with a physician available and counseling 16 hours a day
Level 4 Medically Managed Intensive Inpatient Services	24 hour nursing care and daily physician care and available counseling

NorthCare Network Substance Use Access Department completed a total of 1853 pre-screenings in FY18. After the pre-screening, a screening was completed to determine what level of care an individual may need. Of the 1128 completed screenings, 697 resulted in a referral to residential treatment. Of those referrals there were 602 admissions to SUD residential treatment. This is an increase from 489 residential admissions in FY17. The primary drug used as reported at admission to treatment was alcohol, followed by other opiates/synthetics. While there were slight changes between the percent use of alcohol and opiates/synthetics, there was a noticeable increase in methamphetamine use as primary substance at admission from FY17 to FY18. During FY17, meth was reported to be the primary drug at admission to residential for 36 individuals, 6%. It increased to 19% in FY18. As the tables below reflect, the highest utilization of treatment was for individuals reporting alcohol and opiate use disorders.

SUD Residential Admissions - Primary Substance at Admission

	Alcohol	Benzodiazepines	Cocaine / Crack	Heroin	Inhalants	Marijuana / Hashish	Methamphetamine / Speed	Other Amphetamines	Other Drugs	Other Opiates / Synthetics	Other Sedatives / Hypnotics	Grand Total
Total Admission Per Primary Substance	242	5	8	26	1	20	115	8	3	171	3	**602**

Source: SUD Admissions Detail PCE Standard Report: Service Type Desc= Residential Long-Term, Residential Short-Term. Admissions within the time period of 10/01/2017-09/30/2018. Admission Funding = Medicaid, MI Child, Healthy MI, or MHL.

SUD Detox Admissions - Primary Substance at Admission

	Alcohol	Heroin	Methamphetamine / Speed	Non-prescription methadone	Other Opiates / Synthetics	Grand Total
Total Detox Admissions per Primary Substance	92	11	3	1	90	**197**

Ambulatory-Detoxification , Detoxification. Admissions within the time period of 10/01/2017-09/30/2018. Admission Funding = Medicaid, MI Child, Healthy MI, or MHL.

SUD Outpatient Admissions - Primary Substance at Admission

	Alcohol	Benzodiazepines	Cocaine / Crack	Hallucinogens	Heroin	Inhalants	Marijuana / Hashish	Methamphetamine / Speed	Non-prescription methadone	Other Amphetamines	Other Drugs	Other Opiates / Synthetics	Other Sedatives / Hypnotics	Other Stimulants	Over-the-Counter Medications	Grand Total
Total Admissions per Primary Substance	460	10	21	1	54	1	99	107	3	16	2	424	4	1	1	**1204**

Source: SUD Admissions Detail PCE Standard Report: Service Type Desc= Outpatient, Intensive Outpatient. Admissions within the time period of 10/01/2017-09/30/2018. Admission Funding = Medicaid, MI Child, Healthy MI, or MHL.

SAMHSA National Survey on Drug Use and Health from 2014-2016 averages percentages of use for various drugs for individuals 12 or older in different regions of the United States. In the Upper Peninsula Cocaine and heroin are indicated at less than 1%, alcohol is around 55-60%, and tobacco use is averaged at 31-35%. Marijuana use presented at 14-19%, although with new laws this rate will be expected to increase next year. True to the data, alcohol was the primary reason for admission to treatment.

Providers have Performance Indicator standards to get consumers in to services timely. Scheduling initial assessment within 14 days has improved in the past year. Once a consumer is approved for ongoing services they do get their next service within 14 days.

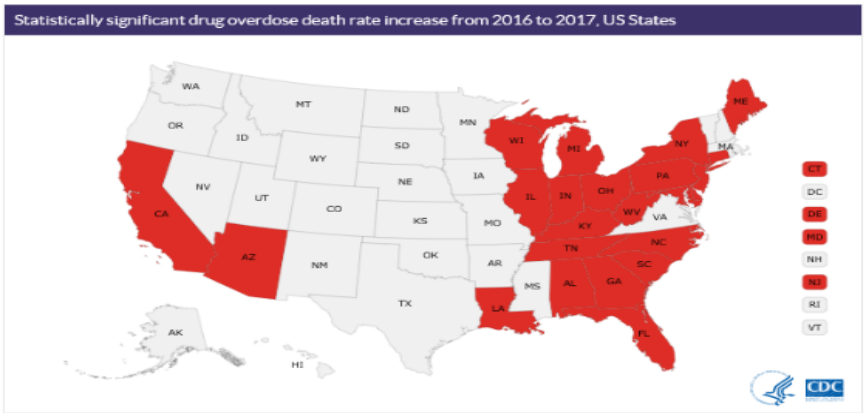
FY18 percent of new persons receiving a face-to-face assessment with a professional within 14 calendar days of a non-emergency request for service				
State Standard is 95%	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**
# New Referrals for FTF Asssessment	302	329	340	335
# New Exceptions	28	34	41	44
# Rec FTF -Exceptions	250	264	272	247
% Rec FTF w/14 Days	91%	89%	91%	85%

FY18 percent of persons with start of ongoing service w/in 14 days of non-emergent face-to-face assessment w/a professional				
State Standard is 95%	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**
# New Starting FTF Services	308	322	328	328
# New Exceptions	0	3	4	4
# Starting Srv w/in 14 days	307	318	321	321
% Starting srv w/in 14 Days	100%	100%	99%	99%

Prevention

Prevention services are a vital component to reduce future demand and NorthCare provides a solid base of primary prevention services across the region. There are 14 substance use prevention coalitions that cover all 15 counties in the Upper Peninsula. Each coalition has one coordinator and many community volunteers who utilize an evidence-based coalition model, C*ommunities that Care*. These coalitions help identify the risk and protective factors that are affecting the community's youth. In FY18, prevention providers delivered Botvin's Life Skills to 3,550 middle school students in 6th, 7th and 8th grade.

One area of national prevention is in the laws against drunk driving. University of Michigan Poverty Solutions data shows that an alarming percent of driving deaths are alcohol related (data below). As the map shows, the CDC has tracked a significant increase in death rates from drug overdoses in Michigan from 2016 to 2017.



Statistically significant increase

Statistically significant increase from 2016 to 2017

No

Yes

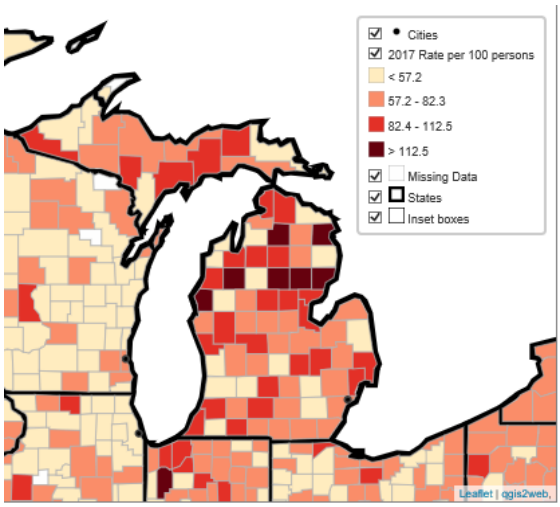
Data Table +

*Deaths are classified using the International Classification of Diseases, Tenth Revision (ICD-10). Drug-poisoning deaths are identified using underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14. Age-adjusted death rates were calculated as deaths per 100,000 population using the direct method and the 2000 standard population. SOURCE: CDC/NCHS, National Vital Statistics System, Mortality. CDC WONDER, Atlanta, GA: US Department of Health and Human Services, CDC; 2018. https://wonder.cdc.gov/.

% Driving Deaths that are Alcohol-Impaired	
Alger	25.0
Baraga	60.0
Chippewa	47.8
Delta	35.7
Dickinson	44.4
Gogebic	50.0
Houghton	44.4
Iron	55.6
Keweenaw	100.0
Luce	16.7
Mackinac	28.6
Marquette	41.7
Menominee	28.6
Ontonagon	40.0
Schoolcraft	31.0
*Source: U of M Poverty	

Prescribing Rules Impact

Represented in the map to the right are the 2017 CDC prescribing rates. New prescribing rules may be correlated to the substance use trends shown above. In March 2018, Public Act 247 stated that a Michigan Automated Prescription System (MAPS) report was required to be run prior to prescribing any medication containing buprenorphine (Suboxone) or methadone. MAPS is a tool used to track controlled substance script filling and prevent drug abuse and diversion at the prescriber, pharmacy, and patient levels. Another great part about this rule is that any professional that treats a patient for an opioid-related overdose is now required to provide SUD treatment information to the consumer.



Public Act 246 began in June 2018 and requires a prescriber to discuss risks of addition and overdose, increased risk of addiction, and the danger of taking a controlled substance with other medications and alcohol with any minor and the minors' parents before prescribing a controlled substance containing an opioid. The prescriber also is required to discuss the dangers of opioid addiction, proper disposal of unused medication, potential legalities of delivery of a controlled substance, and short- and long-term effects of the opioid on prenatal care. Also, Public Act 251 states that no more than 7-days' worth of an opioid shall be prescribed in a 7-day period. These new rules should help reduce the availability of potentially diverted opioids being made available on the street for misuse.

Numbers and Types of Providers

Mental Health

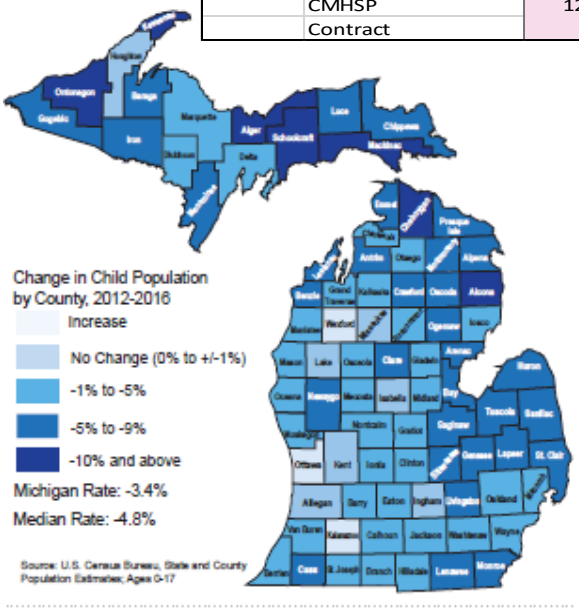
The following table reflects the license types, and numbers of providers in that license type, at each CMH and NorthCare SUD; which is a combination of all the SUD providers. NorthCare Dual represents the community providers that have been authorized by NorthCare for providing MHL services.

Affiliate	ACSW-Lic Master's Social Worker	BCaBA	Board Cert Behavior Analyst	CAADC	CADC	CADC-M	Cert. Peer Support Specialist	Clin-Lic Mstr Soc Wkr	Controlled Substance - Federal	Dietitian	Lic. Bachelor's Social Worker	Lic. Marriage & Family Therapist	Licensed Master's Social Worker	Licensed Practical Nurse	Licensed Professional Counselor	Licensed Psychologist	Lim.Lic. Marriage & Family Ther.	Limited License Psychologist	Ltd. Lic. Bachelor's Social Wkr	Ltd. Lic. Master's Social Worker	Ltd. Lic. Professional Counselor	Macro-Lic Mstr Soc Wkr	Nurse Practitioner	Occupational Therapy Assistant	Physician Medical	Physician's Assistant	Reg. Occupational Ther. - State	Reg. Social Service Technician	Registered Physical Therapist	Registered Professional Nurse	Speech Language Pathologist	Grand Total
Copper Country CMH			1		1	1			8		9		10		2	1		3	3	2			1	1	8		1	1		16		69
Gogebic CMH							1	6	4		15		10		4	1		5	1	6		2			4		1	2		5		67
Hiawatha Behavioral Health		1	3	2			4	1	4		10		16		5			2	2	14	3				7		4	1	1	8	6	94
NorthCare Dual													40			23						1	11		36	6						117
NorthCare SUD	7				1						2	1	18	3	13	2	1	4		10	9				2	1				1		75
Northpointe BHS							1		1	1	16		14		1			2	13	2			2		2		1	1		13		70
Pathways CMH		2	5	6			3	1	7	2	14		41	2		1		5	16	12	1	9	2		7		4		1	20	4	165
Grand Total	**7**	**3**	**9**	**8**	**2**	**1**	**9**	**8**	**24**	**3**	**66**	**1**	**149**	**5**	**25**	**28**	**1**	**21**	**35**	**46**	**13**	**12**	**16**	**1**	**66**	**7**	**11**	**5**	**2**	**63**	**10**	**657**

Source: Aggregation of staff records in ELMER. Staff member will be included in the total for a given license type if he or she had an active license of that type at any time between 10/1/17 and 9/30/18 and was also active at a given CMHSP or SUD provider during that same period. Data is limited to that entered by CMHSP and Network Management staff.

The Community Mental Health agencies are required to report their staffing numbers in the Annual Submission Report. This report segregates providers by residential vs. other settings and by CMH staff vs. contracted staff. CMH's with greater population density reported more staff than those that are less populous. All CMH's except Gogebic report vacancies.

Workforce by Type, Total FTE										
* data from the CMH annual submission report		Copper Country		Gogebic		Hiawatha		Northpointe		Pathways	
		Filled	Vacant	Filled	Vacant	Filled	Vacant	Filled	Vacant	Filled	Vacant
Specialized Residential Settings											
	CMHSP	92	21	32.78	0	35.5	1	83	4.75	0	0
	Contract	0	0	0.1	0	0	0	154.8	27.2	349.69	45.21
Other Settings											
	CMHSP	120	9	47	0	88.25	8.5	43	11.5	34	1.5
	Contract	9	0	8.3	0	0	0	52.75	3.85	109.34	21.4



Another staffing consideration is the population age that providers serve. The youth population in the Upper Peninsula is declining per Kids Count data, with 5 counties losing 10% or more of the child population between 2012 and 2016. Every county had at least some decline. The median population age of individuals in the Upper Peninsula continues to rise. If this trend continues, staff will need to be well versed in disorders common in older adults, such as dementia. While dementia is a medical diagnosis, individuals diagnosed with dementia with behavioral disturbances can be served by the CMH system. In FY18, NorthCare served 79 individuals who had a dementia diagnosis. This is an increase from 63 individuals the previous year.

Substance Use Disorders

There were 9 Substance Use Disorder provider agencies in network in FY18 located in 25 sites across the UP and two additional sites downstate. There were 6 outpatient providers with numerous offices, 7 residential providers including 1 youth residential provider, and 4 providers for residential detox services. Provider sites are denoted on the map on page 41.

MHL

NorthCare has 117 outpatient providers/agencies paneled to provide MI Health Link mild/moderate services to MHL consumers. MHL Mental Health providers submit their claims to NorthCare rather than to Medicare Fee for Service when serving an MHL member. The Electronic Medical Record cannot process claims unless there is an authorization associated with the provider and consumer. To reduce administrative burden on the providers, there is discussion of changing this process in FY19.

Upper Peninsula Health Plan (UPHP), the health plan in the region, does not recognize 6 CMH psychiatrists who are not board-certified. While it is not a federal or state requirement to be board-certified to practice psychiatry, UPHP refuses to panel or pay for services rendered to an MHL individual by a non-board-certified psychiatrist. This has restricted the options for MHL consumers in an area that already lacks resources.

Telehealth

NorthCare has 19 psychiatric providers, including psychiatric nurse practitioners within the CMH network. Most of those providers are via telehealth, with some CMH's having no psychiatric services on site.

Due to the shortage of providers, telehealth is often used for psychiatry as well as ABA services. As the table shows, 1710 consumers utilized telehealth services in FY18, for a total of 7474 units. Outpatient office visits were the most commonly used service via telehealth.

While telehealth is a viable and important option for services due to the limited number of providers, many individuals prefer to talk to their service professional face to face. NorthCare and providers continue to seek effective options for service provision for their consumers.

Telehealth Utilization F18

CPT Code	Descriptor	Units	# clients
	Totals	**7474**	**1710**
0368TU5	ABA Clinical Observation	34	5
0369TU5	ABA Family Guidance	32	5
90791	Psychiatric Eval (no medical)	96	89
90792	Psychiatric Eval (with medical)	297	244
90832	Individual Therapy, 30 min	2	1
90834	Individual Therapy, 45 min	2	2
90837	Individual Therapy, 60 min	3	3
99201	Office/Outpatient new	1	1
99203	Office/Outpatient new	1	1
99204	Office/Outpatient new	10	9
99205	Office/Outpatient new	87	87
99212	Office/Outpatient established	12	11
99213	Office/Outpatient established	2556	798
99214	Office/Outpatient established	3828	1096
99215	Office/Outpatient established	508	270
Q3014GT	Telehealth Site	5	10

Community Providers

The entire Upper Peninsula is lacking providers for physical, mental, and dental health. Providers being overwhelmed can lead to missed diagnosis, inability to slow down and get an accurate history, and inappropriate prescription/diagnosis. Individuals may not feel heard because professionals don't devote enough time to the session. Also, providers may not feel they can become trained well enough to handle more difficult cases.

Ratio of Individuals to Professionals

County	Primary Care Physician	Dentist	Mental Health Providers
Alger	1564:1	2305:1	1537:1
Baraga	953:1	1701:1	1063:1
Chippewa	1463:1	1572:1	524:1
Delta	1516:1	1448:1	670:1
Dickinson	1075:1	1021:1	473:1
Gogebic	964:1	2178:1	635:1
Houghton	1213:1	1662:1	571:1
Iron	1419:1	2239:1	746:1
Keweenaw	no data	2199:0	no data
Luce	802:1	2119:1	795:1
Mackinac	990:1	1353:1	832:1
Marquette	960:1	1145:1	437:1
Menominee	1962:1	1663:1	1164:1
Ontonagon	6007:1	1970:1	5911:1
Schoolcraft	3051:1	2766:1	591:1
Average	1710:1	1823:1	1139:1

*Source: U of M Poverty; Robert Wood Johnson Foundation

The Ratio of Individuals to Professionals table from the University of Michigan Poverty Solutions data shows that our providers are very busy. On average, each dentist and primary care provider needs to serve over 1700 individuals to meet the need of the population in that community. Keweenaw County doesn't have any dentists in the county and Ontonagon County's doctor would need to serve 6000 individuals if everyone living in the county were to receive primary care services in that county. In this table, mental health providers appear to be in abundance in comparison; but the difference is the frequency of visit. Typically, a dentist would see a person twice a year. For mental health, frequency of visit might range from multiple times a year to multiple times a week.

Providers Not Accepting New Patients

There were waiting lists for select services in Copper Country CMH and Pathways CMH area. The other CMH's did not report a waiting list for services in FY18.

Directory

In FY18, Health Services Advisory Group, Inc. (HSAG), a quality improvement organization did an external quality review and indicated that NorthCare and each CMH needed to update current directories to specify who was accepting new patients. Work began on this project with anticipated completion date in FY19.

DAB Migration

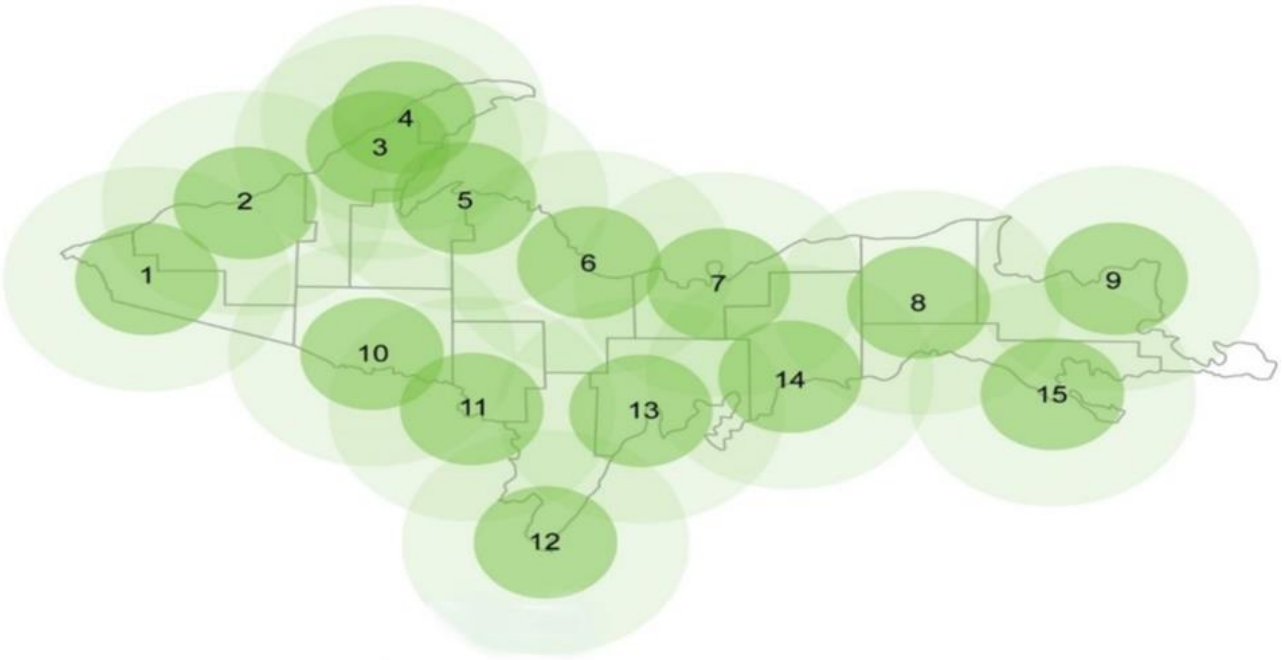
In FY18, it was discovered that consumers who previously had Medicaid suddenly had Healthy Michigan benefit coverage. While this provides the same service coverage for the individual, Healthy MI pays providers at a lesser rate than Medicaid. Seventy consumers with a I/DD diagnosis that should have been considered Medicaid since they had a disability were impacted in FY18. The following codes and corresponding costs were associated with these 70 consumers based on MUNC rates x units. Four consumers were on the Habilitative Supports Waiver (HSW) and denoted as Healthy MI; which is not allowable per department guidelines. The following table shows the service code and the amount of the difference between the Medicaid and Healthy MI rate. Essentially, for HSW consumers the PIHP received $176,709.98 less than it would have if these consumers were appropriately marked as Medicaid. That combined with the other I/DD consumers resulted in a $621,605.45 loss. It is unknown how much revenue was lost for SMI consumers. While this loss does not directly impact the consumer, it does result in lost revenue for the system which could indirectly impact staffing and wages- thus creating workforce shortage and having an impact on the consumer.

CPT Code	COST	CPT Code	COST	CPT Code	COST	CPT Code	COST	CPT Code	COST	CPT Code	COST
90791	$697.05	97168	$376.67	H0002	$331.38	H2014	$51,034.74	T1005	$1,318.60	H2015 HK	$19,155.80
90792	$1,094.74	97802	$462.11	H0023	$3,084.84	H2015	$77,203.27	T1016	$72,788.10	H2016 HK	$153,590.43
90832	$1,212.86	97803	$168.04	H0031	$4,381.99	H2016	$220,830.48	T1017	$20,133.32	T1016 HK	$3,692.15
90834	$3,808.42	99205	$1,074.82	H0032	$2,772.60	H2023	$19,703.76	T1020	$47,563.28	T1999 HK	$271.60
90837	$8,413.80	99212	$155.36	H0034	$459.54	H2030	$1,951.51	T1023	$9,123.75	**HAB COST**	$176,709.98
90887	$285.08	99213	$10,865.24	H0038	$2,669.70	Q3014	$323.55	T1999	$271.60	MUNC rates x units. Cost represents lost revenue for PIHP. HK modifier is for HSW consumers	
96101	$1,610.10	99214	$16,061.94	H0039	$7,864.22	S9445	$956.62	T2025	$253.34		
96372	$4,733.20	99215	$2,167.48	H2000	$1,318.35	S9446	$1,700.64	T2036	$245.20		
97167	$819.38	100-73	$9,111.30	H2011	$7,567.56	T1002	$2,635.92	**TOTAL COST**	**$621,605.45**		

Geographic Location of Providers

Rural Rule

To best provide services, NorthCare strives to ensure providers are available in an individual's area. NorthCare is held to the 60-minute/60-mile rule. The CMH's are located to accommodate this rule. The provider directory, available at www.northcarenetwork.org lists all the CMH providers and links to specific office information such as contact names and address. Directories are updated as needed to assure members have current information about available resources. The dark green area represents the Urban rule of 30-min/30-miles from each CMH office. The light Green area represents the 60-min/ 60-mile radius from each CMH office. To note, Menominee county has two offices, one located by #12 on the map and another in Powers MI, indicated by the small purple circle. The office in Powers is run part time to better accommodate those who live in that area. Because it is only open a few days it has not been added permanently to the map. The second map indicates all the UP SUD providers by county.



Copper Country CMH
- 5 Baraga County
- 3 Houghton County
- 4 Keweenaw County
- 2 Ontonagon County

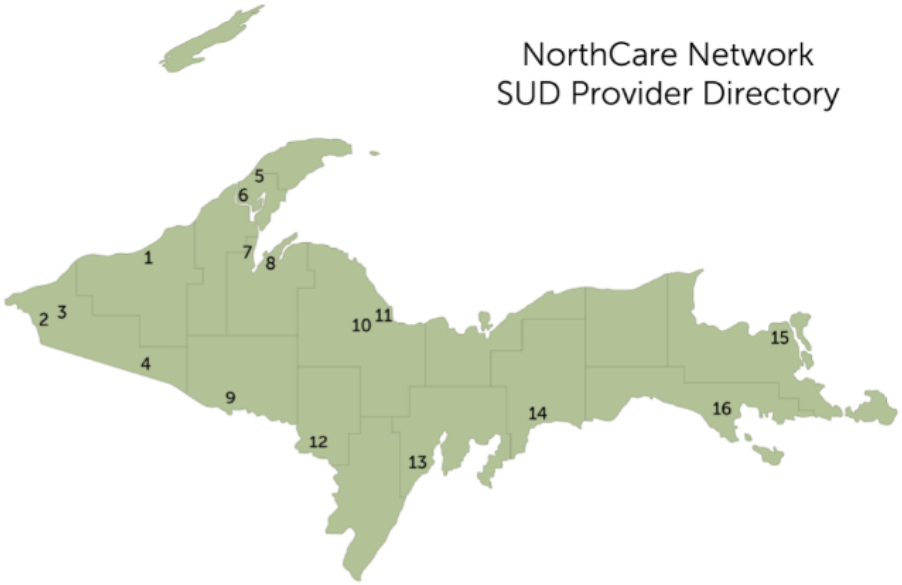
Gogebic Co. CMH
- 1 Gogebic County

Hiawatha Behavioral Health
- 9 Chippewa County
- 15 Mackinac County
- 14 Schoolcraft County

Northpointe Behavioral Health
- 11 Dickinson County
- 10 Iron County
- 12 Menominee County

Pathways CMH
- 7 Alger County
- 13 Delta County
- 8 Luce County
- 6 Marquette County

NorthCare Network
SUD Provider Directory



1 Phoenix House Outpatient
902 River Street, Ontonagon

2 Great Lakes Recovery Outpatient
113 South Curry, Ironwood

3 Phoenix House Outpatient
101 East Mart Street #3, Bessmer

4 Lac Vieux Desert BHS Outpatient
E23970 Pow Wow Trail Road, Watersmeet

5 Phoenix House Residential & Outpatient
57467 Watersworks Street, Calument

6 Phoenix House Outpatient
801 North Lincoln Drive, Hancock

Great Lakes Recovery Outpatient
920 Water Street #6, Hancock

7 Keweenaw Bay Indian Community Outpatient
16429 Bear Town Road, Baraga

8 New Day Treatment Center
16025 Brewery, L'Anse

9 Great Lakes Recovery Outpatient
305 W. Genesee St. Suite 3
Iron River, MI 49935

10 Great Lakes Recovery Outpatient
97 South Fourth Street, Ishpeming

Great Lakes Recovery Youth Residential & Outpatient
104 Malton Road, Negaunee

11 Great Lakes Recovery Outpatient
1009 West Ridge Street #C, Marquette

Great Lakes Recovery Residential
241 Wright Street, Marquette

Catholic Social Services Outpatient
347 Wright Street, Marquette

Marquette General Behavioral Health Services
580 West College, Marquette

12 Great Lakes Recovery
427 South Stephenson Avenue, Iron Mountain

Catholic Social Services Outpatient
427 South Stephenson Avenue #215, Iron Mountian

13 Catholic Social Services
1100 Ludington Street #401, Escanaba

Great Lakes Recovery
1401 North 26th #109, Escanaba

14 Great Lakes Recovery
601 East Lakeshore Drive #101, Manistique

15 Great Lakes Recovery New Hope Outpatient
2655 Ashmun, Sault Ste. Marie

Great Lakes Recovery Women's New Hope House
2655 Ashmun, Sault Ste. Marie

Great Lakes Recovery Men's New Hope House
301 East Spruce Street, Sault Ste. Marie

16 Great Lakes Recovery Outpatient
799 Hambach Street, St. Ignace

Revised 8/2018

Transportation Grant

While the CMH locations are within 60-min/60-mile rule, some consumers still struggle to get to their appointments. Public transportation is extremely limited in the Upper Peninsula. Some counties have a bussing system that will transport between two counties (Alger to Marquette), some counties have a bussing system that will bus between two main towns within the county (e.g. Marquette to Gwinn and Ironwood to Wakefield), and others have transport that stays within the main town. In some areas, finding a taxi service can be difficult, most public transits are not available 24 hours a day/ 7 days a week, and some are not handicap friendly. NorthCare Network was awarded grant funding for transportation starting in FY16 and continuing through FY19. The grant monies can be used to aid adult consumers in getting to routine appointments or to their inpatient mental health or residential substance abuse treatment using gas cards, bus tickets, or CMH staff drivers. In FY18 there were 460 unduplicated consumers for a total of 902 transports served through the transportation grant.

Conclusion

Since the inception of Prepaid Inpatient Health Plans in 2002, NorthCare has been striving to provide efficient and effective treatment to eligible consumers within Region 1 through effective utilization management. Services are contracted with the CMH's, SUD providers, inpatient hospitals, Gryphon and Dial Help crisis service providers, and community providers through the MI Health Link program. Oversight is achieved through a variety of committees.

The number of approved intakes for Mental Health and Substance Use Disorders treatment continues to increase although the total number of Mental Health Access calls has decreased over the past two years. The Upper Peninsula population has remained stable.

Of the consumers approved for services, approximately 75% are admitted into the CMH system. Once in services, NorthCare typically meets the Mission Based Performance Standards and rarely is out of compliance two quarters in a row. Identified issues are addressed through the appropriate committee.

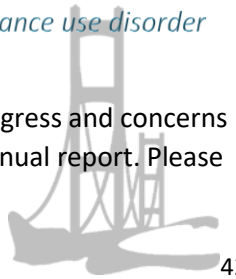
Inpatient hospitalization utilization increased in FY18 compared to FY17. Contracts were executed with two hospitals and a contracted crisis residential opened in the region. Single case agreements were developed for hospitals that NorthCare did not contract with, including hospitals downstate or in neighboring states. House Bill 5439 was introduced in FY18 to improve patient care and expedite the admission process for consumers into an inpatient psychiatric bed via a statewide bed registry. This didn't pass into law until FY19 and it is unknown if/when it may be completed. The bed registry may alleviate excessive calling to multiple hospitals to find a bed, but it will not increase the total number of beds available nor reduce the extreme time consumers are spending in the ER while a psychiatric bed is found.

Alcohol and Opiates continue to be the primary substances consumers are seeking treatment for, although methamphetamine treatment significantly increased in FY18. New Opiate prescribing rules may reduce the ready availability of opiates, but it is unknown what effects that may have. There is the possibility that opiate use disorders will decrease but the negative possibility that methamphetamine use disorders will increase. NorthCare will continue to work with the providers in the region to increase awareness and treatment for co-occurring disorders.

Additionally, integrated care will continue to be a primary focus in FY19, building off efforts completed in FY18. Coordination continues with the Upper Peninsula Health Plan on shared members and the MI Health Link program continues to grow. Telehealth services provide options in areas where providers are lacking. While it is beyond the scope of NorthCare to impact the number of psychiatrists, primary care providers, or dentists practicing in the greater community NorthCare CMH and SUD providers are taking steps to integrate and coordinate care where possible including through the MC3 consultation service.

There was concern in FY18 that continues into FY19 regarding the misplacement of consumers off Medicaid and on to Healthy MI insurance. While this has no impact on the consumer, it does result in less revenue for the PIHP; which in turn means less revenue for the providers and possibly less ability to provide a full scope of services to consumers. Regardless of the difficulties, NorthCare will continue to strive toward its mission to *ensure that every eligible recipient receives quality specialty mental health and substance use disorder services and supports through the responsible management of regional resources.*

NorthCare will continue tracking utilization and demographic trends and will report progress and concerns in the annual newsletter, performance report, and on the website in addition to this annual report. Please contact NorthCare Network Customer Service at 888-333-8030 with concerns.



References

CMHSP Annual Submission Report

CMT Reporting

DIVER Reporting

ELMER Reporting

Michigan Mission-Based Performance Indicator System

U.S. Census Data

Stephanie Grant- DD conference

Center for Behavioral Health Statistics and Quality. (2016). *Key substance use and mental health indicators in the United States: Results from the 2015 National Survey on Drug Use and Health* (HHS Publication No. SMA 16-4984, NSDUH Series H-51). Retrieved from https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2015/NSDUH-FFR1-2015/NSDUH-FFR1-2015.htm

Centers for Disease Control and Prevention. (April 5, 2019). Autism Spectrum Disorder Data and Statistics on Autism Spectrum Disorder. Retrieved from https://www.cdc.gov/ncbddd/autism/data.html

Centers for Disease Control and Prevention. (December 19, 2018). Drug Overdose Deaths. Retrieved from https://www.cdc.gov/drugoverdose/data/statedeaths.html

Centers for Disease Control and Prevention. (July 31, 2017). U.S. County Prescribing Rates, 2017. Retrieved from https://www.cdc.gov/drugoverdose/maps/rxcounty2017.html

Centers for Disease Control and Prevention. Fetal Alcohol Spectrum Disorder Data and Statistics. (April 15, 2019). Retrieved from https://www.cdc.gov/ncbddd/fasd/data.html

Cusack, James; Shaw, Simon; Spiers, Jon; Sterry Rebecca. *Personal tragedies, public crisis. The urgent need for a national response to early death in autism.* Autistica. Retrieved from https://www.sciencemag.org/sites/default/files/documents/AUTISTICA%20REPORT%20-%20Personal%20Tragedies,%20Public%20Crisis.pdf

Guevara Warren, Alicia S. *2019 Kids Count in Michigan Data Book: What It's Like to Be a Kid in Michigan.* Lansing, Michigan League for Public Policy. Retrieved from https://mlpp.org/wp-content/uploads/2019/04/2019-kcdb-master-1.pdf

HealthCare.gov. *Federal Poverty Level.* Retrieved from https://www.healthcare.gov/glossary/federal-poverty-level-FPL/

Mandell, David (March 8, 2018). *Dying before their time: Addressing premature mortality among autistic people.* Sage Journals. Retrieved from https://journals.sagepub.com/doi/full/10.1177/1362361318764742

Mang Chek Wey, SiewYim Loh, Jennifer Geraldine Doss, Abdul Kadir Abu Bakar and Steve Kisely. The oral health of people with chronic schizophrenia: a neglected public health burden. From Australian and New Zealand Journal of Psychiatry 1-10. (2015). Retrieved May 13, 2019, from https://umexpert.um.edu.my/file/publication/00005628_134341.pdf

MI School Data. State of Michigan. *Special Education Data Portraits.* Retrieved from https://www.mischooldata.org/SpecialEducationEarlyOn2/DataPortraits/DataPortraitsDisability.aspx

National Alliance on Mental Illness. *Jailing people with mental illness.* Retrieved from https://www.nami.org/Learn-More/Public-Policy/Jailing-People-with-Mental-Illness

National Institute on Alcohol Abuse and Alcoholism. *Fetal Alcohol Exposure.* Retrieved from https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/fetal-alcohol-exposure

Oral Health Foundation. *Mental Illness and Oral Health.* Retrieved from https://www.dentalhealth.org/mental-illness-and-oral-health

Poverty Solutions at University of Michigan. (2019). Poverty and Well-being Map 2018. Retrieved from https://poverty.umich.edu/data-tools/data-tools-poverty-and-well-being-map-2018.

SAMHSA. *2014-2016 National Survey on Drug Use and Health National Maps of Prevalence Estimates, by Substate Region.* Retrieved from https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHsubstateNationalMaps2016/NSDUHsubstateNationalMaps2016.pdf

Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. *Mental Health Annual Report: 2016. Use of Mental Health Services: National Client-Level Data.* Rockville, MD: Substance Abuse and Mental Health Services Administration, 2018. https://www.samhsa.gov/data/sites/default/files/2016_Mental_Health_Annual_Report_Revised.pdf

The Annie E. Casey Foundation (2018): Kids Count Data Center: Children Ages 0-17 in Out of Home Care-Abuse or Neglect: https://datacenter.kidscount.org/data/tables/1684-children-ages-0-17-in-out-of-home-care-abuse-or-neglect?loc=24&loct=5#detailed/5/3745,3750,3760,3764-3765,3770,3774,3779,3785,3791-3792,3795,3798,3809,3820/false/37,871/any/3575,13164

The Annie E. Casey Foundation (2018): Kids Count Data Center: Confirmed Victims of Abuse and/or Neglect, Ages 0-17: https://datacenter.kidscount.org/data/tables/1676-confirmed-victims-of-abuse-and-or-neglect-ages-0-17?loc=24&loct=5#detailed/5/3744-3826/false/37,871,870,868/any/3559,13162

U.S. Department of Veterans Affairs, *Michigan Veteran Suicide Data Sheet, 2016.* September 2018. Retrieved from https://onceasoldier.org/wp-content/uploads/2018/10/Michigan_2016.pdf

U.S. Department of Veterans Affairs, Veterans Health Administration, Office of Mental Health and Suicide Prevention. Veteran Suicide Data Report, 2005-2016. September 2018. https://www.mentalhealth.va.gov/docs/data-sheets/OMHSP_National_Suicide_Data_Report_2005-2016_508-compliant.pdf

U.S. Department of Veterans Affairs. National Center for Veterans Analysis and Statistics. *Veterans as a percent of county population FY2017: Michigan.* Retrieved from https://www.va.gov/vetdata/docs/SpecialReports/State_Summaries_Michigan.pdf

U.S. Department of Veterans Affairs. Veterans' Health Administration. Locations. October 12, 2018. Retrieved from https://www.va.gov/directory/Guide/division.asp?dnum=1

United States Department of Labor Bureau of Labor Statistics (May 17, 2019). *Economy at a Glance-Michigan*. Retrieved from https://www.bls.gov/eag/eag.mi.htm

United States Department of Labor Bureau of Labor Statistics. *Local Area Unemployment Statistics.* Retrieved from https://www.bls.gov/lau/home.htm#cntyaa

Upper Peninsula Health Plan. *Provider Search- Medicaid and Healthy Michigan Plan*. Retrieved from https://www.uphp.com/provider-search

What Are the ASAM Levels Of Care? Retrieved from https://www.asamcontinuum.org/knowledgebase/what-are-the-asam-levels-of-care/

World Health Organization. (n.d.). *Violence and injury prevention: Child maltreatment (child abuse)*. Retrieved from http://www.who.int/violence_injury_prevention/violence/child/en/