



***NorthCare  
Provider Network  
Service Delivery & Geographic Access***

*FY06 Review and Analysis  
March 2007*

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# Introduction

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# Network Conception

NorthCare Network, a department of the lead agency Pathways, entered into an affiliation agreement with four other regional community mental health boards and was established as the region's Prepaid Health Plan in Fiscal Year 03. The agreement outlines a hub and spoke model where Pathways Community Mental Health fulfills multiple roles:

- Pathways' 120 licensed health professionals deliver behavioral health services to almost 1900 consumers annually in four counties.
- As a division of Pathway's, NorthCare is responsible for PIHP functions related to the fifteen counties of our region.
- NorthCare's Coordinating Agency manages access to over thirty contracted substance abuse service providers located throughout the Upper Peninsula.

**Table 1:** Snapshot of regional CMHSP and US census populations by county

CMHSP Board	FY06 Services †		Coverage US Census *		
	FTE	Consumers	County	Pop	Δ%
Copper Country	54 Licensed Clinical Professionals	DD 181 MIA 8 MIC 0 SED173 SMI 556	Baraga Houghton Keweenaw Ontonagon	8746 35705 2195 7363	0.0 -0.9 -4.6 -5.8
Gogebic Licensed SA provider	25 Licensed Clinical Professionals	DD 181 MIA 77 MIC 44 SED97 SMI 248	Gogebic	16861	-2.9
Hiawatha Licensed SA provider	60 Licensed Clinical Professionals	DD 306 MIA 361 MIC 118 SED179 SMI 428	Chippewa Mackinac Schoolcraft	38780 11331 8819	0.6 -5.1 -0.9
Northpointe	66 Licensed Clinical Professionals	DD 261 MIA 79 MIC 38 SED134 SMI 674	Dickinson Iron Menominee	28032 12299 24996	2.0 -6.4 -1.3
Pathways Lead Agency NorthCare PIHP	120 Licensed Clinical Professionals	DD 592 MIA 968 MIC 157 SED317 SMI 902	Alger Delta Luce Marquette	9662 38347 6789 64760	-2.0 -0.4 -3.3 0.2

† NorthCare Data Warehouse, Consolidated Service Model FY06, Consumers receiving reported services

\* <http://quickfacts.census.gov> U.S. Census, 2005 population estimate with percent change 4/1/2000 to 7/1/2005

# Network Development Approach

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- **Contracts:** NorthCare Network began with five independent CMHSP Boards providing the full service array for their catchment areas. Each Board had an independent contract with the regional hospital. Currently, the NorthCare primary provider system includes the five CMHSP Boards, thirty substance abuse providers, the after hours crisis phone service (Dial HELP) and Marquette General Hospital where 87% of our consumers requiring inpatient care receive services.
- **Standards:** As a managed care unit with five CMHSP Boards and thirty substance abuse providers, NorthCare has placed a high priority on the standardization of provider practice as related to service delivery.
- **Regional Committees & Cross Functional Teams:** Regional efforts have been guided by regional committees focused on specific areas as well as regional cross functional teams. Technology such as SameTime, QuickPlace and video conferencing are all used to provide effective and efficient means of collaboration and communication for our partners.
- **Provider-Oriented Projects:**
  - Implementation of Evidence Based Practices
    - Assertive Community Treatment
    - Family PsychoEducation
    - Parent Management Training
    - Integrated Treatment of Co-Occurring Disorders
  - Coordination of full CMHSP participation in the state-wide CAFAS project for youth
  - Establishment of a single after-hours crisis service and a standard pre-admission screening process for all citizens in the Upper Peninsula
  - Formulation of the NorthCare benefit plan to guide consistent service authorization
  - Definition of standardized access procedures
  - Alignment of regional committees with regional goals
  - Standardization of key data definition, capture and storage
  - Regional Grievance and Appeals process and forms for Medicaid enrollees and a regional electronic complaint system

# Network Capacity

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## FY06 Consumer Base & Service Delivery

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- **Crisis:** NorthCare Network must provide crisis services to all the citizens in the Upper Peninsula according to the regulations outlined in the Michigan Mental Health Code. Crisis intervention services and screening for inpatient psychiatric hospitalization must be available from the Network as needed.
- **Priority Population for CMHSP Services:** The consumer population eligible to receive ongoing Medicaid services is defined by the Michigan Mental Health Code, the Michigan State Medicaid Provider Manual, and the Medicaid Managed Specialty Supports and Services Concurrent 1915(b)/(c) Waiver Program Master Contract. Specialty services provided by the CMHSP are directed toward our priority population: youth with serious emotional disturbances (SED); individuals who have a serious mental illness (SMI); individuals with developmental disabilities (DD); and those individuals who experience co-occurring disorders involving any of the above with substance abuse disorders. (**Appendices 1 and 2** present the diagnostic groups that have received services in 2006.) NorthCare managed services for 4,759 Medicaid consumers in FY06. Of these, 1,109 (23%), were consumers with a developmental disability and 3,650 (77%) were adults and children with mental health disorders.
- **Level of Care:** The NorthCare Network benefit plan is utilized by the five CMHSP Boards when a consumer has been fully assessed and assigned a level of care. The benefit plan allows regional monitoring of eligibility determinations and over and under utilization of services. **Appendix 3** summarizes the consumers according to primary eligibility and level of service.
- **Substance Abuse:** The NorthCare Coordinating Agency manages the care for Medicaid enrollees seeking treatment for substance abuse or substance dependency disorders throughout the 15 counties in the Upper Peninsula. **Appendix 4** summarizes the primary diagnoses of clients receiving substance abuse services.

### See Appendices for:

1. FY06 Consumer Base Overview by Diagnostic Category
2. FY06 Consumer Base Consumers by Diagnostic Category by Age
3. FY06 Consumer Base Consumers by Primary Eligibility and Level of Service
4. FY06 Substance Abuse Clients

# FY06 Provider Overview

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## Contracting & Compliance

NorthCare Network contracts with the five CMHSP, Marquette General Hospital, and Dial HELP, the agency providing regional after hour's crisis phone service. The CMHSP are responsible for all other service provider contracts. NorthCare is responsible for the oversight of the subcontracts for all the providers of Medicaid services.

NorthCare directs the mandatory requirements for Medicaid compliance through contract, policy, and regional plans. According to these documents, providers must be available within a sixty (60) mile radius from the consumer's home; a provider must be available with physical access for enrollees with disabilities; and the provider has a responsibility to assist with transportation needs through coordination of services with the Upper Peninsula Medical Health Plan and the Department of Human Services. (Appendices 5, 6, and 7 substantiate the geographic access requirements are met.)

## CMHSP Provider Network

Three provider tiers meet the service demands of a Medicaid PIHP. **Appendix 8** presents the service array provided in FY06.

- **Tier 1 – Licensed Clinical Providers:** Located at the CMHSP and responsible for the provision of the services that are our core mission. **Appendix 9** presents a simple list of the number of licensed providers across the region. **Appendix 10** furthers the analysis by examining the full time equivalents at each CMHSP. **Appendix 11** completes the picture by relating the numbers of providers with specific populations at each Board.
- **Tier 2 – Paraprofessionals:** Provide support services to consumers. The richness of the first tier of providers is necessary to provide adequate supervision to the second tier. In FY06, paraprofessionals provided community living support services and skill building services to 1,427 consumers, or approximately 34% of the Medicaid consumers. (**Appendix 12** presents Board specific data.) A new strategy to maximize the effectiveness of paraprofessionals is to train peer support specialists to provide some of these services. Five Peer Support Specialists have received State of Michigan certification and up to eight more trainees will attend certification classes in 2007.
- **Tier 3 – Residential Service Staff:** Residential homes may be operated by the CMHSP or subcontracted to a private provider. At the present time, hundreds of direct care staff work in 60 different homes throughout the region to provide care for those consumers requiring a residential level of care. Staff provide daily personal care and community living supports to almost 400 consumers throughout the region. Individual special contract arrangements are in place for approximately an additional 100 individuals. A breakdown of residential providers by type and Board is given in **Table 2**. NorthCare also has 20 consumers placed out of network; these placements are developed and monitored by the individual responsible Board.

**Table 2 : Residential Providers in the Upper Peninsula**

Group Homes	NORTHCARE		Copper Country		Gogebic		Hiawatha		NorthPointe		Pathways	
	# homes	# beds	# homes	# beds	# homes	# beds	# homes	# beds	# homes	# beds	# homes	# beds
CMHSP owned & operated	23	187	10	67	4	34	3	36	6	50	n/a	n/a
Contracted	29	207	2	16			7	44	1	8	19	139
Special Contracts (in network)	32	97	4	5			4	9	11	33	13	50
<b>TOTALS</b>	<b>84</b>	<b>497</b>	16	88	4	34	14	89	18	91	32	189
Out of network placements		20		2				11		3		4

Source: NorthCare Utilization Report

**Substance Abuse**

With providers located across the region, the role of the NorthCare Coordinating Agency is to plan, coordinate and oversee the delivery of substance abuse services within the 15 counties. **Appendix 13** illustrates the 60 mile service delivery requirement is met.

**Community (Acute) Inpatient Psychiatric Service Providers**

These providers work with both NorthCare Network and the CMHSPs for authorization and continuing stay reviews. NorthCare employs a hospital clinical reviewer who works with the NorthCare Medical Director to evaluate (authorize) all CMHSP admissions to Marquette General Hospital (MGH) to ensure medical necessity criteria are met. NorthCare’s Medical Director is also a treating psychiatrist on the Psychiatric Unit at MGH. This centralization with the primary provider of inpatient care has allowed a high degree of coordination of care. Quality Improvement meetings are held regularly with the Director of MGH Inpatient Services. **Table 3** summarizes the number of consumers and inpatient days authorized by NorthCare in FY06.

**Table 3:** Number of consumers and inpatient days authorized by NorthCare in FY06

Hospital	# Consumers	% Consumers	# Days	% Days
<b>Marquette General Hospital</b>	669	85.3%	4041	87.2%
<b>Other</b>	115	14.7%	594	12.8%
	784	100.0%	4635	100.0%

## **Out of Network Providers**

These providers are located outside our geographic area. Each CMSHP has the authority to contract for any services that are authorized on a case by case basis. Consumers using a self determination model for their treatment plan may access out of network providers of their choice. Payment for the services would be based on the individual budget developed as part of the individual plan of service.

### **See Appendices for:**

5. Geographic Access for Mental Health Services - Consumers
6. Geographic Access for Substance Abuse Services - Consumers
7. Geographic Access for Mental Health Services – FTE
8. FY06 Medicaid Service Array
9. Number of Professionals Delivering Services by Site, FY06
10. FTE of Professionals Delivering Services by Site, FY06
11. Providers Delivering FY06 Reportable Medicaid Services by Board, by Consumer Eligibility
12. Consumers Receiving Reportable CLS & Skill Building
13. Geographic Access for Substance Abuse Services – FTE

## **Analysis of Future Network Needs**

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# Approach

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Given NorthCare's current penetration rate of 11% of Medicaid enrollees, it appears the NorthCare Network of Providers is sufficient to meet current needs.

Our analysis of future needs considers the probable impact of the following factors on the public mental health service system:

- Medicaid enrollment
- Demographic change
- Prevalence rates of disease
- Co-morbidity: In both the older adult and youth populations

# Medicaid Enrollment

The behavioral health needs of Medicaid consumers are met by two systems. Medicaid consumers with mild to moderate disorders are served by the Upper Peninsula Health Plan. During 2005 (the most recent year for which complete data is available) the average monthly enrollment for the UPHP was 25,679. In 2005--2,448 consumers accessed behavioral health services through this plan. This figure indicates approximately 10% of the UPHP enrollees accessed behavioral health benefits.

**Table 4** gives the percentage of the Medicaid eligible consumers who were served by NorthCare in FY06. Given the serious budgetary deficit and the high rates of unemployment projected for the state of Michigan over the next several years, it seems reasonable to anticipate that Medicaid enrollment will at least stay at its current rate.

**Table 4:** Medicaid Penetration

Board	Population Estimate	Medicaid Eligible Estimate	% of Total Population	Consumers Served	% of Medicaid Eligible
<b>Copper Country</b>	54,009	7,794	14%	679	9%
<b>Gogebic</b>	16,861	2,846	17%	394	14%
<b>Hiawatha</b>	58,930	8,538	14%	932	11%
<b>Northpointe</b>	65,327	9,384	14%	895	10%
<b>Pathways</b>	119,558	15,808	13%	1,859	12%
<b>NorthCare</b>	314,685	44,370	14%	4,759	11%

Sources: Eligibility numbers for September 2006 as reported by DKHowe.com as of March 2007; Consumers Served in FY06 with reportable Medicaid services in the NorthCare Data Warehouse.

**Appendix 14** illustrates the trending data for Medicaid eligible enrollees by age from April 2006 – February 2007. The demographic data in the next section suggests this declining trend will not change in the next five years.

**See Appendix for:**

14. Medicaid Eligible by Age from April 2006 – February 2007

## Demographic Change

**Table 5:** Upper Peninsula Population Comparison

	<b>Population over 65</b> Michigan Standard 12.4%	<b>Population under 18</b> Michigan Standard 24.9%
<b>County</b>	<b>% of Total Population</b>	<b>% pf Total Population</b>
Alger	17.8	17.8
Baraga	16.7	20.2
Chippewa	13.1	19.2
Delta	17.9	21.6
Dickinson	20.2	21.9
Gogebic	21.4	17.9
Houghton	14.9	19.8
Iron	22.8	18.6
Keweenaw	21.7	19.2
Luce	15.7	19.4
Mackinac	20.6	20.2
Marquette	14.0	19.0
Menominee	17.4	21.9
Ontonagon	23.5	17.4
Schoolcraft	19.8	20.5

Source U.S. Census Bureau as of March 1, 2007

- **Older Adults:** Michigan is an aging state without the influx of new families to mitigate the effect of this demographic fact. In **Table 1**, page 5, the declining census across the UP was shown. Eleven out of 15 counties report a decline in population over the past 5 years. As shown in **Table 5** above, the Upper Peninsula has a larger proportion of adults over 65 than the Michigan average of 12.4, with the lowest proportion in Chippewa County at 13.1% and the highest in Ontonagon with 23.5%. Trending data for youth indicates a decline in their numbers as the number of those over 65 increases.
- **Youth:** The demographics presented for the Upper Peninsula indicate a declining population in the under 18 age group. While nationally there is a shortage of child psychiatrists and that trend is expected to continue, one of the CMHSPs has been utilizing telemedicine effectively to meet this need. Regionally there is a need to evaluate the willingness to expand psychiatric services using this technology.
  - **Youth Psychiatric Inpatient Care:** Currently Marquette General Hospital has a five bed Youth Unit with the capacity to increase beds if needed. There is no indication that MGH will discontinue providing this service.

- **Poverty:** The State of Michigan continues to experience high unemployment rates, ranking second in the nation and surpassed by the State of Mississippi. The Upper Peninsula counties have higher unemployment rates than the State of Michigan average. This is reflected in the 2004 poverty rates for the 15 counties in the Upper Peninsula:
  - Lowest in Dickinson County
    - 10.3% living in poverty
    - 13.9% under the age of 18 living in poverty
  - Highest in Luce County
    - 16.2% living in poverty
    - 21.8% under the age of 18 living in poverty

Current predictions for Michigan suggest these rates will not significantly improve as the state faces a three billion dollar deficit over the next several years.

- **Ethnic groups**
  - **Caucasian:** The Upper Peninsula has a homogenous Caucasian culture. The lowest percentage of Caucasians is in Chippewa County with 78% and the highest percentage is in Dickinson County with 98.1%. Significantly, 10 of the 15 counties have a population of Caucasians greater than 90% with 8 of those 10 counties greater than 95%.
  - **Native American:** The Native American population accounts for >5% but < than 13% in 5 counties in the Upper Peninsula. Studies by SAHMSA and Center for Health Equity Research and Promotion indicate Native Americans score significantly higher in substance abuse disorders and the prevalence of frequent mental distress among adults than other ethnic groups in the United States. The presence of Native Americans across the Upper Peninsula suggests the importance of sustaining efforts to collaborate on prevention and educational programs that have been effective with this group.

The NorthCare Coordinating Agency for Substance Abuse Services recognizes the need for culturally specific substance abuse treatment for our Native American population. It is essential for our substance abuse providers to receive culturally specific training on treatment issues and treatment outcomes. The Substance Abuse Provider Network along with the NorthCare Coordinating Agency works in collaboration with Northern Michigan University Native American Studies Program to create training opportunities.

NorthCare requires annual cultural diversity training for staff which often explores relevant aspects of Native American Culture. Each CMHSP is monitored to ensure local referral and collaboration agreements are in place with local tribes and Indian Health Centers. This has improved coordination of care for the Native Americans receiving behavioral health services.

# Prevalence Rates of Disease

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Almost 30% of the general population is likely to experience a mental health or addictive disorder within a 12 month period.<sup>1</sup>

According to a US Surgeon General's report on Mental Health (1999), approximately 20% of the population is affected by one or more mental health disorders during any given year. An additional 6% of the population will have an addictive disorder and another 3% are likely to have co-occurring mental health **and** substance use disorders.

In this group of all disorders, less than half are likely to ever seek professional help:

- 20% are likely to seek general medical treatment and/or mental health counseling for mild to moderate conditions
- 12% are likely to seek outpatient substance abuse treatment
- 11.5% are likely to receive mental health specialty services from the public mental health system.

Almost half of those individuals with mental illness will experience some degree of impairment in functioning during the course of the disorder(s). The same Surgeon General's Report estimated that about half of those with some degree of impairment (5.4% of all adults and 7% of all children) will meet criteria for a serious mental illness (SMI) or serious emotional disturbance (SED).

Given these prevalence estimates and NorthCare's client base of 4,759, NorthCare and the UPHP appear to be successfully meeting the current needs of the Medicaid enrollees in the Upper Peninsula. Penetration rates regionally are consistent with national standards: UPHP penetration rate approximately 10% and NorthCare an overall penetration rate of 11% in FY06.

With an expected decrease in population rates and stable or increasing Medicaid enrollment, maintenance of the current NorthCare network should be sufficient to meet future needs of the most seriously mentally ill or emotionally disturbed.

*Special Note – Addictive Disorders:* According to the Surgeon General report cited above, in the United States, 6% of the adult population and 2% of youth between the ages of 9 and 17 meet diagnostic criteria for an addictive disorder. Regional statistics for the Upper Peninsula indicate the prevalence of people needing substance abuse services is 19.6%.<sup>2</sup> This suggests we may also experience a higher degree of co morbidity with serious mental illnesses.

Individuals with developmental disabilities: Individuals with developmental disabilities comprise approximately 1 to 2% of the general population, consisting of those individuals with diagnoses of Mental Retardation and/or other developmental disorders (e.g., genetic disorders, cerebral palsy, spinal bifida)<sup>3</sup> (DSM-III-R). Although the incidence rates of developmental disabilities are much lower than the prevalence rates for mental illness, it is expected that a significant majority of individuals with a disability will seek supports from the CMHSP system throughout their adult life.

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<sup>1</sup> Lifetime and 12 month Prevalence of DSM-III Psychiatric Disorders in the U.S.: Results from the National Co morbidity Study, Archives of General Psychiatry (51), Jan, 1994.

<sup>2</sup> Michigan Department of Community Health, Office of Drug Control Policy September 2003,

<sup>3</sup> Mental health data is given in 12 month prevalence rates, developmental disabilities data is provided for incidence rates, as these disorders are expected to continue throughout an individual's life.

Professional and community supports are currently provided for over 1,100 individuals with developmental disabilities in the NorthCare network. The NorthCare penetration rate for serving those with developmental disabilities is 3%, well in line with national incidence and service utilization data.

Of the 1,100+ individuals with developmental disabilities, currently, almost 500 of these individuals receive CMHSP supports in residential settings, and openings for local beds are at a premium (currently only seven open beds are available).

To anticipate future need, NorthCare estimates 63 individuals with developmental disabilities currently between 18 and 26 may require residential services in the future due to aging parents or families no longer able to keep their adult children at home. In addition, approximately 30 individuals in the most intensive levels of care will be turning 18 within the next five years, and another 23 will reach age 18 within 10 years. As these disorders persist across a lifetime, these individuals can be expected to continue to need intensive services and an increase in the need for residential services would be expected.

## Co-morbidity

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Co-Morbidity can refer to the co-existence of both a mental health disorder and a substance use disorder. It can also be used to describe the presence of two or more psychiatric disorders (AXIS I and AXIS II). Of increasing concern is the co-morbidity of a mental health diagnosis and physical health problems or physical health complications and an addictive disorder. It is also possible for disorders in all these areas to manifest themselves simultaneously. A triple assault creates more serious symptoms; a prolonged course of treatment; and/or poorer outcomes.

- **Mental illness and addictive disorders:** Estimates of the co-morbidity for both substance use disorder *and* a mental illness have ranged from 49% to 60% for those individuals diagnosed with *either* a psychiatric diagnosis or an addictive disorder. As a result, it is estimated that about half of the individuals seeking treatment for either disorder will also have symptoms of another significant disorder. Together, these statistics indicate that approximately 10% of the general population has both mental health and substance abuse diagnoses.

These individuals require longer and more intensive treatment and experience more negative outcomes. This further substantiates the need for specialized assessment for co-occurring disorders and treatment specialists experienced in the treatment of both psychiatric and addictive disorders.

- **Individuals served by CMHSP and medical problems:** There are several trends with our consumers involving medical co morbid conditions:
  - Iatrogenic conditions—a metabolic disorder experienced as a side effect of the atypical antipsychotic
  - Aging DD population with increasing medical complications
  - Increasing prevalence of obesity--according to the National Advisory Committee on Rural Health and Human Services 2005 report, Michigan ranked third for the percentage of adults with obesity (24.4%).
- **Mental illness and developmental disabilities:** Historically, dual diagnosis referred to those individuals who had a developmental disability and a mental illness. The CMHSP have the responsibility to have a differential diagnosis process to best determine treatment strategies for the individuals who are in this category. Of the +1,100 individuals with developmental disabilities, approximately one-third have a diagnosis on AXIS I as well as their primary diagnosis on Axis II. As autism rates are increasing nationally, more services may be required by this group. The need for psychiatric time is increased with this population as their treatment is complex and requires more monitoring.
- **Youth and Co-occurring Disorders:** The current benefit plan is designed to serve the Seriously Emotionally Disturbed youth in our region. Although the youth population is expected to decline across the next 13 years, epidemiology for severe mental illness and co-occurring disorders suggests we will need to continue to focus resources on this population. Attention must be paid particularly to collaboration with the school systems in prevention and early intervention programs dealing with substance abuse, teen suicide and violence.

# Conclusions

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- **Evidence Based Treatment:** Dollars must be directed to serve the most severe illnesses. Prudent use of resources requires providing treatments which have been proven effective. We will maintain the training and implementation of Evidence Based Practices we have in place today. We need to broaden the clinical skill base of our practitioners to better utilize peer directed services and vocational services. In addition, we must utilize emerging and promising practices to meet newly identified challenges. We will focus on early intervention and recovery for all populations.
- **Residential:** The PIHP is working toward a consistent regional approach to the development of residential services. Two Boards worked together to bring a private not for profit contractor to the region to develop residential programs for SMI and DD consumers. Three new facilities are now in operation. The regional UM committee for DD Services regularly reviews residential data to determine any unmet needs. Increased efforts at joint ventures in residential services and continued monitoring at the regional level should ensure that any unmet needs will be addressed on an ongoing basis.
- **Integrated Co-occurring Services:** We continue to train staff in Motivational Interviewing and establish standard screening and assessment processes for identifying co-occurring disorders. The integration of co-occurring services will remain a priority for the region. Although initial steps have had some positive local outcomes, a regional culture of recovery has not yet been established.
- **Aging Population:** NorthCare with our providers must begin the process of studying the aging population. We need to anticipate the mental health resources that will be necessary for this increasing population. We must develop a collaborative system the many agencies working with older adults. Collaboration will allow us to maximize our resources and avoid duplication of services.

# Appendix

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## Appendix 1

### FY06 Consumer Base Overview by Diagnostic Category

AXIS I	Total Consumers	% of Regional Population est. 314,685
Abuse/Neglect	1	0.00%
Adjustment Disorders	215	0.07%
Anxiety Disorders	168	0.05%
Attention Deficit Disorders	243	0.08%
Autistic Spectrum Disorders-incl Pervasive DD	197	0.06%
Behavior Disorders	212	0.07%
Bipolar Disorders	559	0.18%
Cognitive Disorders	3	0.00%
Dementia	6	0.00%
Disorders due to General Medical Condition	90	0.03%
Eating, Sleeping, Movement & Elimination Disorders	12	0.00%
Impulse Control Disorders	21	0.01%
Learning Disorders	21	0.01%
Major Depressive Disorders	796	0.25%
MISC Affective Disorders	385	0.12%
Misc Disorder	9	0.00%
Misc. Childhood Disorders	24	0.01%
Psychotic Disorder	48	0.02%
Schizophrenia	712	0.23%
Sexual Disorder	5	0.00%
Substance Abuse Disorders	105	0.03%
Substance Induced Disorders	22	0.01%
	<b>3854</b>	<b>1.22%</b>
AXIS II		
Mental Retardation	1106	0.35%
Personality Disorder	529	0.17%
	<b>1635</b>	<b>0.52%</b>

Source: NorthCare Provider Service Model FY06. Consumers with reportable, Medicaid services.

Note: Some occurrences missing due to incomplete diagnostic data from CMHSPs.

## Appendix 2

### FY06 Consumer Base Consumers by Diagnostic Category by Age

AXIS1PCategory	AXIS1P	Total	Clients Age 0-17	Clients Age 18-64	Clients Age 65+
<b>Totals</b>	<b>Totals</b>	<b>7,682</b>	<b>1,826</b>	<b>5,119</b>	<b>525</b>
<b>Abuse/Neglect</b>	995.53:CHILD SEXUAL ABUSE	1	1		
	309.0:ADJUST DIS W/DEP MD	35	12	21	2
	309.21:SEPAR ANXIETY DIS	3	3		
	309.24:ADJUST DIS W/ANXIETY	11	4	6	1
	309.28:ADJUST DIS W/ANX.DEP	39	12	25	2
	309.3:ADJUST DIS W/DIS.CON	10	8	2	
	309.4:ADJUST DIS W/EMO.CON	21	16	5	
	309.81:PTSD	89	44	44	1
	309.9:ADJUST DIS UNSPEC	7	1	6	
<b>Adjustment Disorders</b>		<b>215</b>	<b>100</b>	<b>109</b>	<b>6</b>
	300.00:ANXIETY DISORDER NOS	39	5	34	
	300.01:PANIC DIS W/O AGORA	11	1	10	
	300.02:GEN ANXIETY DIS	42	4	38	
	300.11:CONVERSION DISORDER	1		1	
	300.15:DISSOCIATIVE DIS NOS	1		1	
	300.21:PANIC DIS W/AGORA	17		15	2
	300.23:SOCIAL PHOBIA	10	3	7	
	300.29:SPECIFIC PHOBIA	3	1	2	
	300.3:OBSESS-COMPUL DIS	36	9	24	3
	300.7:BODY DYSMORPHIC DIS	1		1	
	300.81:SOMATIZATION DIS	2		2	
	308.3:ACUTE STRESS DIS	5	1	4	
<b>Anxiety Disorders</b>		<b>168</b>	<b>24</b>	<b>139</b>	<b>5</b>
	314.00:ADHD,INATT TYPE	49	43	6	
	314.01:ADHD,HYPER-IMP-COMB	159	123	36	
	314.9:ADHD NOS	35	29	6	
<b>Attention Deficit Disorders</b>		<b>243</b>	<b>195</b>	<b>48</b>	
	299.00:AUTISTIC DISORDER	116	81	35	
	299.80:PERVASIVE DEV DIS	81	54	26	1
<b>Autistic Spectrum Disorders-incl Pervasive DD</b>		<b>197</b>	<b>135</b>	<b>61</b>	<b>1</b>
	312.34:INTER EXPLOSIVE DIS	21	5	16	
	312.81:CONDUCT DIS CHILD ON	11	11		
	312.82:CONDUCT DIS ADOL ONS	5	5		
	312.89:CONDUCT DIS UNSPEC	6	4	2	
	312.9:DISRUP BEH DIS NOS	27	25	2	
	313.81:OPPOSI DEFIANT DIS	142	134	8	
<b>Behavior Disorders</b>		<b>212</b>			

Source: NorthCare Provider Service Model FY06. Counts include consumers with reportable, Medicaid services.  
 Note: Some occurrences missing due to incomplete diagnostic data from CMHSPs.

## Appendix 2, continued

AXIS1PCategory	AXIS1P	Total	Clients Age 0-17	Clients Age 18-64	Clients Age 65+
	296.00:BPLR.I.SIN.MAN.UNSP	8	4	4	
	296.01:BPLR.I.SIN.MAN.MILD	1		1	
	296.02:BPLR.I.SIN.MAN.MOD	1		1	
	296.04:BPLR.I.SIN.MAN.SEVP	3		3	
	296.33:MAJ.DEPR.RCR.SEVE	1		1	
	296.40:BPLR.I.MREC.MAN/HYP	45	6	32	7
	296.41:BPLR.I.MREC.MAN.MILD	6	1	4	1
	296.42:BPLR.I.MREC.MAN.MOD	7		6	1
	296.43:BPLR.I.MREC.MAN.SEVE	11		10	1
	296.44:BPLR.I.MREC.MAN.SEVP	29		26	3
	296.45:BPLR.I.MREC.MAN.PREM	9		7	2
	296.46:BPLR.I.MREC.MAN.FREM	3		3	
	296.50:BPLR.I.MREC.DEP.UNSP	17	1	15	1
	296.51:BPLR.I.MREC.DEP.MILD	8		8	
	296.52:BPLR.I.MREC.DEP.MOD	37		33	4
	296.53:BPLR.I.MREC.DEP.SEVE	29		26	3
	296.54:BPLR.I.MREC.DEP.SEVP	14	1	13	
	296.55:BPLR.I.MREC.DEP.PREM	6		6	
	296.56:BPLR.I.MREC.DEP.FREM	5		5	
	296.60:BPLR.I.MREC.MIX.UNSP	23	5	18	
	296.61:BPLR.I.MREC.MIX.MILD	6	3	3	
	296.62:BPLR.I.MREC.MIX.MOD	52	5	46	1
	296.63:BPLR.I.MREC.MIX.SEVE	16	1	14	1
	296.64:BPLR.I.MREC.MIX.SEVP	25		24	1
	296.65:BPLR.I.MREC.MIX.PREM	7	1	6	
	296.66:BPLR.I.MREC.MIX.FREM	3		3	
	296.7:BPLR.I.MREC.UNSP	23	7	15	1
	296.80:BPLR.DIS.NOS	76	29	45	2
	296.89:BPLR.II.DIS	88	7	76	5
<b>Bipolar Disorders</b>		<b>559</b>	<b>71</b>	<b>454</b>	<b>34</b>
<b>Cognitive Disorders</b>	<b>780.9:AGE-RELATED COG DEC</b>	<b>3</b>			<b>3</b>
	290.40:DEM.VASC.UNCOM	2			2
	290.42:DEM.VASC.DELUS	3			3
	290.43:DEM.VASC.DEPR	1		1	
<b>Dementia</b>		<b>6</b>		<b>1</b>	<b>5</b>
	293.81:PSY DIS DUE TO MED/C	4		3	1
	293.82:PSY DIS DUE TO MED/C	2	1	1	
	293.83:MD DIS DUE TO MED/CO	24	2	17	5
	293.9:MTL DIS DUE TO MED/C	3	2	1	
	294.0:AMN DIS DUE TO MED/C	1		1	
	294.1:DEM DUE TO MED/CONDI	4		3	1
	294.10:DEMENTIA W/O BEH DIS	9		1	8
	294.11:DEMENTIA WITH OTHER	23		1	22
	294.8:AMN DIS/DEM NOS	8		3	5
	294.9:COGNITIVE DISORDER	12	4	8	
<b>Disorders due to General Medical Condition</b>		<b>90</b>	<b>9</b>	<b>39</b>	<b>42</b>

Source: NorthCare Provider Service Model FY06. Counts include consumers with reportable, Medicaid services.

Note: Some occurrences missing due to incomplete diagnostic data from CMHSPs.

## Appendix 2, continued

AXIS1PCategory	AXIS1P	Total	Clients Age 0-17	Clients Age 18-64	Clients Age 65+
	307.1:ANOREXIA NERVOSA	2	1		1
	307.23:Tourette's DIS	2	2		
	307.3:STEREO MOVEMENT DIS	1		1	
	307.51:BULIMIA NERVOSA	1		1	
	307.52:PICA	2		2	
	307.59:FEED DIS OF INF/CHIL	2	2		
	307.7:ENCOPRESIS W/O CONS	2	1	1	
<b>Eating, Sleeping, Movement &amp; Elimination Disorders</b>		<b>12</b>	<b>6</b>	<b>5</b>	<b>1</b>
	312.23:SOCIALIZED CONDUCT DISORDER S	1	1		
	312.30:IMP-CON DIS NOS	17	4	13	
	312.31:PATHOLOGICAL GAMB	1		1	
	312.39:TRICHOTIL	2		2	
<b>Impulse Control Disorders</b>		<b>21</b>	<b>5</b>	<b>16</b>	
	307.9:COMMUNI DIS NOS	1	1		
	315.31:MIXED RECP-EXP LANG	1		1	
	315.39:PHONOLOGICAL DIS	2		2	
	315.4:DEVEP COORD DIS	5		4	1
	315.9:LEARNING DIS NOS	12	7	5	
<b>Learning Disorders</b>		<b>21</b>	<b>8</b>	<b>12</b>	<b>1</b>
	295.70:SCHIZOAFFECTIVE DISO	1		1	
	296.20:MAJ.DEPR,SIN,UNSPEC	20	3	17	
	296.21:MAJ.DEPR,SIN,MILD	7	3	4	
	296.22:MAJ.DEPR,SIN,MOD	38	17	18	3
	296.23:MAJ.DEPR,SIN,SEVE	43	6	35	2
	296.24:MAJ.DEPR,SIN,SEVP	12	2	9	1
	296.25:MAJ.DEPR,SIN,PREM	7	1	5	1
	296.26:MAJ.DEPR,SIN,FREM	7		6	1
	296.30:MAJ.DEPR,RCR,UNSPEC	59	8	48	3
	296.31:MAJ.DEPR,RCR,MILD	28	3	24	1
	296.32:MAJ.DEPR,RCR,MOD	237	25	191	21
	296.33:MAJ.DEPR,RCR,SEVE	224	27	190	7
	296.34:MAJ.DEPR,RCR,SEVP	66	2	58	6
	296.35:MAJ.DEPR,RCR,PREM	28	3	22	3
	296.36:MAJ.DEPR,RCR,FREM	19	2	13	4
<b>Major Depressive Disorders</b>		<b>796</b>	<b>102</b>	<b>641</b>	<b>53</b>
	296.64:BPLR,I,MREC,MIX,SEVP	1		1	
	296.90:MOOD DIS NOS	113	58	52	3
	300.4:DYSTHYMIC DISORDER	64	11	50	3
	301.13:CYCLOTHYMIC DISORDER	2		2	
	311:DEPR DIS NOS	204	47	148	9
	314.01:ADHD,HYPER-IMP-COMB	1	1		
<b>MISC Affective Disorders</b>		<b>385</b>	<b>117</b>	<b>253</b>	<b>15</b>

Source: NorthCare Provider Service Model FY06. Counts include consumers with reportable, Medicaid services.  
 Note: Some occurrences missing due to incomplete diagnostic data from CMHSPs.

## Appendix 2, continued

AXIS1PCategory	AXIS1P	Total	Clients Age 0-17	Clients Age 18-64	Clients Age 65+
	345.10:GEN CONVULSIVE EPILEPSY /WO IN	1		1	
	310.1:PERS CHG DUE TO MED/	5		4	1
	310.2:POSTCONCUSSION SYNDROME	1	1		
	316:(PSY.FAC)AFFECT GMC	2		1	1
<b>Misc Disorder</b>		<b>9</b>	<b>1</b>	<b>6</b>	<b>2</b>
	313.23:SELETIVE MUTISM	2	1	1	
	313.89:REAC ATTACH DIS	17	16		1
	313.9:DIS OF INF,CHILD,ADO	5	5		
<b>Misc. Childhood Disorders</b>		<b>24</b>	<b>22</b>	<b>1</b>	<b>1</b>
	296.33:MAJ.DEPR,RCR,SEVE	1		1	
	297.1:DELUSIONAL DISORDER	7		3	4
	297.3:SHARED PSYCHOTIC DIS	1			1
	298.9:PSYCHOTIC DIS NOS	39	4	31	4
<b>Psychotic Disorder</b>		<b>48</b>	<b>4</b>	<b>35</b>	<b>9</b>
	295.10:SCHIZOPHRENIA,DISORG	44	1	38	5
	295.12:SCHIZOPHRENIA,DISORG,CHRONIC	1			1
	295.20:SCHIZOPHRENIA,CATATO	2		2	
	295.30:SCHIZOPHRENIA,PARANOI	235		217	18
	295.32:SCHIZOPHRENIA,PARANOI,CHRONIC	15		13	2
	295.34:PARAN SCHIZO CHRONIC/EXACERB	3		3	
	295.35:PARAN SCHIZO REMISS	1		1	
	295.40:SCHIZOPHRENIFORM DIS	4	1	1	2
	295.60:SCHIZOPHRENIA,RESIDU	31		19	12
	295.61:RESID SCHIZO SUBCHRONIC	1		1	
	295.62:RESID SCHIZO CHRONIC	3		2	1
	295.70:SCHIZOAFFECTIVE DISO	257	4	230	23
	295.72:SCHIZOAFFECTIVE-CHRONIC	7		7	
	295.74:SCHIZOAFFECTIVE-CHRONIC/EXAC	2		2	
	295.75:SCHIZOAFFECTIVE-REMISS	1		1	
	295.90:SCHIZOPHRENIA,UNDIFF	104		89	15
	295.92:SCHIZOPHRENIA,UNDIFF CHRONIC	1			1
<b>Schizophrenia</b>		<b>712</b>	<b>6</b>	<b>626</b>	<b>80</b>
	302.2:PEDOPHILIA	4		3	1
	302.6:GEN ID DIS IN CHILD	1	1		
<b>Sexual Disorder</b>		<b>5</b>	<b>1</b>	<b>3</b>	<b>1</b>
	296.33:MAJ.DEPR,RCR,SEVE	1		1	
	303.00:ALCOHOL INTOX	3		3	
	303.90:ALCOHOL DEP	39	1	36	2
	304.00:OPIOID DEP	9		9	
	304.10:SED,HYPN,ANXIO DEP	1		1	
	304.20:COCAINE DEP	1		1	
	304.30:CANNABIS DEP	2	1	1	
	304.80:POLYSUBSTANCE DEP	26	6	19	1
	305.00:ALCOHOL ABUSE	13	2	11	
	305.20:CANNABIS ABUSE	4	2	2	
	305.50:OPIOID ABUSE	4		4	
	305.60:COCAINE ABUSE	1			1
	305.90:INHALANT ABUSE	1	1		
<b>Substance Abuse Disorders</b>		<b>105</b>	<b>13</b>	<b>88</b>	<b>4</b>
	291.2:350C ALCOH-IND,PER,D	2			2
	291.3:ALCOH-IND,PSYC,HALL	1		1	
	291.5:ALCOH-IND,PSYC,DELUS	1		1	
	291.8:ALCOH WITHDRAWAL	1		1	
	291.89:ALCOH MOOD	4		4	
	292.0:SUBS WITH,NOT ETOH	1		1	
	292.11:SUBS-IND P,DIS,W/DEL	2		2	
	292.12:SUBS-IND,P,DIS,W/HAL	2	1	1	
	292.83:SUBS-IND PER AMN DIS	1		1	
	292.84:SUBS-IND MOOD DIS	6	2	4	
	292.89:SUBS INTOX	1		1	
<b>Substance Induced Disorders</b>		<b>22</b>	<b>3</b>	<b>17</b>	<b>2</b>

Source: NorthCare Provider Service Model FY06. Counts include consumers with reportable, Medicaid services.  
 Note: Some occurrences missing due to incomplete diagnostic data from CMHSPs.

## Appendix 2, continued

AXIS2P Category	AXIS2P	Total Clients	Clients Age 0-17	Clients Age 18-64	Clients Age 65+
<b>TOTALS</b>		<b>2741</b>	<b>257</b>	<b>2254</b>	<b>230</b>
	317 : MENTAL RETARD,MILD	531	49	434	48
	318.0 : MENTAL RETARD,MODERATE	262	20	221	21
	318.1 : MENTAL RETARD,SEVERE	145	7	123	15
	318.2 : MENTAL RETARD,PROFOUND	74	3	61	10
	319 : MENTAL RETARD,UNSPEC	94	41	42	11
<b>Mental Retardation</b>		<b>1106</b>	<b>120</b>	<b>881</b>	<b>105</b>
	301.0 : PARANOID PERS DISORDER	4		3	1
	301.20 : SCHIZOID PERS DISORDER	9	1	8	
	301.22 : SCHIZOTYPAL PERS DISORDER	20		17	3
	301.4 : OBS-COMP PERS DISORDER	5		5	
	301.50 : HISTRIONIC PERS DISORDER	5		5	
	301.6 : DEPENDENT PERS DISORDER	51		45	6
	301.7 : ANTISOCIAL PERS DISORDER	35	1	33	1
	301.81 : NARCISS PERS DISORDER	4		3	1
	301.82 : AVOIDANT PERS DISORDER	23	1	20	2
	301.83 : BORDERLINE PERS DISORDER	250	11	238	1
	301.9 : PERSONALITY DISORDER NOS	123	3	115	5
<b>Personality Disorder</b>		<b>529</b>	<b>17</b>	<b>492</b>	<b>20</b>

Source: NorthCare Provider Service Model FY06. Counts include consumers with reportable, Medicaid services.  
 Note: Some occurrences missing due to incomplete diagnostic data from CMHSPs.

# Appendix 3

## FY06 Consumer Base Consumers by Primary Eligibility and Level of Service

Wednesday, March 14, 2007

**Northcare Network Data Warehouse  
Primary Eligibility and Level of Service FY06**

Medicaid Service: Yes  
Service Reportable: Yes  
Level of Service Code Desc: Required LOS Codes

Primary Eligibility	Level of Service Code Desc	Northcare Consumers	Pathways Consumers	Northpointe Consumers	Hiawatha Consumers	Gogebic Consumers	Copper Consumers
<b>Developmental Disabled</b>	DD01:Basic Support Services	333	121	79	101	18	16
	DD02:Enhanced Support Services	383	144	55	81	27	79
	DD03:Specialized Support Services	376	224	37	42	54	21
	DD04:Intensive Residential And Support Services	150	28	41	20	4	68
<b>Mental III Adult</b>	MH1A: Brief Outpatient Therapy	48	9	6	33		
	MH1B: Non-Intensive Case/Therapeutic Stab & Support	62	14	3	40	2	3
	MH2A: CSM/Community Supports	27	8	6	11	1	1
	MH2B: Intensive CSM/Community Support Services	32	20	1	11		
	MH2C: ACT/Home Based Services	8	3		5		
	MH3B: Specialized Residential Contract	1	1				
	MH3C: Treatment Group Home	1	1				
	MH3D: Crisis Residential Services	1			1		
<b>Mental III Child</b>	MH1A: Brief Outpatient Therapy	53	5	4	35	9	0
	MH1B: Non-Intensive Case/Therapeutic Stab & Support	12	2	8	2		0
	MH2A: CSM/Community Supports	16	9	4	3		0
	MH2B: Intensive CSM/Community Support Services	6	5		1		0
	MH2C: ACT/Home Based Services	20	11		6	3	0
	MH3B: Specialized Residential Contract	1	1				0
	MH4A: Acute Inpatient Care (Local/Regional)	1			1		0
	MH4B: State Hospital Inpatient Care	3			3		
<b>Severe Emotional Disabled</b>	MH1A: Brief Outpatient Therapy	74	22	3	45	4	
	MH1B: Non-Intensive Case/Therapeutic Stab & Support	108	11	5	14	2	78
	MH2A: CSM/Community Supports	158	47	55	9	18	31
	MH2B: Intensive CSM/Community Support Services	144	106	24	10	3	1
	MH2C: ACT/Home Based Services	126	18	16	35	33	24
	MH3A: Therapeutic Foster Care	2	2				
	MH3B: Specialized Residential Contract	5	1	4			
	MH3C: Treatment Group Home	3		2			1
	MH4A: Acute Inpatient Care (Local/Regional)	6			6		
	MH4B: State Hospital Inpatient Care	1	1				
<b>Severe Mental III</b>	MH1A: Brief Outpatient Therapy	73	5	7	44	10	7
	MH1B: Non-Intensive Case/Therapeutic Stab & Support	327	72	58	69	13	118
	MH2A: CSM/Community Supports	515	117	202	38	69	95
	MH2B: Intensive CSM/Community Support Services	477	282	83	39	3	72
	MH2C: ACT/Home Based Services	187	65	28	38	28	30

Source: NorthCare Provider Service Model FY06. Counts include consumers with reportable, Medicaid services.

# Appendix 3, continued

Source: NorthCare Provider Service Model FY06. Counts include consumers with reportable, Medicaid services.

Wednesday, March 14, 2007

## Northcare Network Data Warehouse Primary Eligibility and Level of Service FY06

Medicaid Service: Yes  
Service Reportable: Yes  
Level of Service Code Desc: Required LOS Codes

Primary Eligibility	Level of Service Code Desc	Northcare Consumers	Pathways Consumers	Northpointe Consumers	Hiawatha Consumers	Gogebic Consumers	Copper Consumers
<b>Severe Mental Ill</b>	MH3A:Therapeutic Foster Care	9					9
	MH3B:Specialized Residential Contract	34	4	18			12
	MH3C:Treatment Group Home	31	14	3	2	4	8
	MH3D:Crisis Residential Services	3			1		2
	MH4A:Acute Inpatient Care (Local/Regional)	6			6		
	MH4B:State Hospital Inpatient Care	5	1	1	3		
	<b>Total</b>	<b>3,833</b>	<b>1,374</b>	<b>753</b>	<b>760</b>	<b>306</b>	<b>665</b>

## Appendix 4

### FY06 Substance Abuse Clients

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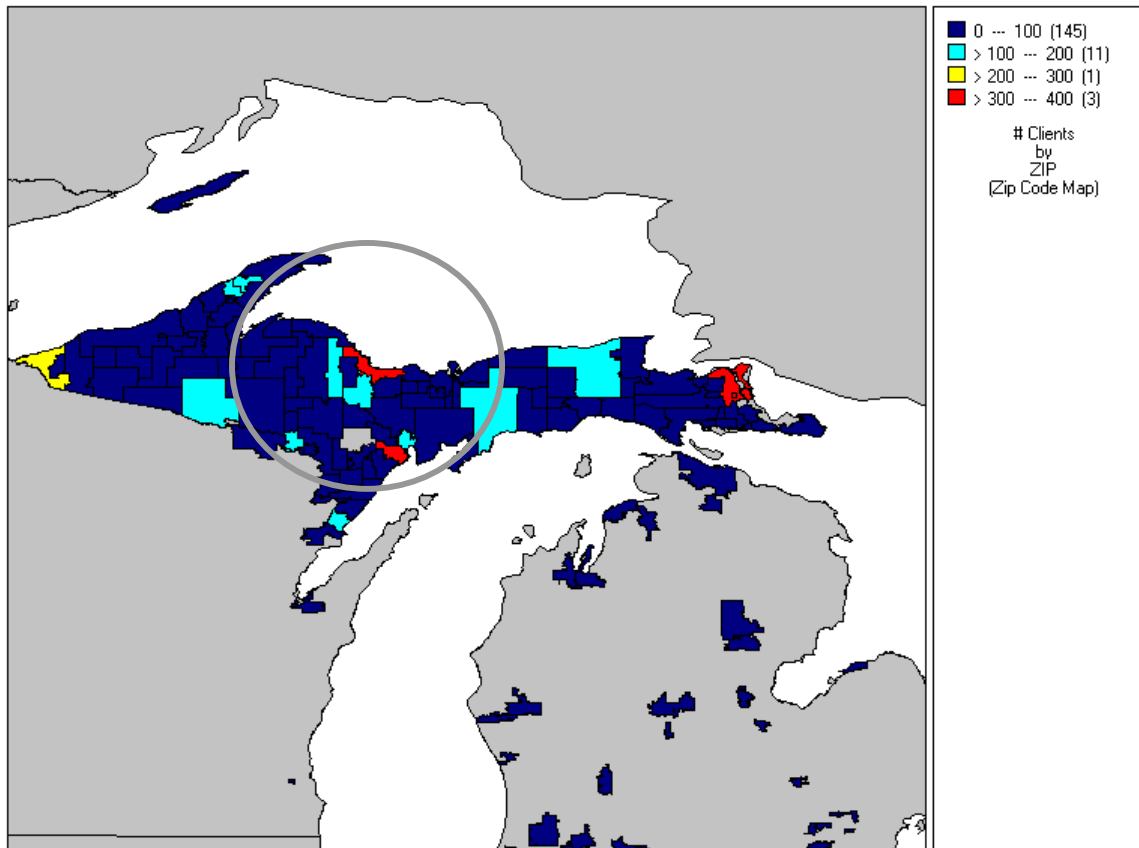
Sunday, March 04, 2007		
Primary DSM Dx	Primary DSM Dx Desc	Total Clients
291.10	Alcohol amnesic disorder	1
291.30	Alcohol hallucinosis	1
303.90	Alcohol dependence	219
304.00	Opioid dependence	69
304.10	Sedative, hypnotic, or anxiolytic dependence	4
304.20	Cocaine dependence	14
304.30	Cannabis dependence	96
304.40	Amphetamine or similarly acting sympathomimetic dependence	4
304.80	Polysubstance dependence	15
305.00	Alcohol abuse	120
305.20	Cannabis abuse/intoxication	51
305.40	Sedative, hypnotic, or anxiolytic abuse/intoxication	1
305.50	Opioid abuse/intoxication	5
305.70	Amphetamine or similarly acting sympathomimetic abuse/intoxication	1
305.90	Inhalant abuse/intoxication	1
		<b>602</b>

Source: NorthCare SA Provider Service Model FY06. Counts include consumers with reportable, Medicaid services.

## Appendix 5

### Geographic Access for Mental Health Services - Consumers

Number of consumers by ZIP Code receiving reportable Medicaid services



Source

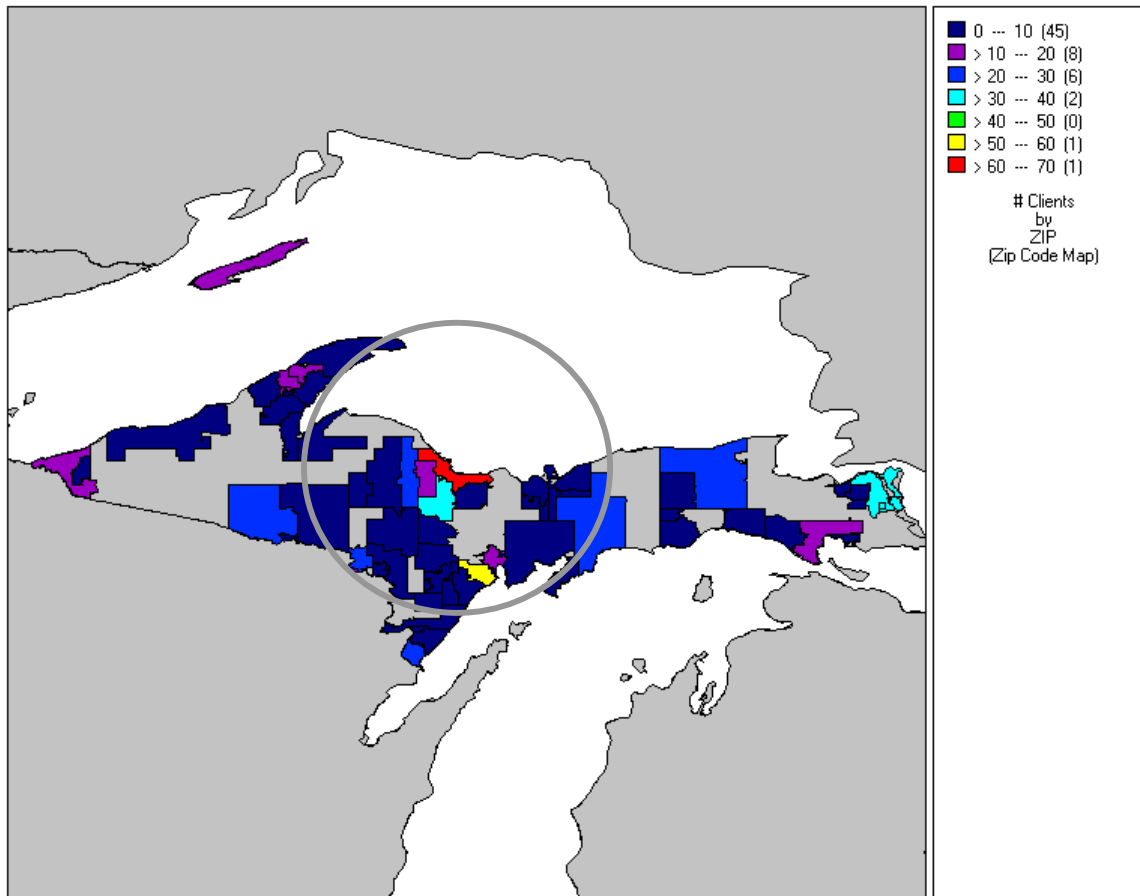
NorthCare Provider Services Model FY06

Circle indicates approximately 60 mile radius from Marquette, MI

## Appendix 6

### Geographic Access for Substance Abuse Services - Consumers

Number of Consumers by ZIP Code receiving reportable Medicaid services



Source

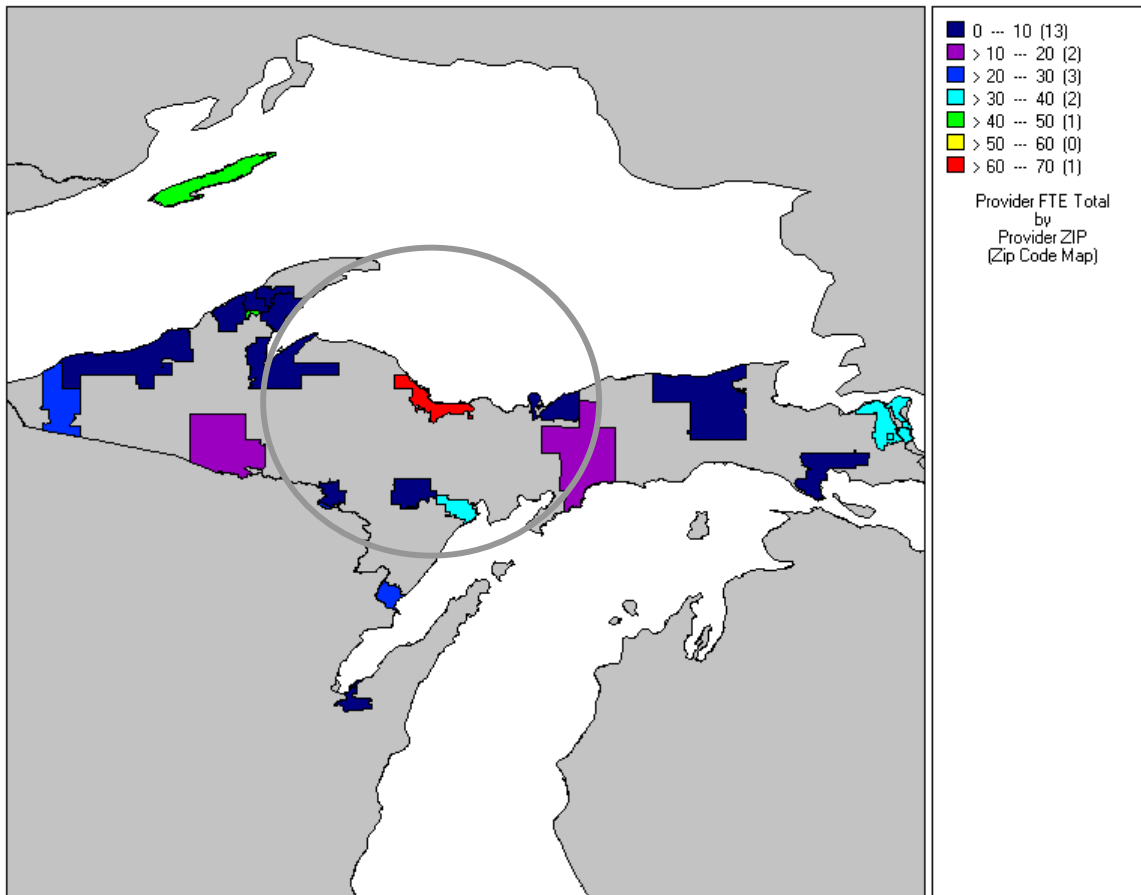
NorthCare Substance Abuse Provider Services Model FY06

Circle indicates approximately 60 mile radius from Marquette, MI

# Appendix 7

## Geographic Access for Mental Health Services - FTE

Number of FTE by ZIP Code delivering reportable Medicaid services



Source  
NorthCare Provider Services Model FY06  
Circle indicates approximately 60 mile radius from Marquette, MI

# Appendix 8

## FY06 Medicaid Service Array

Wednesday, March 14, 2007

Northcare Network Data Warehouse  
Northcare Network Services Provided FY06

Service Reportable: Yes  
Medicaid Service: Yes  
State Service Description: State Service Description

State Service Description	State Plan Service	B3 Service	Hab Waiver	Child Waiver	General Fund Only
ACT	X				
ACT-Jail	X				
Behavioral Health Brief Screening	X				
Behavioral health prevention education		X			
Brief Assessment dosage adjustment minimal psychotherapy TD testing	X			X	
Brief Assessment dosage adjustment, minimal psychotherapy, TD testing-Jail	X				
Brief office visit for the sole purpose of monitoring or changing drug prescriptions	X				
Brief office visit for the sole purpose of monitoring or changing drug prescriptions -Jail	X				
Community Psychiatric Hospital Room and Board	X				
Community Transition		X			
Community/work reintegration training (eg shopping transportation money management vocational activities and/ or work environment/modification analysis work task analysis)	X				
Comprehensive Community Support Services		X	X	X	
Comprehensive Community Support Services high need		X	X		
Comprehensive Community Support Services moderate need		X	X		
Comprehensive multidisciplinary evaluation	X				
Crisis Intervention	X				
Crisis Intervention Service	X				
Crisis Intervention Service-Jail	X				
Crisis Residential	X				
Development of cognitive skills to improve attention memory problem solving (includes compensatory training) direct (one-on-one) patient contact by the provider	X				
Developmental testing: extended	X				
Drop-In Center attendance		X			
Durable Medical Equipment			X		
E & M Visit	X				
Electroconvulsive Therapy	X				
Emergency Response systems-service fee		X	X		
Evaluation of oral and pharyngeal swallowing function	X				
Evaluation of speech language voice communication auditory processing and/or aural rehabilitation status	X			X	
Family Psycho-Education: Joining		X			
Family Psycho-Education: Joining w/o consumer		X			
Family Psycho-Education: Skills workshop		X			
Family Psycho-education EBP		X			
Family Psycho-education EBP w/o consumer		X			
Family Training		X		X	
Family Training w/consumer EBP PMTO		X			
Family psychotherapy w/o patient	X				
Family psychotherapy with patient	X				
Family psychotherapy with patient PMTO	X				
Family therapy per session EBP	X				
Fiscal Intermediary Services		X		X	
Fluphenazine Dec, per 25					
Foster Care-Therapeutic, child					X
Group psychotherapy	X				
Group psychotherapy-Jail	X				
Habilitation prevocational waiver			X		
Haloperidol Decan, per 50					
Home Based	X				
Home care training			X		
Individual psychotherapy 20 to 30 minutes	X				
Individual psychotherapy 20 to 30 minutes-Jail	X				
Individual psychotherapy 45 to 50 minutes	X			X	
Individual psychotherapy 45 to 50 minutes-Jail	X				
Individual psychotherapy 75 to 80 minutes	X				
Initial Hospital Care Day Low	X				

# Appendix 8, continued

Wednesday, March 14, 2007

Northcare Network Data Warehouse  
Northcare Network Services Provided FY06

Service Reportable: Yes  
Medicaid Service: Yes  
State Service Description: State Service Description

State Service Description	State Plan Service	B3 Service	Hab Waiver	Child Waiver	General Fund Only
Initial Hospital Care Day Mod	X				
Interpretation of results of psychiatric exam	X				
Manual therapy techniques (eg mobilization/manipulation manual lymphatic drainage manual traction) one or more regions	X				
Medical Nutrition Therapy or Assessment	X				
Medication training and support	X				
Mental Health Assessment non-physician	X			X	
Mental Health Clubhouse Services	X				
Mental health service plan development by non-physician	X			X	
Miscellaneous therapeutic items and supplies		X	X	X	
Neuropsychological Evaluation	X				
Non Family Training				X	
Nursing Assessment/evaluation	X			X	
Nutritional counseling dietitian visit	X				
Occupational therapy evaluation	X				
Occupational therapy re-evaluation	X				
Office Visit	X				
Orthotic(s) fitting and training upper extremity(ies) lower extremity(ies) and/or trunk	X				
Orthotic(s) management and training	X				
Patient education not otherwise classified non-physician provider	X				
Patient education not otherwise classified non-physician provider group	X				
Peer Specialist services		X			
Personal Care Item NOS		X	X		
Personal Care Services	X				
Personal Care Services-high need	X				
Personal Care Services-moderate need	X				
Physical or manipulative therapy performed for maintenance rather than restoration	X				
Physical therapy evaluation	X				
Physical therapy re-evaluation	X				
Private Duty Nursing habs support			X		
Psychiatric Evaluation	X				
Psychological Testing (Neurobehavioral Status Exam) By Psychologist	X				
Psychological Testing (Neuropsychological Testing) By Technician	X				
Psychological testing	X				
RN services	X				
Re-Assessment and intervention	X				
Respite Care Services		X	X		
Respite care services all providers			X		
Risperidone, Long-Acting (0.5mg)					X
Screening for Inpatient Program	X				
Screening for Inpatient Program-Jail	X				
Self-care/home management training and compensatory training meal preparation safety procedures and instructions in use of assistive technology devices/adaptive equipment	X				
Sensory integrative techniques to enhance sensory processing and promote adaptive responses to environmental demands	X				
Skills training and development		X	X		
Specialized Supply NOS		X	X		
State Hospital Room & Board	X				
Subsequent Hospital Care Low	X				
Subsequent Hospital Care Mod	X				
Supported Employment		X	X		
Supports Coordination		X	X		
Supports Coordination-Jail		X			
Targeted Case Management	X			X	

# Appendix 8, continued

Wednesday, March 14, 2007

**Northcare Network Data Warehouse  
Northcare Network Services Provided FY06**

Service Reportable: Yes  
Medicaid Service: Yes  
State Service Description: State Service Description

State Service Description	State Plan Service	B3 Service	Hab Waiver	Child Waiver	General Fund Only
Targeted Case Management-Nursing Facility Mental Health Monitoring	X				
Targeted CaseManagement-Jail	X				
Therapeutic prophylactic or diagnostic injection subcutaneous or intramuscular	X				
Therapeutic activities direct (one-on-one) patient contact by the provider (use of dynamic activities to improve functional performance)	X				
Therapeutic camping overnight			X		
Therapeutic procedure one or more area minutes;massage including effleurage petrissage and/or tapotement (stroking compression percussion).	X				
Therapeutic procedure one or more areas; aquatic therapy with therapeutic exercises.	X				
Therapeutic procedure one or more areas; gait training (includes stair climbing. )	X				
Therapeutic procedure one or more areas; therapeutic exercises to develop strength and endurance range of motion and flexibility	X			X	
Therapeutic procedure(s) group (2 or more individuals)	X				
Therapeutic procedure(s) group (2 or more individuals)-Jail	X				
Therapeutic, prophylactic or diagnostic injection subcutaneous or intramuscular	X				
Therapeutic or Diagnostic Injection	X				
Transportation Day	X				
Treatment of speech language voice communication and/or auditory processing disorder	X			X	
Treatment of speech language voice communication and/or auditory processing disorder; group	X				
Unskilled respite care		X			X
Wheelchair management/propulsion training	X				
Wraparound		X			
Wraparound GF Only					X

## Appendix 9

### Number of Professional Delivering Services by Site, FY06

*Please Note:*

- *Figures represent the presence of a practicing professional and do not imply a full-time presence at the board.*
- *Regional totals are not given as individuals practicing at multiple boards are included in both board's numbers.*

Provider Category	Provider Credential	Copper	Gogebic	Hiawatha	Northpointe	Pathways
<b>Dietitian</b>	RD			1	1	1
<b>Nurse</b>	BSN	1				
	RN	11	3	6	14	17
	AAS RN				1	
	CNP				1	
<b>Occupational Therapist</b>	LSST	1				
	OT	2				
	OTR		1		1	3
<b>Physical Therapist</b>	PT				0	
<b>Physician</b>	DO					1
	MD	3	1	4	3	3
<b>Physician's Assistant</b>	PA			1		
<b>Professional Counselor</b>	LMHC			4		
	LPC	1	1			
<b>Psychologist</b>	LLP	6	2	2	4	7
	PhD	1		2		2
	PsyD					1
<b>Social Worker</b>	LBSW	14	12	16	20	42
	LLBSW	2	1			4
	LLMSW			1		9
	LLP	0				
	LMSW	12	4	17	18	29
	LSST	1				
	RSWT			7		
<b>Speech Pathologist</b>	SST				4	1
	SLP				1	1

Source: NorthCare Provider FTE Model FY06

# Appendix 10

## FTE of Professional Delivering Services by Site, FY06

### Northcare FY06 Provider FTE by Board

Provider Category	Provider Credential	Northcare FTE Total	Pathways FTE Total	Northpointe FTE Total	Hiawatha FTE Total	Gogebic FTE Total	Copper FTE Total
Dietitian	RD	1.18	0.83	0.25	0.10		
Nurse Practitioner	CNP	1.00		1.00			
Occupational Therapist	OT	1.75					1.75
	OTR	4.80	3.00	1.00		0.80	
Occupational Therapy Assistant	LSST	1.00					1.00
Physical Therapist	PT	0.05		0.05			
Physician	DO	0.75	0.75				
	MD	14.34	3.07	2.70	4.00	1.25	3.32
Physician's Assistant	PA	1.00			1.00		
Professional Counselor	LMHC	4.00			4.00		
	LPC	2.00				1.00	1.00
Psychologist	LLP	22.44	7.39	4.00	2.32	2.48	6.25
	PhD	5.00	2.00		2.00		1.00
	PsyD	0.06	0.06				
Registered Nurse	AAS RN	1.00		1.00			
	BSN	0.50					0.50
	RN	50.47	17.33	14.00	5.62	2.67	10.85
Social Worker	LBSW	104.70	42.10	20.35	16.30	11.95	14.00
	LLBSW	7.38	4.13			1.25	2.00
	LLMSW	9.60	8.60		1.00		
	LLP	0.25					0.25
	LMSW	78.89	28.84	18.00	16.55	4.00	11.50
	LSST	1.00					1.00
	RSWT	7.00			7.00		
	SST	5.00	1.00	4.00			
Speech Pathologist	SLP	1.43	1.34	0.09			
	<b>Total</b>	<b>326.59</b>	<b>120.44</b>	<b>66.44</b>	<b>59.89</b>	<b>25.40</b>	<b>54.42</b>

Source: NorthCare Provider FTE Model FY06

## Appendix 11

### Providers Delivering FY06 Reportable Medicaid services by Board, by Consumer Eligibility

Board	Primary Eligibility	Provider Category	# Consumers	# Providers	Client to Provider Ratio x to 1
<b>Copper Country</b>	Developmental Disabled	Occupational Therapist	5	1	5
		Occupational Therapy Assistant	9	1	9
		Physician	57	4	14
		Professional Counselor	1	1	1
		Psychologist	66	2	33
		Registered Nurse	99	9	11
	Mental III Adult	Social Worker	120	11	11
		Physician	3	2	2
		Professional Counselor	2	1	2
	Severe Emotional Disabled	Psychologist	1	1	1
		Social Worker	3	5	1
		Physician	40	3	13
		Professional Counselor	2	1	2
		Psychologist	36	3	12
	Severe Mental III	Registered Nurse	4	4	1
		Social Worker	108	15	7
		Occupational Therapy Assistant	32	1	32
		Physician	279	3	93
		Professional Counselor	28	1	28
		Psychologist	62	7	9
Registered Nurse		137	10	14	
Social Worker	222	19	12		

Board	Primary Eligibility	Provider Category	# Consumers	# Providers	Client to Provider Ratio x to 1
<b>Gogebic</b>	Developmental Disabled	Occupational Therapist	42	1	42
		Physician	38	3	13
		Professional Counselor	4	1	4
		Psychologist	9	3	3
		Registered Nurse	37	4	9
		Social Worker	105	18	6
	Mental III Adult	Physician	2	1	2
		Professional Counselor	11	1	11
		Social Worker	12	6	2
	Mental III Child	Physician	1	1	1
		Professional Counselor	7	1	7
		Psychologist	3	1	3
	Severe Emotional Disabled	Social Worker	27	8	3
		Physician	30	3	10
		Professional Counselor	12	1	12
		Psychologist	19	2	10
		Registered Nurse	3	1	3
	Severe Mental III	Social Worker	69	12	6
		Occupational Therapist	1	1	1
		Physician	96	3	32
		Professional Counselor	42	1	42
		Psychologist	51	3	17
		Registered Nurse	29	4	7
		Social Worker	140	17	8

Source: NorthCare Provider Services Model FY06

## Appendix 11, continued

Board	Primary Eligibility	Provider Category	# Consumers	# Providers	Client to Provider Ratio x to 1
<b>Hiawatha</b>	Developmental Disabled	Dietitian	10	1	10
		Physician	53	2	27
		Physician's Assistant	36	1	36
		Professional Counselor	1	1	1
		Psychologist	57	4	14
		Registered Nurse	77	5	15
		Social Worker	229	27	8
	Mental III Adult	Physician	32	2	16
		Physician's Assistant	32	1	32
		Professional Counselor	26	5	5
		Psychologist	13	5	3
		Registered Nurse	32	6	5
	Mental III Child	Social Worker	135	37	4
		Physician	23	2	12
		Physician's Assistant	1	1	1
		Professional Counselor	18	3	6
		Psychologist	6	1	6
	Severe Emotional Disabled	Registered Nurse	5	3	2
		Social Worker	63	18	4
		Physician	85	2	43
		Physician's Assistant	1	1	1
		Professional Counselor	39	4	10
	Severe Mental III	Psychologist	15	4	4
		Registered Nurse	48	4	12
		Social Worker	128	23	6
		Dietitian	1	1	1
		Physician	110	2	55
	Physician's Assistant	110	1	110	
	Professional Counselor	63	4	16	
	Psychologist	38	6	6	
	Registered Nurse	127	7	18	
	Social Worker	227	40	6	

Board	Primary Eligibility	Provider Category	# Consumers	# Providers	Client to Provider Ratio x to 1
<b>Northpointe</b>	Developmental Disabled	Dietitian	44	1	44
		Nurse Practitioner	45	1	45
		Occupational Therapist	67	1	67
		Physical Therapist	3	1	3
		Physician	50	4	13
		Psychologist	60	4	15
		Registered Nurse	53	11	5
		Social Worker	149	21	7
		Speech Pathologist	14	1	14
		Mental III Adult	Nurse Practitioner	1	1
	Physician		8	2	4
	Psychologist		3	2	2
	Registered Nurse		1	1	1
	Social Worker		22	16	1
	Mental III Child	Nurse Practitioner	1	1	1
		Physician	7	2	4
		Psychologist	12	3	4
	Severe Emotional Disabled	Social Worker	18	15	1
		Dietitian	2	1	2
		Nurse Practitioner	4	1	4
		Occupational Therapist	4	1	4
		Physician	54	3	18
	Severe Mental III	Psychologist	56	4	14
		Registered Nurse	10	7	1
		Social Worker	69	27	3
		Speech Pathologist	1	1	1
		Dietitian	14	1	14
		Nurse Practitioner	158	1	158
		Occupational Therapist	9	1	9
		Physician	176	3	59
	Psychologist	97	4	24	
	Registered Nurse	133	14	10	
	Social Worker	334	37	9	

Source: NorthCare Provider Services Model FY06

## Appendix 11, continued

Board	Primary Eligibility	Provider Category	# Consumers	# Providers	Client to Provider Ratio x to 1
<b>Pathways</b>	Developmental Disabled	Dietitian	25	3	8
		Occupational Therapist	89	3	30
		Physician	95	6	16
		Psychologist	88	8	11
		Registered Nurse	79	16	5
		Social Worker	481	62	8
	Mental III Adult	Speech Pathologist	34	2	17
		Dietitian	1	1	1
		Occupational Therapist	1	1	1
		Physician	18	4	5
		Psychologist	37	7	5
		Registered Nurse	30	9	3
	Mental III Child	Social Worker	305	60	5
		Physician	7	3	2
		Psychologist	13	5	3
		Registered Nurse	21	6	4
	Severe Emotional Disabled	Social Worker	73	24	3
		Dietitian	2	2	1
		Occupational Therapist	5	2	3
		Physician	98	5	20
		Psychologist	62	7	9
		Registered Nurse	16	7	2
	Severe Mental III	Social Worker	219	42	5
		Speech Pathologist	4	1	4
		Dietitian	19	2	10
		Occupational Therapist	9	3	3
		Physician	429	6	72
Psychologist		149	11	14	
Registered Nurse		198	17	12	
	Social Worker	560	71	8	

Source: NorthCare Provider Services Model FY06

## Appendix 12

### Consumers Receiving Reportable CLS & Skill Building

Level of Service Code Desc	Northcare Consumers	Northcare Units
<b>Totals</b>	<b>1,439</b>	<b>2,543,724</b>
DD01:Basic Support Services	208	400,200
DD02:Enhanced Support Services	309	712,515
DD03:Specialized Support Services	238	876,510
DD04:Intensive Residential And Support Services	56	179,199
MH1A:Brief Outpatient Therapy	8	938
MH1B:Non-Intensive Case/Therapeutic Stab & Support	50	24,770
MH2A:CSM/Community Supports	186	126,077
MH2B:Intensive CSM/Community Support Services	249	122,661
MH2C:ACT/Home Based Services	81	39,279
MH3A:Therapeutic Foster Care	6	5,613
MH3B:Specialized Residential Contract	23	49,596
MH3C:Treatment Group Home	13	2,224
MH4A:Acute Inpatient Care (Local/Regional)	4	2,093
MH4B:State Hospital Inpatient Care	1	54

Level of Service Code Desc	Copper Consumers	Copper Units
Totals	300	371,327
DD01:Basic Support Services	9	13,719
DD02:Enhanced Support Services	75	136,040
DD03:Specialized Support Services	20	61,945
DD04:Intensive Residential And Support Services	25	59,379
MH1A:Brief Outpatient Therapy	3	601
MH1B:Non-Intensive Case/Therapeutic Stab & Support	19	2,239
MH2A:CSM/Community Supports	37	11,824
MH2B:Intensive CSM/Community Support Services	68	60,134
MH2C:ACT/Home Based Services	22	5,390
MH3A:Therapeutic Foster Care	6	5,613
MH3B:Specialized Residential Contract	9	12,821
MH3C:Treatment Group Home	5	938
MH4A:Acute Inpatient Care (Local/Regional)		
MH4B:State Hospital Inpatient Care		

Source: NorthCare Provider Services Model FY06

## Appendix 12, continued

Level of Service Code Desc	Gogebic Consumers	Gogebic Units
Totals	103	124,149
DD01:Basic Support Services	11	15,507
DD02:Enhanced Support Services	24	81,470
DD03:Specialized Support Services	22	21,923
DD04:Intensive Residential And Support Services		
MH1A:Brief Outpatient Therapy		
MH1B:Non-Intensive Case/Therapeutic Stab & Support	1	8
MH2A:CSM/Community Supports	30	3,095
MH2B:Intensive CSM/Community Support Services	4	1,186
MH2C:ACT/Home Based Services	5	265
MH3A:Therapeutic Foster Care		
MH3B:Specialized Residential Contract		
MH3C:Treatment Group Home	3	636
MH4A:Acute Inpatient Care (Local/Regional)		
MH4B:State Hospital Inpatient Care		

Level of Service Code Desc	Hiawatha Consumers	Hiawatha Units
Totals	242	381,944
DD01:Basic Support Services	61	90,933
DD02:Enhanced Support Services	64	141,976
DD03:Specialized Support Services	21	65,369
DD04:Intensive Residential And Support Services	9	26,071
MH1A:Brief Outpatient Therapy	2	35
MH1B:Non-Intensive Case/Therapeutic Stab & Support	18	17,983
MH2A:CSM/Community Supports	15	13,987
MH2B:Intensive CSM/Community Support Services	21	6,233
MH2C:ACT/Home Based Services	26	17,156
MH3A:Therapeutic Foster Care		
MH3B:Specialized Residential Contract		
MH3C:Treatment Group Home	1	108
MH4A:Acute Inpatient Care (Local/Regional)	4	2,093
MH4B:State Hospital Inpatient Care		

Source: NorthCare Provider Services Model FY06

## Appendix 12, continued

Level of Service Code Desc	Northpointe Consumers	Northpointe Units
Totals	224	605,183
DD01:Basic Support Services	48	140,366
DD02:Enhanced Support Services	46	158,338
DD03:Specialized Support Services	28	133,925
DD04:Intensive Residential And Support Services	8	24,424
MH1A:Brief Outpatient Therapy	1	189
MH1B:Non-Intensive Case/Therapeutic Stab & Support	1	2,718
MH2A:CSM/Community Supports	54	72,916
MH2B:Intensive CSM/Community Support Services	19	27,809
MH2C:ACT/Home Based Services	8	8,759
MH3A:Therapeutic Foster Care		
MH3B:Specialized Residential Contract	10	35,313
MH3C:Treatment Group Home		
MH4A:Acute Inpatient Care (Local/Regional)		
MH4B:State Hospital Inpatient Care		

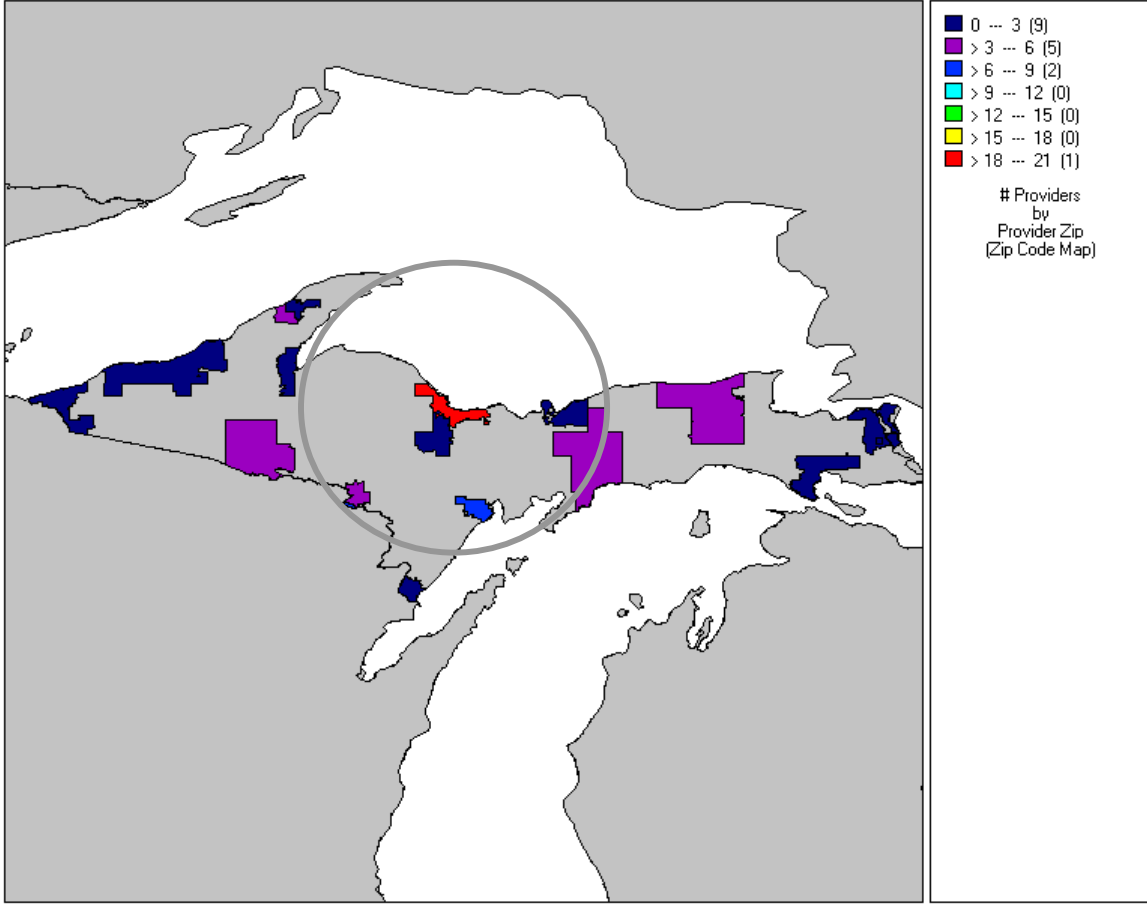
Level of Service Code Desc	Pathways Consumers	Pathways Units
Totals	579	1,061,121
DD01:Basic Support Services	79	139,675
DD02:Enhanced Support Services	100	194,691
DD03:Specialized Support Services	148	593,348
DD04:Intensive Residential And Support Services	14	69,325
MH1A:Brief Outpatient Therapy	2	113
MH1B:Non-Intensive Case/Therapeutic Stab & Support	11	1,822
MH2A:CSM/Community Supports	51	24,255
MH2B:Intensive CSM/Community Support Services	138	27,299
MH2C:ACT/Home Based Services	21	7,709
MH3A:Therapeutic Foster Care		
MH3B:Specialized Residential Contract	4	1,462
MH3C:Treatment Group Home	4	542
MH4A:Acute Inpatient Care (Local/Regional)		
MH4B:State Hospital Inpatient Care	1	54

Source: NorthCare Provider Services Model FY06

# Appendix 13

## Geographic Access for Substance Abuse Services – FTE

Number of FTE by ZIP Code delivering reportable Medicaid services



Source: NorthCare Substance Abuse Provider Services Model FY06  
Circle indicates approximately 60 mile radius from Marquette, MI

# Appendix 14

## Medicaid Eligible by Age from April 2006 – February 2007

