DEPARTMENT OF HUMAN SERVICES

Legislative Report

Adult Mental Health Initiatives Reform Funding Formula Development

Behavioral Health Division

February 2022

For more information contact:

Minnesota Department of Human Services
Behavioral Health Division
P.O. Box 64981
St. Paul, MN 55164-0981

651-431-2460

For accessible formats of this information or assistance with additional equal access to human services, write to DHS.BHD@state.mn.us, call 651-431-2460, or use your preferred relay service. ADA1 (2-18)

Minnesota Statutes, Chapter 3.197, requires the disclosure of the cost to prepare this report. The estimated cost of preparing this report is $16,488.

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I. Executive summary

Adult Mental Health Initiatives (AMHI) are regional collaborations charged with overseeing adult mental health services and funding to counties and tribal governments in their area.

Minnesota has 19 Adult Mental Health Initiatives (AMHIs) that are made up of regional groupings of counties or single metro countries. Additionally, White Earth Nation is a standalone AMHI region. AMHIs have been an effective mechanism for regional collaboration to build community-based mental health services in Minnesota since 1996. The structure and funding of AMHIs continue to give regions flexibility to respond to the unique needs and circumstances in their region.

Initial funding determinations for AMHIs were not uniform, equitable, or transparent, and were based on proximity to state hospitals that closed in the 1990s. AMHI funding is vulnerable and has been reduced in the past (2003, 2005, and 2009) to cover costs of other services.

An equitable funding formula for Adult Mental Health Initiatives (AMHIs) that is supported by data is necessary to reduce mental health disparities in our communities. The Minnesota Department of Human Services (DHS) proposes an equitable funding formula built on available, reliable data that encompasses population metrics, social determinants of health, poverty/deprivation, and concerns of access to care in rural vs. urban locales. These metrics combined provide a measure of mental health prevalence and need in a community; therefore, this formula will allow DHS to fund the Adult Mental Health Initiatives (AMHIs) based on mental health prevalence and need across the state, responding to regional differences and changes over time. The variables in the formula capture a larger service population than would be found if using existing service utilization data and address disparities.

A data-driven funding formula is a significant improvement from the current method of using historical allocations that are not equitable, transparent, nor defensible. In 1996, six regions received a total of $1.849 million; today, 19 AMHI regions receive a total of $33.5 million per year. Current allocations range from $1.49 to $21.29 per capita (adult only) and have not been recalculated since initial funding was distributed.

AMHI Reform efforts to develop an equitable funding formula began in earnest in 2019 when staff researched differences in mental health service needs across the state. DHS completed an Equity Analysis to ensure that equitable resources, meaningful community, and shared decision-making were foundational to the project. DHS contracted with an actuarial consultant in April 2020 to research and develop the funding formula with input from AMHI stakeholders. DHS focused on research and model building, while making adjustments and improvements based on stakeholder feedback. In June 2021, the actuarial consultant finalized their portion of the work and provided DHS with a working formula model that is transparent, defensible, and flexible. Following this effort, DHS collaborated with a stakeholder workgroup to set the weights for each variable within the funding formula.

The workgroup focused on ensuring the funding formula variables met the following key attributes:

- Transparency – provide DHS and stakeholders with a more detailed understanding of the funding allocation rationale

- Flexibility – allow for adjustments over time to reflect population changes or other circumstances
- Alignment – minimize disruption to existing service delivery and acknowledge need is greater elsewhere
- Equity – support equitable distribution of funding to at-risk residents across the state

DHS engaged with stakeholders throughout the project, from hosting quarterly virtual statewide meetings to surveying all stakeholders to gather feedback on the potential variables. Stakeholders were co-creators of the final product; in a workgroup, representatives from each county-based AMHI recommended the final weights and percentages for the formula model.

DHS recommends using the formula weights developed by the stakeholder workgroup; these weights place high value on social determinants of health and neighborhood level assessment of both socioeconomic disadvantage and rural identity. These weights address equity and result in less disruption to funding than other options that placed a high value on population statistics. Eleven of the 18 county-based AMHIs will see an increase in funding with the funding formula, eight of those eleven see more than a 30% increase in funding. This is one step to addressing the disparities that currently exist in Minnesota's mental health system.

II. Legislation

Minnesota Laws 2021, 1st Special Session, Chapter 7, Article 11, section 33:

By February 1, 2022, and prior to the implementation of a new funding formula, the commissioner of human services must provide a report on the funding formula to reform adult mental health initiatives to the chairs and ranking minority members of the legislative committees with jurisdiction over health and human services finance and policy. In developing the funding formula, the commissioner must consult with stakeholders, including adult mental health initiatives, counties, Tribal nations, adult mental health providers, and individuals with lived experiences. The report must include background information, the underlying rationale and methodology for the new formula, and stakeholder feedback.

III. Introduction

Purpose of report

This report is submitted to the Minnesota Legislature pursuant to Minnesota Laws 2021, 1st Special Session, Chapter 7, Article 11, section 33. It provides a summary of the funding formula work, including the methodology, stakeholder engagement, and recommendations. This report was prepared by the Minnesota Department of Human Services, AMHI Reform project team and includes feedback heard from stakeholders.

AMHI Reform history

Adult Mental Health Initiatives (AMHI) are regional collaborations charged with overseeing adult mental health services and funding to counties and tribal governments in their area.

Minnesota has 19 Adult Mental Health Initiatives (AMHIs) that are made up of regional groupings of counties or single metro countries. Additionally, White Earth Nation is a standalone AMHI region. AMHIs have been an effective mechanism for regional collaboration to build community-based mental health services in Minnesota since 1996. The structure and funding of AMHIs continue to give regions flexibility to respond to the unique needs and circumstances in their region.

Initial funding determinations for AMHIs were not uniform, equitable, or transparent, and were based on proximity to state hospitals that closed in the 1990s. AMHI funding is vulnerable and has been reduced in the past (2003, 2005, and 2009) to cover costs of other services.

The effort to reform AMHIs began in 2014, when staff in the then Mental Health Division sought to improve the understanding and application of the Mental Health Program Consultant role. In exploring the position, the team found there was a need to revisit how the AMHIs were funded, update the statutory language, and provide more guidance for how AMHIs operate.

In 2017, the Minnesota Department of Human Services contracted with a vendor that coordinated a workgroup. This workgroup provided recommendations for AMHI Reform, such as development of a mission statement, expanding measurement and data collection, and better defining the role of the Mental Health Program Consultants.

In 2019, AMHI Reform moved to the next step to operationalize the reform effort. This included creating a more transparent, equitable, and defensible funding strategy. The AMHI Reform Team completed an Equity Analysis early in the process to ensure we were asking the right questions to address the current disparities in funding within the funding formula. The department contracted with Forma Actuarial Consulting Services, Inc. in April 2020 to assist in the development of a funding formula. Forma ACS Inc. delivered a funding formula model, report, and recommendations to DHS on June 30, 2021.

AMHI Reform has the following goals:

1. Establish a transparent funding formula or method
2. Update statutory language to move the initiatives out of pilot project status
3. Improve outcome measurement

The timeline for AMHI Reform specific to the funding formula is:

- October 2019: DHS issued a quick-call for a vendor to assist in the development of a funding formula.
- April 2020 through June 2021: DHS contracted with Forma ACS to assist in developing a funding formula.
- June 30, 2021: Forma ACS presented a final formula model with usage recommendations to DHS.
- June through November 2021: County-based AMHI stakeholder workgroup reviews formula work and provides recommendations about weights of formula variables to DHS.
- October 2021-December 2022: DHS in partnership with White Earth Nation develops pilot Tribal AMHI Funding Formula and determines implementation plan of Tribal AMHI funding formula.
- February 2022: Final recommendations of the funding formula are due in a report to the Minnesota Legislature.
- June through December 2022: In partnership with AMHI stakeholders, DHS develops implementation plan for new formula allocations.
- February 2023: DHS releases final implementation plan and announces formula-based allocations for the 2025-2026 funding cycle. Note: regional allocations are subject to changes brought about by additions or reductions of AMHI fund.
- April 2024: DHS releases AMHI grant plan application for the 2025-2026 funding cycle.
- January 1, 2025: First contract round for formula-based allocations begins.

IV. Funding formula model development

Background

In 2019, a project team was formed that consisted of multiple DHS staff. DHS solicited information from all 19 AMHIs about the various factors impacting mental health service delivery that should be taken into consideration in the funding formula. Several regions reported concerns about demographics including serving diverse cultures and an aging population. Several also shared that it would be very important to include factors that capture challenges with housing, transportation, and workforce. It was determined that the expertise of an actuarial was needed in order to research cost variables and population statistics that address the concerns raised by stakeholders in order to develop an equitable, data-based, and transparent funding formula.

In April 2020, DHS contracted with Forma Actuarial Consulting Services, Inc. (Forma ACS) to assist with the development of a funding formula for the AMHIs. DHS shared information gathered from the AMHIs with Forma ACS; this was a starting point for the funding formula development and guided some of the necessary research. DHS amended the contract to extend the work based on status of the project and feedback from stakeholders. The work concluded on June 30, 2021, when Forma ACS presented a model for the funding formula and recommendations to DHS for how to implement the model in a final report. The model provides a method for assigning value to the different variables and calculates an allocation for each of the nineteen AMHIs. In order to set the final values for each variable, DHS convened two workgroups: a county-based AMHI workgroup and a Tribal-AMHI workgroup.

Throughout the funding formula model development, DHS focused on ensuring the funding formula project and specific variables met the following key attributes:

- Transparency – provide DHS and stakeholders with a more detailed understanding of the funding allocation rationale
- Flexibility – allow for adjustments over time to reflect population changes or other circumstances
- Alignment – minimize disruption to existing service delivery and acknowledge need is greater elsewhere
- Equity – support equitable distribution of funding to at-risk residents across the state

Forma ACS and DHS moved through three phases for this project: reviewing previous efforts and funding determinations; researching and analyzing potential variables for the formula; and creating the model tool for determining new allocations.

In reviewing previous funding determinations, DHS was unable to identify a clear methodology for how allocations were set. Initial funding determinations were not equitable, uniform, or transparent. The allocations were loosely based on proximity to state hospitals that closed in the 1990s. In 1996, six AMHI regions were funded with a total of $1.849 million; today, 19 AMHI regions receive a total of $33.5 million per year. The current allocations are based on the original funding scheme from 1996 and range from $1.49 to $21.29 per capita (adult only population). Reallocating funds is necessary to provide a more equitable distribution of AMHI dollars across the state; it is not an assumption that the funds are unnecessary in some AMHI regions.

Stakeholder Engagement

Stakeholder engagement is a top priority for AMHI Reform. The importance of community voice and perspective is a key objective of DHS' policy and program development. Stakeholder engagement in AMHI Reform involved the co-creation of the funding formula in partnership with community members who have practical knowledge and expertise on issues related to mental health needs and services which they confront every day.

Throughout the AMHI Reform process, DHS communicated with stakeholders using a variety of structured participatory methods that allowed for inclusive and meaningful stakeholder collaboration. The methods allowed for continuous feedback from stakeholders that informed the funding formula development. DHS convened two workgroups to finalize the funding formula model developed by DHS and Forma ACS: County-based AMHI and Tribal AMHI. All county-based regions had one self-nominated representative on the AMHI Reform Funding Formula Workgroup.

DHS employed trusted facilitation techniques and participatory methods to promote discussion and build consensus among workgroup members regarding the prioritizing and weighting of funding formula variables. DHS also incorporated several communication vehicles that included presentations at organized group meetings (Statewide AMHI Meetings; presentations at MACSSA meetings, the State Advisory Council on Mental Health, and American Indian Mental Health Advisory Council meetings) and electronic formats such as updates on GOV delivery; announcements and information on the AMHI website; and regular emails with workgroup members. DHS also encouraged AMHI contacts to communicate all phases of AMHI Reform with stakeholders in their communities.

In Spring 2021, DHS conducted a survey of AMHI stakeholders, asking them to share their thoughts on each potential variable and to share any other ideas that could strengthen this work. The results indicated that the 123 respondents generally supported the use of population data, but felt other variables, such as risk factor measures, should have more weight. DHS incorporated feedback from stakeholders throughout the process by identifying assumptions to be addressed, identifying additional data sources to research, and validating variables and data sources for inclusion in the final formula model. Specifically, DHS heard the need to take a closer look at variability of service access between rural and urban settings; DHS validated and incorporated a rural factor into the funding formula. AMHI stakeholders also shared that funds support individuals on Medicare and therefore the adult Medicare population was incorporated into the funding formula model.

While reflecting on the county-based AMHI workgroup activities and outcomes, workgroup members had many positive things to share. One workgroup member said, "I think DHS approaching the people at the front line that are going to be most impacted on this, I think is also really critical." Another workgroup member shared, "You've listened, even when you couldn't do things, you at least let us know that, which is a nice refreshing change." A third workgroup member stated, "It amazes me how much communication and agreement there really was on the core basic issues, from a lot of people's standpoint. I think that's sometimes unusual." Many agreed that despite the challenging conversation held during workgroup meetings the process was done very well and some intend to use a similar participatory framework within their own organizations. For more details

about the county-based workgroup, including details of the structure of the meetings, outcomes, and recommendations, see Section V County-based AMHI Funding Formula in this report.

The second workgroup is in partnership with representatives from White Earth Nation to develop a pilot Tribal AMHI funding formula for the White Earth Nation AMHI. This formula may serve as the prototype for a funding formula for other Tribal Nations if they were to become AMHIs in the future. See Section VI Tribal-AMHI Funding Formula for a detailed description of this work to date. At the time of writing this report, a Tribal-AMHI funding formula has not been finalized.

Research and Data

The specific variables in the final model developed by Forma ACS and DHS are:

- Adult Population
    - Statewide adult census population (US Census Bureau data)
    - Adult Medicaid enrollee population (DHS data)
    - Adult Medicare enrollee population (Federal CMS data)
- Social determinants of health and medical risk factor
    - Serious mental illness or serious and persistent mental illness (SMI/SPMI), Substance use disorder, Deep poverty, Homelessness, and Past incarceration (DHS data)
    - Medical risk uses the John's Hopkins Adjusted Clinical Group (ACG) risk indicators
- Area deprivation index (ADI) factor
- Rural factor using rural-urban commuting area (RUCA) codes

In combination, these variables provide a measure of mental health prevalence and need within AMHI regions across the state. The allocations are therefore both a representation of funding needed to serve a region's population based on risk factors and one way to address the large disparities in the mental health service delivery system. The social determinants of health and medical risk, ADI, and RUCA codes also build equity into the funding formula. These social determinants of health and medical risk acknowledge the other factors that impact and exacerbate mental health needs. The ADI and RUCA codes address the variations in service access that can exist both across a region and within a community.

It is important to note that Mental Health Information System (MHIS) service utilization data was not included in the formula model development due to identified gaps in data collection. MHIS data only measures current utilization and is a data source that continues to improve in its reliability. Including MHIS utilization data in the formula would not address equity, mental health service need, or access to services. It would limit the formula to only a small population currently reported as using AMHI grant services.

Supporting Data Sources

- Statewide population data provided by the US Census Bureau
- Medicaid data from Health Care Administration at the Minnesota Department of Human Services
- Medicare data from federal resources (Centers for Medicare & Medicaid Services Public Use File)

- Social determinants of health and relative risk data, collected and analyzed for the Medicaid population by the Health Care Administration at the Minnesota Department of Human Services
- Area Deprivation Index provided by Neighborhood Atlas, University of Wisconsin School of Medicine and Public Health
- Rural-urban commuting area (RUCA) codes, U.S. Health Resources and Services Administration, Office of Rural Health Policy in partnership with the U.S. Agriculture Department's Economic Research Service and the WWAMI Rural Health Research Center at the University of Washington

V. County-based AMHI funding formula

Purpose of the county-based AMHI workgroup

DHS convened a workgroup, comprised of one representative for each county-based AMHI, to collaborate on setting weights for each of the variables within the funding formula. AMHIs nominated their representative for the workgroup. If more than one person was nominated, DHS reviewed the "application" and selected the representative. The goal of the workgroup was to assign weights/values to the funding formula variables while ensuring the key attributes of transparency, flexibility, alignment, and equity were met.

County-based AMHI workgroup structure

DHS hosted a workgroup kick-off and orientation meeting on June 23, 2021. At this meeting, DHS and Forma ACS reviewed the funding formula model. This included a tutorial on how the model could be used and adjusted to create funding allocations.

DHS then scheduled seven additional meetings, every other week, from August 18 through November 10, 2021. The seven meetings were dedicated to introduction, discussion, and prioritizing four categories of variables: Population; Social Determinants of Health and Medical Risk; Area Deprivation Index; and Rural Allocation. Each variable category involved two workgroup meetings. A staff member from the Behavioral Health Division, who was not a member of the AMHI team, facilitated all workgroup meetings using various facilitation techniques known as Technology of Participation. Due to the covid-19 pandemic, all workgroup meetings were held virtually via WebEx.

The first workgroup meeting for each variable utilized a participatory method for discussion. Being responsive to the workgroup, we adjusted the facilitation method used in each meeting: World Café method, Focused Conversation that encouraged members to reflect objectively and discuss the merits and weaknesses of the variables in question, or a pre-meeting survey. The follow-up meeting centered on consensus building and decision-making, whereby the workgroup prioritized the variables based on: 1) relevance to the AMHI mission; and 2) responsiveness to local community issues. The final step in the process was a wrap-up meeting to finalize the workgroup's recommendations by reviewing the work from the previous six meetings and coming to consensus on final values to place on each variable in the funding formula model. DHS presented the workgroup's efforts and final recommendations to AMHI stakeholders at a virtual statewide meeting on November 16, 2021. The AMHI Reform Team also presented work to date at the November 18, 2021 MACSSA meeting and the December 2, 2021 State Advisory Council on Mental Health meeting.

DHS provided the workgroup members with reference materials ahead of each meeting; these materials gave more information and context for each data source and variable within the formula. The reference materials can be found on the AMHI website.

Outcomes of county-based AMHI workgroup meetings

Population variables

There were two meetings held to review and set values on population variables: statewide, Medicaid, and Medicare. Using the World Café method, meeting one reviewed and discussed the merits and flaws of using population as a variable within the formula. The second meeting used a priority matrix approach to facilitate prioritizing the three population variables. These priorities were later used to guide weight or percentage setting within the formula.

During conversations, members raised concerns that population variables are not sensitive or specific to the needs of the adult mental health community; however, there was agreement that these variables are one component of measuring potential service need. Members felt strongly that population alone should not determine the new allocations.

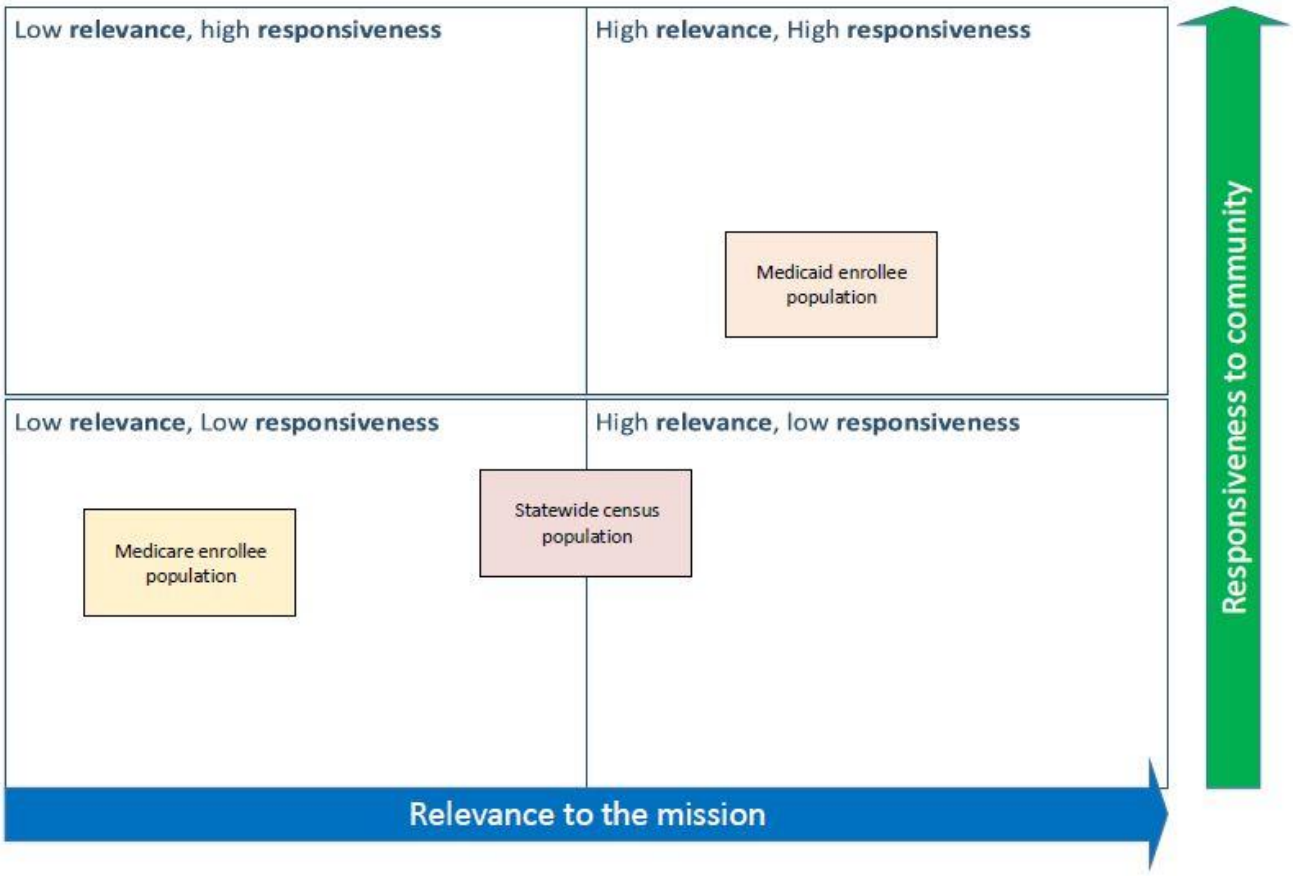


Figure 1. The workgroup used a priority matrix to prioritize the three population variables. These priorities are the basis for the final values as proposed by the workgroup.

Social determinants of health and medical risk variables

The first meeting about social determinants of health (SDOH) and medical risk was on September 15, 2021. The social determinants of health proved to be a more challenging topic than expected. While there was agreement that these factors impact mental health, the group raised concerns about the data source used for this variable. AMHI dollars are primarily used for individuals with serious and persistent mental illness (SPMI) who are under- and un-insured as well as for services that do not have a corresponding Medicaid benefit. Using a measure based on Medicaid data seemed counter-intuitive to workgroup members who see the majority of their funds paying for services for those who are under- and un-insured; however, Medicaid data provides a proxy measure for the total number of individuals with mental health needs who may be accessing services.

In order to respond to concerns raised and ensure the work stayed grounded in the overarching goals of developing an equitable, transparent, and data-driven funding formula, the DHS team revised the October 13, 2021 meeting to respond to these concerns and work with the group to find an agreeable path forward. Our facilitator used the focused conversation method – objective, reflective, interpretive, and decision-making – to move from concerns about the variables to decisions for next steps. Through this method, we were able to clear up some confusion about the scope of the workgroup, better capture their concerns and feedback, and reach agreement for the remaining planned meetings.

Workgroup members completed the priority matrix for SDOH via a pre-meeting survey, and finalized the matrix as a group during the October 27, 2021 meeting. The workgroup placed high value on most of the social determinants of health, with the exception of past incarceration. Past incarceration had value, but less than the other SDOH because it does not include jail as an incarceration location. The group felt this decreased its utility in the formula.

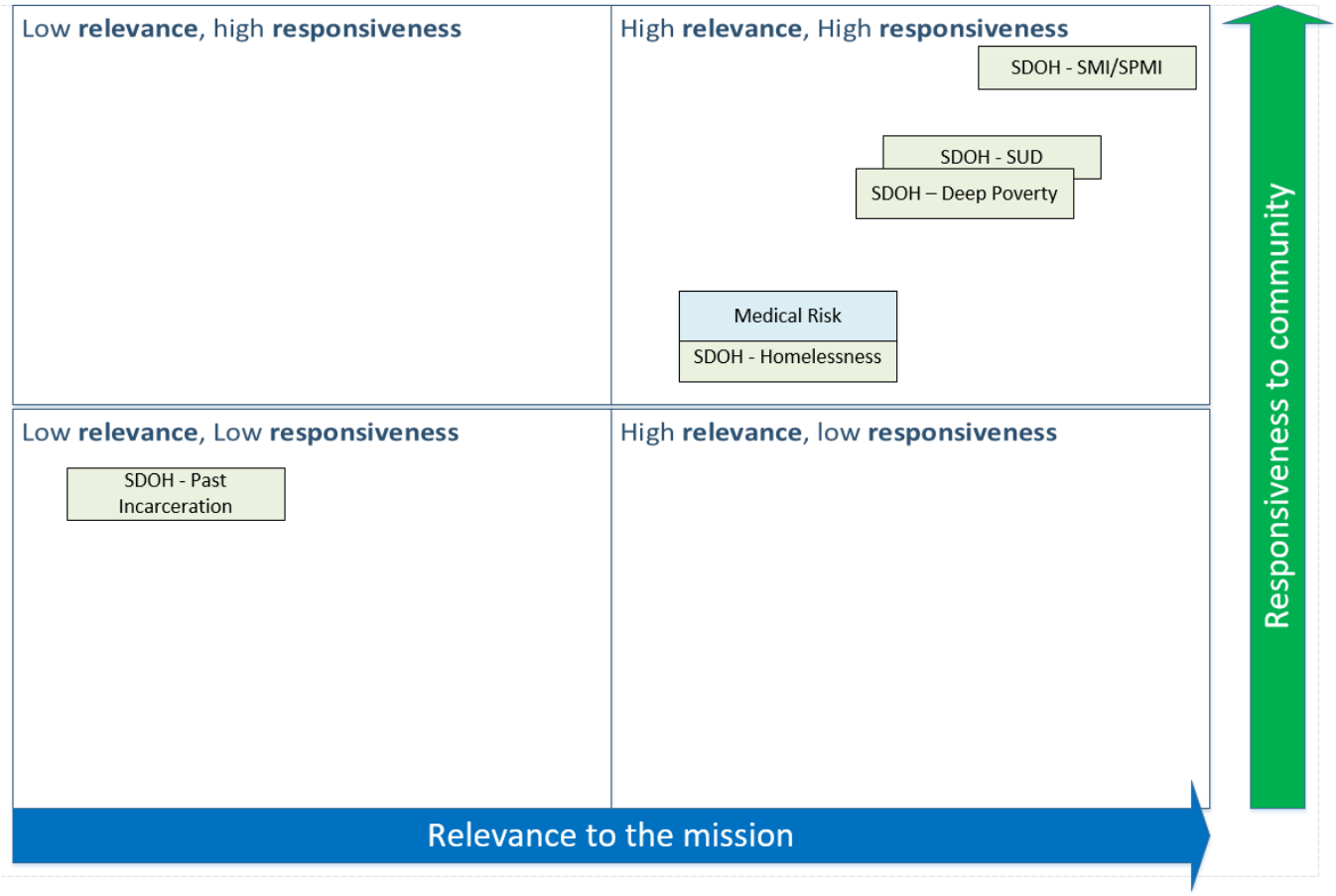


Figure 2. The workgroup used a priority matrix to prioritize the 5 social determinant of health sub-variables and medical risk. These priorities are the basis for the final values as proposed by the workgroup.

Area Deprivation Index (ADI) and rural allocation

The workgroup members provided input on the definition of "rural" through a survey sent before the October 27, 2021 meeting. During the October 27, 2021 meeting, the workgroup approved the use of rural-urban commuting area (RUCA) codes 4-10 as the rural definition in the AMHI funding formula model. They used the priority matrix to set values for the ADI and rural allocation. The workgroup placed high value on both the ADI and the rural allocation given the ability of these variables to account for the variations and challenges in accessing mental health services across regions of the state. These variables were noted as being more sensitive to mental health service access needs than population or social determinants of health variables.

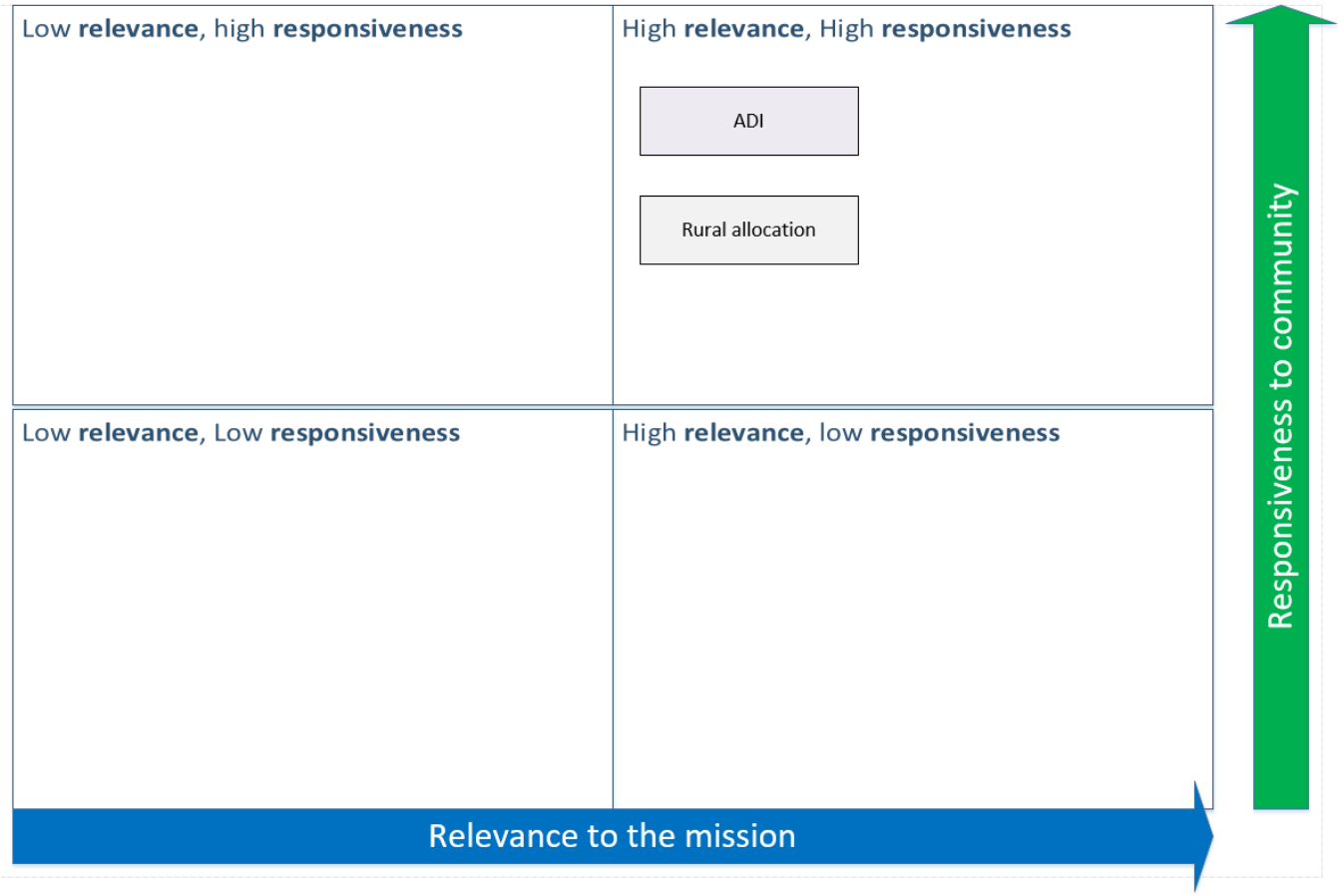


Figure 3. The workgroup used a priority matrix to prioritize the ADI and rural allocation variables. These priorities are the basis for the final values as proposed by the workgroup.

County-based AMHI workgroup recommendations

The workgroup met for the last time on November 10, 2021 to wrap up their work and finalize recommendations. DHS created a method for converting priorities to percentages, using a zero to five scale; the workgroup used this method in the final meeting to finalize the weights for each formula variable. The priority matrix was divided into bands from zero to five, with zero in the lower left corner and five at the upper right corner. Zero equaled zero percent, and five equaled 25%. The location of each variable on the priority matrix thus determined the potential percentage.

The workgroup completed a pre-meeting survey before the final meeting to confirm the priorities in total and propose potential percentages based on the same method, but without a visual. During the meeting, the group reviewed all of their previous variable-specific priorities and then completed a final priority matrix that set values for all four main variables: population, social determinants of health, area deprivation index, and rural factor.

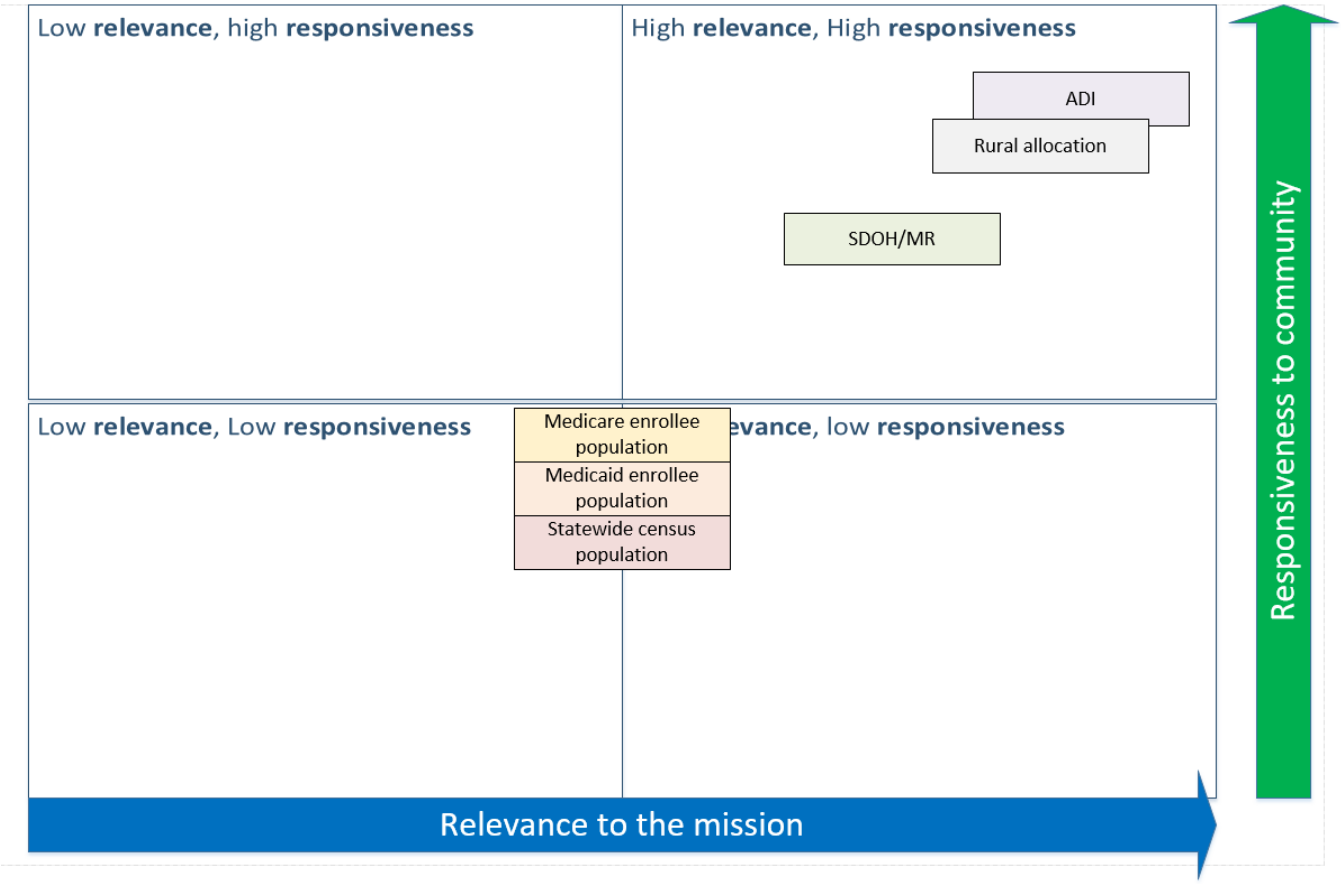


Figure 4. The final priority matrix created by the workgroup. This is a combination of all previous priority matrices and the workgroup's response to the pre-meeting survey.

The reform team walked the workgroup through the formula model, inserting hypothetical percentages based on the variable priorities recommended by the workgroup. The workgroup compared, discussed, and finalized the percentages by placing the weights into the formula and evaluating the impact on the new allocations. The workgroup made their final recommendations to DHS on how to prioritize each variable within the formula. These recommendations reflect the values and priorities placed on the variables by the workgroup and are reflective of the overall goals of the project of transparency, flexibility, alignment, and equity.

Based on this work, the workgroup made the following recommendations for percentages in line with the priorities they set:

- ADI – 25%
- Rural allocation using RUCA codes – 25%
- SDOH/medical risk – 20%
    - SMI/SPMI – 30%
    - SUD – 20%
    - Deep poverty – 20%
    - Homelessness – 15%

    - Medical risk – 15%
    - Past Incarceration – 0%
- Statewide population – 10%
- Medicaid population – 10%
- Medicare population – 10%

Other county-based AMHI workgroup recommended strategies

Though outside the scope of the funding formula development process, the workgroup wished to share other recommendations for AMHI Reform specifically as well as strategies to improve the mental health system in Minnesota in general. The workgroup felt it very important to report the following recommended strategies to DHS and the Minnesota Legislature:

- Increase funding to the AMHIs because the mental health system is underfunded and overburdened.
- Implement the new allocations using a base level of funding that all AMHIs receive, with all remaining funding subject to the funding formula.
- Use a phased-in approach to transition from current to new allocations.
- Allow the funds to be used for serious mental illness (SMI) instead of serious and persistent mental illness (SPMI).
- Place more system support on early intervention and prevention.
- Maintain the flexibility that AMHIs have to meet the needs of their community and increase that flexibility by opening additional BRASS billing codes.
- Evaluate the impact of the covid-19 pandemic on access to services and the intensity of need for services.
- Enforce mental health parity.

VI. Tribal AMHI funding formula

In late 2020, it became clear that the funding formula would work well for county-based AMHIs but not as well for White Earth Nation or other tribes, should other tribes become an AMHI in the future. Population data, for example, is based on many assumptions of what makes a population and where the boundaries for that population exist. Similarly, DHS's Medicaid data is representative only if people using services have identified themselves as American Indian or a member of White Earth Nation. Because of this, DHS determined there should be two formulas built off the main model: one for county-based AMHIs, and one for tribal AMHIs. DHS began working with White Earth Nation to pilot this formula, given White Earth is currently the only tribal AMHI.

The goals of the partnership:

- work together to identify reliable data sources that best represent White Earth and the people using their services
- determine which variables within the formula align with those data
- set values on variables to finalize the formula

Appendix D contains a list of the White Earth Nation workgroup members.

Purpose of Tribal AMHI workgroup

DHS convened a workgroup with representatives from White Earth Nation and the White Earth AMHI. This workgroup is exploring the data that best represent White Earth Nation's service recipients and how those data can be used within a Tribal funding formula. This group is also exploring which of the county-based AMHI funding formula variables have potential to be incorporated into the Tribal funding formula, given the different needs for a Tribe as compared to a county.

Tribal AMHI workgroup structure

DHS partnered with White Earth Behavioral Health to form the workgroup, using the recommendations from White Earth Behavioral Health as to who should be included and how to frame the meeting discussions. The first workgroup meeting was on October 20, 2021 via WebEx. Discussion focused on factors that are important to include in a Tribal funding formula. Such factors include how to account for historical trauma and a whole family, whole community approach as opposed to a focus on individuals in a population. Workgroup members identified a need to do additional research on these topics to identify any existing funding formula work with this vital cultural lens.

Each subsequent meeting was planned and scheduled based on the discussions and needs identified in the previous meeting. All workgroup meetings were virtual with a call-in option as well due to the continued COVID-19 pandemic. The first meeting focused on introductions, relationship building, and setting shared goals. The second meeting is scheduled for December 8, 2021 and will spend more time exploring population data that are relevant to and representative of the White Earth AMHI. The structure of the work, frequency of meetings, and

discussion methods are being developed in partnership; however, all are in agreement that the Tribal funding formula should function similarly to the county-based AMHI, but with more representative data for Tribal AMHIs.

VII. Final recommendations

Use agreed upon weights in final funding formula

DHS recommends the funding formula, co-created with stakeholders, be utilized to determine new allocations for the AMHIs; the formula has been designed with equity, transparency, flexibility, and alignment to cause the least disruption possible while also addressing the many disparities in the existing funding.

Based on input from AMHI stakeholders and DHS subject matter experts, we recommend the final formula values be set as such:

- Population – 30%
  - Statewide – 10%
  - Medicaid – 10%
  - Medicare – 10%
- Social determinants of health and medical risk – 20%
  - SMI/SPMI – 30%
  - SUD – 20%
  - Deep poverty – 20%
  - Medical Risk – 15%
  - Homelessness – 15%
  - Past Incarceration – 0%
- ADI and rural allocation – 50%
  - ADI factor – 25%
  - Rural allocation – 25%

Apply the funding formula to set the new grant allocations

The table below represents preliminary allocations using the formula weights set by the workgroup and adopted by DHS. These allocations may be impacted by the finalization of the Tribal Funding Formula. Please note, the formula model was developed using population statistics from the 2010 Census and will be updated with 2020 Census data prior to finalizing the allocations for the 2025-2026 funding cycle.

The preliminary formula-based allocations reduce the range of per capita funding, addressing some of the disparities that exist with the historical allocations. Additionally, 11 of the 18 county-based AMHIs will see an increase in funding, and 8 of those 11 will see a greater than 30% increase in funding.

AMHI	Current historical allocation	Per Capita (Adults)	Preliminary formula-based allocation	Per capita (Adults)
ABHI	$3,829,186	$15.41	$2,889,427	$11.63
Anoka	$765,075	$2.81	$1,370,917	$5.04

AMHI	Current historical allocation	Per Capita (Adults)	Preliminary formula-based allocation	Per capita (Adults)
BCOW	$1,181,263	$9.44	$1,390,577	$11.11
Carver	$319,933	$4.13	$268,042	$3.46
CommUnity	$1,249,432	$3.83	$1,929,595	$5.92
CREST	$2,297,954	$6.92	$3,133,147	$9.43
Dakota	$482,776	$1.49	$1,440,388	$4.43
Hennepin	$5,809,267	$5.87	$5,355,162	$5.41
NW8	$1,453,914	$21.29	$964,816	$14.13
Ramsey	$4,466,053	$10.57	$2,805,213	$6.64
Region 2	$595,725	$9.62	$944,301	$15.24
Region 4S	$664,642	$12.37	$727,274	$13.54
Region 5+	$1,236,491	$8.67	$2,088,819	$14.65
Region 7E	$1,715,762	$13.04	$1,141,504	$8.68
SCCBI	$4,210,082	$17.23	$2,633,257	$10.78
Scott	$228,859	$2.11	$412,173	$3.79
SW18	$2,229,288	$10.70	$3,072,057	$14.74
Washington	$604,982	$3.04	$774,014	$3.89
White Earth Nation	$158,688	n/a	TBD	n/a
Total	$33,499,372		$33,499,372	$7.71

Table 1: Comparison of new and former allocations by AMHI region.

Develop an implementation plan with stakeholder input

DHS will convene another workgroup to help develop the implementation plan. The implementation plan will outline how to transition from the historical allocations to the formula-based allocations, and over what period of time that transition will take place. The implementation plan will also identify the schedule for review, updating of data sources, and potential recalibration of the funding formula over time. This implementation planning process will build on and expand the four guiding attributes. The implementation plan will be developed in collaboration with stakeholders, shared directly with stakeholders, and focus additional effort on improving how the model addresses health inequities.

Complete development of a tribal funding formula for tribal AMHIs

DHS will continue to partner with White Earth Nation in the development of a Tribal-AMHI specific funding formula.

This formula will be piloted with White Earth Nation, currently the only Tribal AMHI, with the understanding that it may be used for other Tribes who choose to become their own AMHIs in the future.

VIII. Appendices

Appendix A: AMHI regions

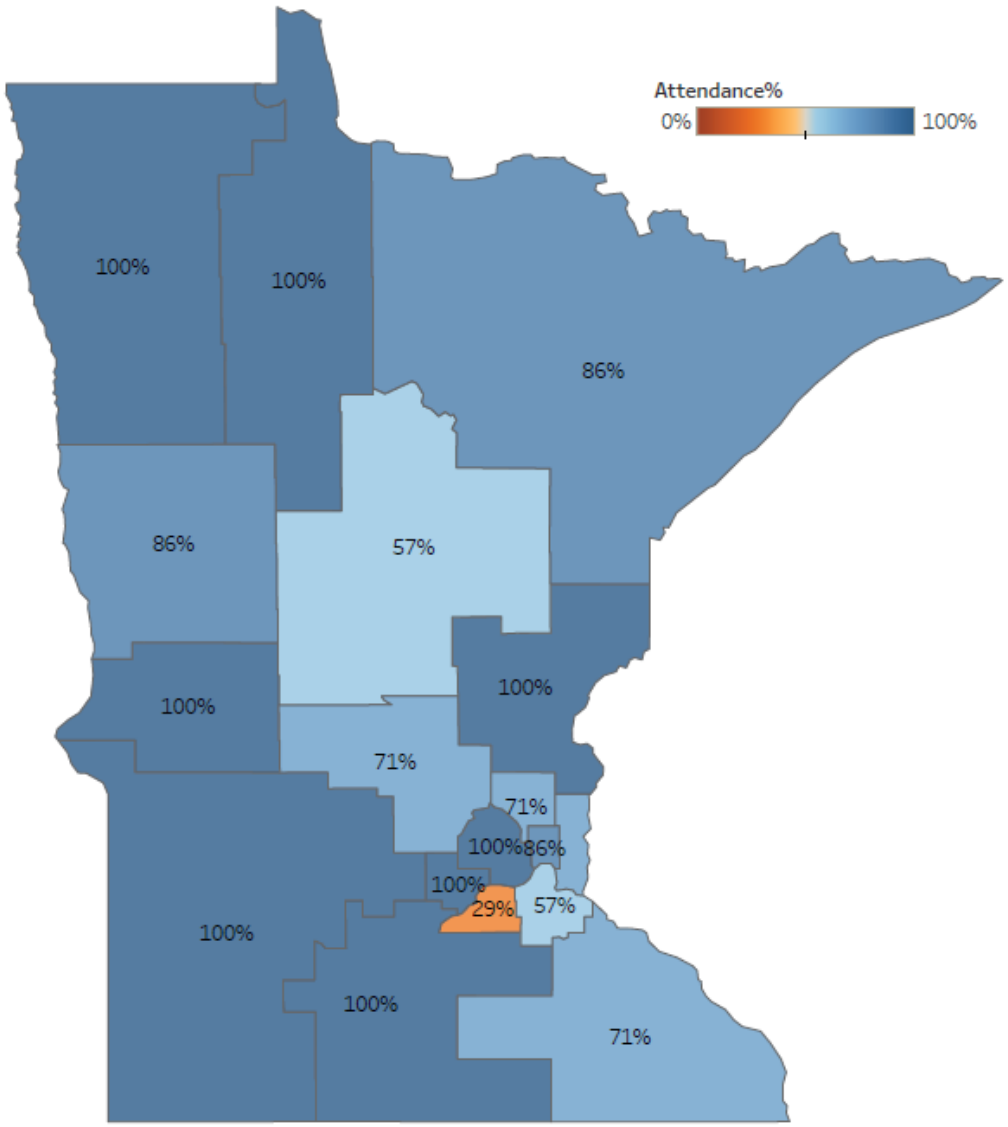
1. NW8: Kittson, Roseau, Mahnomen, Marshall, Pennington, Red Lake, Polk, and Norman counties
2. Region 2: Lake of the Woods, Beltrami, Clearwater, and Hubbard counties
3. ABHI: Koochiching, Itasca, St. Louis, Lake, Cook, and Carlton counties
4. BCOW: Becker, Clay, Otter Tail, and Wilkin counties
5. Region V+: Cass, Wadena, Crow Wing, Aitkin, Todd, and Morrison counties
6. Region 7E: Mille Lacs, Kanabec, Pine, Isanti, and Chisago counties
7. Region 4S: Traverse, Grant, Douglas, Stevens, and Pope counties
8. CommUnity: Stearns, Benton, Sherburne, and Wright counties
9. Anoka county
10. Ramsey county
11. Washington county
12. Hennepin county
13. SW18: Big Stone, Swift, Kandiyohi, Meeker, Mcleod, Lac qui Parle, Chippewa, Renville, Yellow Medicine, Lincoln, Lyon, Redwood, Pipestone, Murray, Cottonwood, Rock, Nobles, and Jackson counties
14. Dakota county
15. Scott county
16. Carver county
17. SCCBI: Sibley, Brown, Nicollet, Le Sueur, Rice, Watonwan, Blue Earth, Martin, Faribault, and Freeborn counties
18. CREST: Goodhue, Wabasha, Waseca, Steele, Dodge, Olmsted, Winona, Mower, Fillmore, and Houston counties
19. White Earth Nation

Appendix B: County-based AMHI funding formula workgroup members

- Shauna Reitmeier – NW8 Board, provider representative
- Amy Ballard – Region 2 Board, county representative
- Melissa Wright – ABHI Board, Tribal representative
- Margaret Williams – BCOW Board, county representative
- Tami Lueck – Region V+ Board, county financial representative
- Kesha Anderson – Region 4S, AMHI Coordinator
- Bethany Oberg – CommUnity, AMHI Coordinator
- Chuck Hurd – Region 7E Board, county representative
- Jason Rodrigues – Anoka, AMHI Coordinator/grant manager
- Martin Marty – Hennepin, AMHI Coordinator/grant manager
- Pamela Sanchez/Kenya Walker – Ramsey, AMHI Coordinator/grant manager, Adult Services Manager

- Crystal Klarich – Washington, AMHI Coordinator/grant manager
- Danielle Fox – Scott, AMHI Coordinator/grant manager
- Melissa Hanson – Carver, AMHI Coordinator/grant manager
- Ericka Hammer – Dakota, AMHI Coordinator/grant manager
- Kimberly Holm – SW18, AMHI Coordinator
- Jamie Hayes – SCCBI, AMHI Coordinator
- Tim Hunter – CREST, AMHI Coordinator

Appendix C: County workgroup meeting attendance



Appendix D: Tribal formula workgroup members

- Cortney Pemberton – White Earth Behavioral Health, Assistant Director
- Clinton Alexander – White Earth Behavioral Health, Director
- Judy Simpson – White Earth Crisis Coordinator
- Colette Kemper – Mental Health Billing Specialist
- Samuel Lerud – Finance
- Autumn Ambroday – Psychiatrist
- Winnie Lindstrom – Intern at White Earth Behavioral Health, Ph.D. candidate in Epidemiology
- Sara Erie – White Earth Mental Health Interim Clinical Director
- David Quincy – Behavioral Health Advisor
- Merlin Deegan – Cultural Division Director
- Melissa Wright – Co-chair, American Indian Mental Health Advisory Council
- Gertrude Buckanaga – Co-chair, American Indian Mental Health Advisory Council

Appendix E: AMHI reform funding formula model overview report

Submitted by Forma Actuarial Consulting Services, Inc. upon completion of consultation contract. The report can be found on the AMHI website. It provides DHS and stakeholders with a detailed understanding of the formula rationale.

Appendix F: Data sources summary rationale

Adult Population: US Census data was included as one measure of service population. It is recognized that this is a broad measure and may lack the detail to best capture mental health service need and prevalence of mental illness in a community. Census data informs the formula by identifying how many people potentially could be using the services provided by AMHIs. While it provides information on overall potential service population in an area, it does not take into account differential need or more detailed information on individuals using mental health services.

Adult Medicaid Population: Because mental health prevalence data do not readily exist in a format that can be used time and again, the project team looked to DHS's data on Medical Assistance (Medicaid) enrollment. This was identified as one reliable data source that could provide a proxy for mental health prevalence or service need as it provides information about claims related to mental health services. This data source provides information on what portion of the overall statewide population may be using or needing mental health services and supports. This allows the formula to take into account differential needs across the state and make some assumptions on prevalence of mental illness.

Adult Medicare Population: Based on feedback from AMHI stakeholders that AMHI grant service recipients may be on Medicare instead of Medicaid, the project team also included Medicare data as another proxy for mental health prevalence and service need. Medicare data is another way of getting more specific than overall census

population data, and is an attempt at capturing differential needs across the state. By including both Medicaid and Medicare populations in the funding formula, we can more easily approximate the total number of potential service recipients.

Social Determinants of Health (SDOH): These data were analyzed and included in the funding formula as a way of capturing more detail on service needs and prevalence of mental illness in a community. Their inclusion recognizes that population data do not tell the full story and miss important nuances in service need and access that directly impact health inequities. The SDOH data are compiled and analyzed by DHS Health Care Administration data staff, based off existing Medicaid data found in the DHS data warehouse. The SDOH that are captured within these data include: severe mental illness, severe and persistent mental illness, substance use disorder, deep poverty, past incarceration, and homelessness.

Medical risk data, ACG scores in Medicaid data: The purpose of these data is to recognize that there are other risk factors that impact a person's mental health needs. This variable makes the formula more sensitive to the mental health service needs across the state. Medical risk combined with SDOH allows the formula to be more sensitive than if it focused on straight population metrics. ACG scores refers to Johns Hopkins Adjusted Clinical Group (ACG) scores, which are based on diagnostic codes and other population data. The ACG scores data are available within the DHS data warehouse. The ACG information looks at all medical risk factors, not just mental health or substance use disorder.

Area Deprivation Index (ADI): The ADI was originally created by the US federal government from long-form Census data and primarily used at the county level to assess mortality and disease prevalence. Over time, the ADI has been refined to the census block group (i.e., "neighborhood") level. Currently, the University of Wisconsin School of Medicine and Public Health develops and publishes the metrics based on the American Community Survey (ACS) Five Year Estimates. Each census block group receives an area deprivation index (ADI), a composite measure of neighborhood socioeconomic disadvantage. The calculation combines 17 census measures capturing education, employment, income, poverty, and housing characteristics.

AMHI-Specific ADI Score: For the AMHI funding formula model development, we used the 2018 ADI, based on ACS data for 2018, which is a 5-year average of ACS data obtained from 2014-2018. ADI scores are published for nine-digit zip codes, which we combined and averaged to the five-digit zip code level. Based on these zip-code specific ADI scores and population levels by zip code, we developed population-weighted ADI scores for each AMHI; these scores are incorporated into the funding formula.

The ADI was included in the funding formula in response to stakeholder feedback that there are differences in mental health needs and access to services between regions. ADI is a means of capturing the other factors that are typically harder to quantify, such as geography, transportation and infrastructure, workforce shortages, housing, employment, etc. This data source was also selected because it has been assessed on more than one occasion, increasing the likelihood that it will continue to be updated regularly, responding to changes across communities over time.

Rural definition: The Minnesota State Demographic Center, Minnesota Department of Health, and Minnesota Department of Agriculture all define "rural" based on the rural-urban commuting area (RUCA) codes developed by the U.S. Health Resources and Services Administration, Office of Rural Health Policy in partnership with the

U.S. Agriculture Department's Economic Research Service and the WWAMI Rural Health Research Center at the University of Washington. RUCAs classify U.S. census tracts using measures of population density, urbanization and daily commuting. RUCA codes 1-10 delineate metropolitan, micropolitan, small town and rural commuting areas based on the size and direction of the primary (largest) commuting flows.

For purposes of rural health grants, MDH uses RUCA codes 1-3 to delineate urban parts of Minnesota and codes 4-10 to define rural. The Health Resources & Services Administration uses this same definition to determine eligibility for Rural Health Grants issued at the federal level. Definitions of rural are inconsistent, but there is general agreement that there are challenges faced by rural communities that metropolitan communities do not face. The rural allocation option within the formula is a way of building this acknowledgement into the model. Because there are inconsistent definitions, there is not a specific data source that can be used to capture those differences. To apply the rural allocation, the county-based workgroup agreed with using RUCA codes 4-10 to define "rural" for purposes of the AMHI funding formula.

Appendix G: 2021 Stakeholder survey

Summary of survey respondents:

- There were 123 respondents to the survey.
- 38% of respondents were county social service staff, 29% were mental health providers, 11% were people with lived experience, 8% were AMHI coordinators, and 3% were managed care organization staff. The remaining 11% were listed as 'other'.
- 11% of respondents indicated they were associated with more than one AMHI.
- 76% of responses were related to multi-county AMHIs and 24% were related to single-county/metro AMHIs.

Summary of survey feedback:

- Responses indicated that additional funding could be allocated if the AMHIs serve a disproportionate share of Medicaid and Medicare clients.
- The information provided related to insurance status also indicates that risk information from the Medicaid data could be a credible estimate of overall relative population risk.
- Responses indicated general support in basing funding on population size and population risk.
- Comments reflected concerns around additional needs driven by rural-specific factors.
- Responses to questions about risk factors indicated that additional funding could be allocated if the AMHIs serve a disproportionate share of clients with certain SDOHs, particularly SMI, SUD, deep poverty, and overall physical health.
- Responses also indicated support for DHS to consider adding additional per-capita funding for AMHIs that serve larger, less populated, geographic regions.

Survey questions for population characteristics:

Currently, we are analyzing public and DHS resources to determine the size and risk characteristics of the counties and regions served by the AMHIs and determining how best to integrate this information into the

funding formula. Although the information tells us the general characteristics of the populations within the geographic areas covered by the AMHIs, we are looking for more insight into the risk and other population characteristics of the populations seeking services from the AMHIs.

- Please estimate the relative percentage of the population served by your AMHI with the following general types of insurance coverage:
    - Commercially Insured %
    - Medicare Insured %
    - Medicaid Insured %
    - IHS Insured %
    - Uninsured
    - Other % (please explain)
- For the portion of your population that is insured, of the following how much do they influence why they are seeking services delivered by your AMHI (1 not much of an influence to 5 primary influence):
    - Insufficient coverage (services frequently covered by insurers, but are not covered by the member's insurance
    - Utilization of services not typically covered by insurance (housing assistance, transportation)
    - Lack of providers in county or region
    - Other (please explain)
- Please estimate the relative percentage of the population served by your AMHI falling within the following age bands:
    - 18-30 %
    - 31-40 %
    - 41-50 %
    - 50-65 %
    - 65+ %
- How would you characterize the relative impact of the following social determinants of health or population characteristics on the service requirements of the population you serve (1 not very impactful to 5 very impactful):
    - Severe Mental Illness (SMI or SPMI)
    - Substance Use Disorder (SUD)
    - Deep Poverty; Homelessness
    - Past Incarceration
    - Clients' Race or Ethnicity
    - Aging of your population
    - Clients' overall physical health or presence of medical comorbidities (diabetes, hypertension, etc.)

Survey questions for service requirements and expenses:

Currently, the funding for some AMHIs is higher on a per capita basis. In these cases, the AMHI's funding is higher than other AMHIs that provide services to counties or regions with populations of similar size and medical risk. These differences could potentially be explained by service requirements or types of services specific to that county or region. Alternately, the cost for delivering similar services could potentially be higher for different counties or regions.

- Are there specific, unique factors driving service needs or expenses in the region served by your AMHI that require higher than average per capita funding levels? If so, how do the following factors contribute to these differential needs or expenses (1 not much of an influence to 5 significant influence):

    - Geographic distance between providers and clients; Lack of reliable transportation (e.g., car, public transportation)
    - Scarcity of specialists / MH workforce shortage; Absence of specialized health center (e.g., CBHH) in region
    - Lack of access to services covered under clients' insurance
    - Language or cultural barriers between providers and clients
    - Insufficient funding from other sources (County, State, etc.)
    - Lack of consistent technology infrastructure within the county or region (i.e., cellphone coverage, internet access)
    - Tourism / non-county residents visiting the area and using services periodically
    - Other client needs or operational expenses
- Is there supporting data or information for the factors you selected that DHS could use to inform or incorporate into the funding formula? If Yes, please describe.

Survey questions – general:

- Is it reasonable to consider the relative population size in the regions or counties when determining the funding allocation? Yes; No; Yes, but other factors are more important
- Is it reasonable to consider the relative population risk in the regions or counties when determining the funding allocation? Yes; No; Yes, but other factors are more important
- If you answered "No" to either of the above questions, please suggest alternate factors that you believe should be of primary consideration in determining the funding allocations.

Appendix H: Participation and engagement methods

DHS used ICA's Technology of Participation (ToP) - ICA International (ica-international.org) and The World Cafe for participatory and engagement strategies during the county-based funding formula workgroup.