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Research**

The Hennepin County Youth Mental Health and Wellness Dashboard

*A framework to consider how individual,
family, school, and community factors
contribute to mental health*

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Contents

Project background	1
Methodology	1
Selection of appropriate indicators	2
Orientation to the report.....	3
A mental health and wellness framework.....	4
Considering both mental illness and positive mental health.....	5
Applying a public health approach to mental health	6
Review of key indicators	9
Key indicators: Youth demographics.....	10
Key indicators: Mental health problems	12
Key indicators: Mental health and wellness – protective factors	14
Key indicators: Mental health and wellness – risk factors	17
Key indicators: Social determinants	20
Key measures: Mental health system capacity	23
Other factors considered	27
Youth Mental Health and Wellness Dashboard.....	30
Using the dashboard.....	32
Applying the dashboard to guide neighborhood-level action	32
Using the dashboard to measure change over time.....	33
Potential next steps and future recommendations.....	33
References	36
Appendix.....	39
Detailed descriptions of key indicators.....	39
Youth Mental Health and Wellness Dashboard – Key disparities data included	43
Additional information about select data sources used.....	48

Figures

1. Criteria for selecting dashboard indicators	2
2. A dual continuum model of mental illness and mental health.....	5
3. Examples of risk and protective factors that contribute to mental health outcomes ..	7
4. Maslow’s hierarchy of needs	8
5. A proposed framework to assess youth mental health and wellness	9
6. Race and ethnicity of Hennepin County youth (age 0-17)	10
7. Hennepin County Youth Mental Health and Wellness Dashboard	30

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Project background

In 2011, the Hennepin County Children's Mental Health Collaborative commissioned Wilder Research to develop a dashboard of key indicators that could be used to not only describe mental health problems among youth who live in Hennepin County, but to also consider ways in which youth positive mental health and well-being is promoted or negatively impacted by neighborhood conditions, school environments, and family characteristics. The resulting Youth Mental Health and Wellness Dashboard is intended to provide local stakeholders with consistent information that can be used to identify needs in the county and guide strategic planning efforts across multiple child-serving systems.

This work aligns with the Collaborative's mission to serve as "a catalyst for improving children's lives by serving as a convener, coordinator, advisor, and advocate for community efforts to increase access to and resources for high quality mental health services for children and families." During the past five years, the Collaborative has supported a variety of initiatives to address the needs of youth in Hennepin County, including efforts to integrate primary care and mental health services, improve the cultural competence of mental health services, increase access to mental health services for youth involved in the juvenile justice system, and expand the use of an effective school-based mental health service model. Recently, there has been growing interest among Collaborative stakeholders in not only evaluating the effectiveness of the programs they fund, but to think more broadly about the needs of youth across the county in order to determine whether their funding priorities are appropriate. The dashboard is intended to be a tool that the Collaborative can use to guide their future strategic planning efforts.

This report describes the framework used to describe both mental health problems and positive mental health/wellness, presents the dashboard itself, provides a detailed description of the indicators used, and offers the Collaborative and other stakeholders recommendations for using this framework when considering broader prevention and mental health promotion strategies in future strategic planning and decision-making activities.

Methodology

A multi-method approach was used to develop a local framework to understand youth mental health and wellness, and to create the dashboard of key indicators. Focused literature reviews were completed to explore conceptual frameworks that could be applied to this study, to identify factors that contribute to poor mental health outcomes and that promote mental health and wellness, and to review potential indicators. Semi-structured key informant interviews were conducted with stakeholders across multiple child-serving systems, including state agencies, county departments, school districts,

health plans, and advocacy groups. The interviews were used to introduce the concept of the dashboard and to identify potential data sources that could be used to describe key mental health outcomes and factors that contribute to mental health and wellness. Finally, to ensure the framework and selected measures aligned with the experiences of youth and parents, six discussion groups were conducted with Hennepin County youth and one was held with parents from the Collaborative's Parent Catalyst Leadership Group. The youth and parents that participated in these groups were asked to identify factors within their family, school, and community that contribute to stress, and the types of supports that can help youth overcome stress and achieve wellness.

Selection of appropriate indicators

The Youth Mental Health and Wellness dashboard is a set of county-level indicators that can be used to understand how well child-serving systems are: a) responding to the mental health needs of youth; and b) supporting the mental health and wellness of youth. The indicators are intended to be higher-level measures that are relevant across multiple stakeholder groups, rather than more focused performance measures that describe the effectiveness of specific initiatives.

The following criteria were used to prioritize the key indicators and final set of dashboard measures (Figure 1). These criteria were used to compare and prioritize different measurement options; however, not every indicator meets all criteria.

1. Criteria for selecting dashboard indicators

Criterion	Description
Research-based	The indicator has a strong evidence base demonstrating its relevance to mental health and wellness
Sensitive	The indicator is drawn from a data source that has a large enough representative sample to reliably monitor changes over time
Repeated	The indicator is drawn from a data source that is collected regularly using a consistent data collection strategy
Affordable	The indicator can be collected and reported without significant costs
Available	The indicator is already being collected through a publicly-available data source
Understandable	The indicator can be easily understood by multiple stakeholder groups and key audiences, including parents and youth
Comparable	The indicator can be used to make comparisons by different demographic characteristics (e.g., by race, socioeconomic status) and/or geographic areas (e.g., by school district, city)

Orientation to the report

This report is intended to provide stakeholders with clear and concise information to understand how the dashboard was developed and how it should be used. The report is divided into the five key sections described below:

- **A mental health and wellness framework.** This section of the report describes the approach used to create the Hennepin County Youth Mental Health and Wellness Dashboard. It highlights the value in adopting a public health approach to address mental health and offers information to support the inclusion of dashboard measures that not only focus on the prevalence of mental health disorders, but also the individual, familial, school, and community factors that contribute to both poor mental health and positive mental health/wellness.
- **Review of key indicators.** The dashboard consists of 24 key county-level indicators, but a number of other measures were also considered. This report section provides a rationale for incorporating one or more indicators from each specific topic area, limitations to consider when interpreting the data, and recommendations to improve the quality of data or relevance of the indicator in the future.
- **Youth Mental Health and Wellness Dashboard.** The final stand-alone dashboard is presented in this section of the report.
- **Using the dashboard.** The report provides the Collaborative and other stakeholders with a few suggestions for ways to use the dashboard to stimulate conversation, inspire new ideas, and guide future decision-making. A set of recommendations is offered to the Collaborative to consider as they begin to share and use the dashboard.
- **Appendix.** More detailed information about the sources of information used in the dashboard is provided in the Appendix. This section of the report also includes a second version of the dashboard, which incorporates some key disparities data, if available.

A mental health and wellness framework

At any given time, between 14 and 20 percent of children, youth, and young adults are experiencing some type of mental health or social emotional disorder (Kessler, Berglund, Demler, Jin, & Waters, 2005). These conditions can result in a number of poor outcomes, including less supportive social relationships, poorer academic performance and higher rates of school drop-out, increased likelihood of involvement in the juvenile justice system, and substance use. The impacts of delinquency and negative behavior earlier in life can persist into adulthood, leading to lower levels of employability and subsequent income levels, housing stability, and rates of alcohol and substance use.

While mental illness itself cannot be prevented, mental health symptoms and outcomes can be improved when problems are identified early and appropriate interventions are provided. An important part of addressing the mental health needs of youth is to ensure the appropriate array of services is in place to treat children with diagnosed mental health problems. However, more can be done to enhance the impact of these individual mental health services and to further support the mental health and wellness of all children and youth. The Hennepin County Youth Mental Health & Wellness Dashboard is intended to provide local stakeholders with a framework that can be used to guide broader efforts to address the various individual, family, school, and community factors that contribute, both positively and negatively, to youth mental health outcomes.

Often, research focused on youth mental health examines the impact of poor mental health symptoms, the effectiveness of mental health services, or the differences in key outcomes (e.g., academic success) between youth with mental health diagnoses and those without. In contrast, the framework used to develop this dashboard does not focus on outcomes related to poor mental health, but rather the factors that contribute to both poor mental health and wellness.

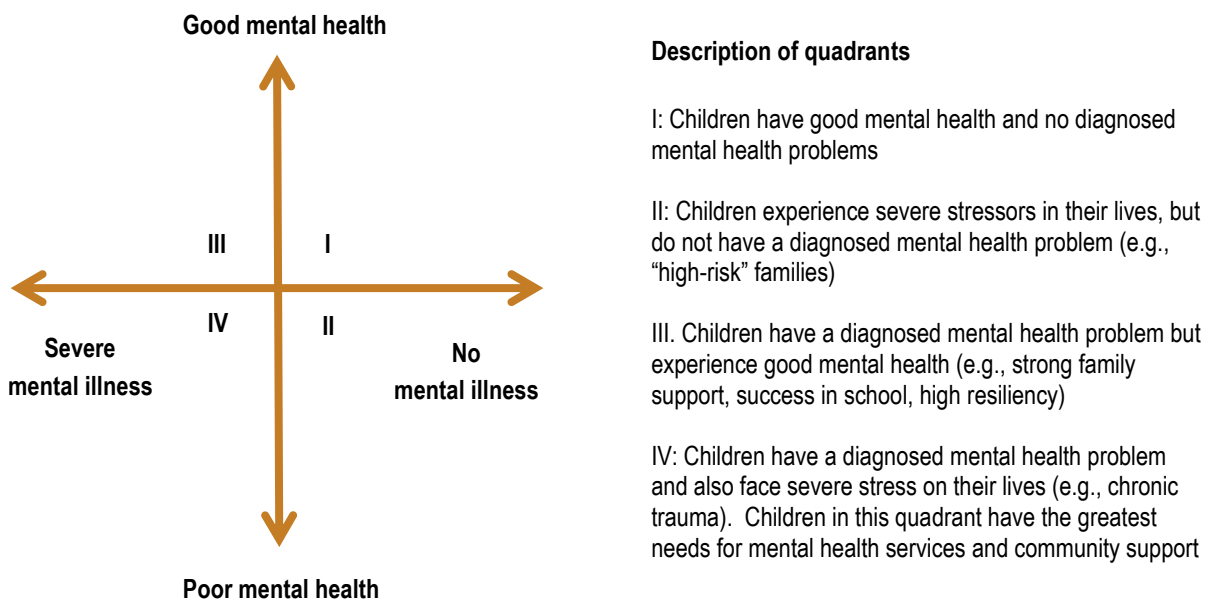
The approach used to develop the dashboard has been guided, in part, by the vision described in the recent monograph, *A Public Health Approach to Children's Mental Health: A Conceptual Framework* (Miles, Espiritu, Horen, Sebian, & Waetzig, 2010). This document emphasizes the importance of considering both mental health problems and positive mental health wellness and provides a framework that focuses on population-level indicators, identifies key risk and protective factors that contribute both positively and negatively to mental health, and considers how social determinants - the underlying conditions that influence social and economic conditions in which people live - influence mental health and wellness.

Considering both mental illness and positive mental health

Mental health is often considered primarily on a continuum with the presence of mental illness on one end of the spectrum and absence of mental illness on the other. However, this approach ignores many aspects of positive mental health and well-being that extend beyond the simple absence of a mental health problem, including overall life satisfaction, a sense of purpose, the ability to form trusting relationships with others, and a sense of community belonging (Keyes, 2007). In short, mental health is more than simply the absence of mental illness.

The framework used to develop the Youth Mental Health and Wellness Dashboard considers not only the presence of mental health symptoms or diagnoses, but also the degree to which an individual experiences positive mental health and well-being. It is based on a dual continuum model that considers mental illness and positive mental health as separate, but related constructs (Figure 2). This type of model allows stakeholders to consider the needs and strengths of youth more holistically, and to consider population-based intervention strategies to promote mental health and well-being, regardless of the presence or absence of a mental health diagnosis.

2. A dual continuum model of mental illness and mental health



Source: Government of Newfoundland and Labrador, Department of Human Resources (2001)

This distinction between mental illness and mental health has been adopted globally and resonates locally. In 2004, the World Health Organization (WHO) defined mental health as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” (World Health Organization, 2004). A more holistic perspective of health also resonated with the youth we spoke to in a series of discussion groups. In most of those conversations, youth described health not only as a state of physical well-being, but also having positive relationships with others, experiencing emotional balance, feeling less stress, and maintaining a spiritual connection.

Applying a public health approach to mental health

There is a long-standing disconnect between the fields of public health and mental health. The mental health field, which historically has used an individualized, treatment-based approach, has not expanded its focus to fully consider wellness and mental health promotion. Simultaneously, public health has typically fallen short of considering mental health promotion and prevention in community health needs assessments and subsequent intervention activities. Adopting a framework that incorporates a larger focus on prevention and wellness is not intended to detract from, but rather to enhance and support, the work done across all child-serving systems to identify children with mental health or behavioral disorders and provide effective treatment interventions.

Using a population-based approach

Mental health is often thought of as being treated at an individual level. However, when a broader perspective is used to consider the mental health needs of population groups rather than individuals, it also opens the door to different types of intervention opportunities to promote mental health, reduce the stigma associated with mental illness, and improve access to mental health treatment. There are examples of areas where a population-focused, prevention-based approach is currently used to promote the positive mental health of children and youth. For example, the area of early childhood mental health strongly promotes healthy attachment between young children and parents, which includes identifying and addressing factors that contribute to parental stress. Schools also emphasize wellness and positive mental health through efforts to create healthy and supportive school climates for all students and approaches like Positive Behavioral Interventions and Supports (PBIS) to promote positive student behavior in the classroom. There are also examples of the public and medical health fields broadening their focus from physical health to positive mental health. This is evident in the growing use of standardized screening tools to assess social emotional development and potential mental health concerns among youth.

Identifying key risk and protective factors

A number of individual, family, school, and community factors can increase or decrease the likelihood that a young person will develop a mental health disorder or influence the severity of symptoms experienced by someone with a diagnosed mental health condition (National Research Council & Institute of Medicine, 2009). These characteristics, referred to as risk and protective factors, occur over the lifespan, have cumulative effects, and interact with one another (Figure 3). Generally, as the combined impact of multiple risk factors experienced over time grows, the risk for potential mental health problems increases (Wille et al., 2008). At the same time, the presence of protective factors can offset the negative impact of stressors and reduce the risk of mental health problems. While the complex interactions between risk and protective factors make it difficult to accurately predict which children will develop mental health problems, this approach is one way to identify individuals and populations at greater risk.

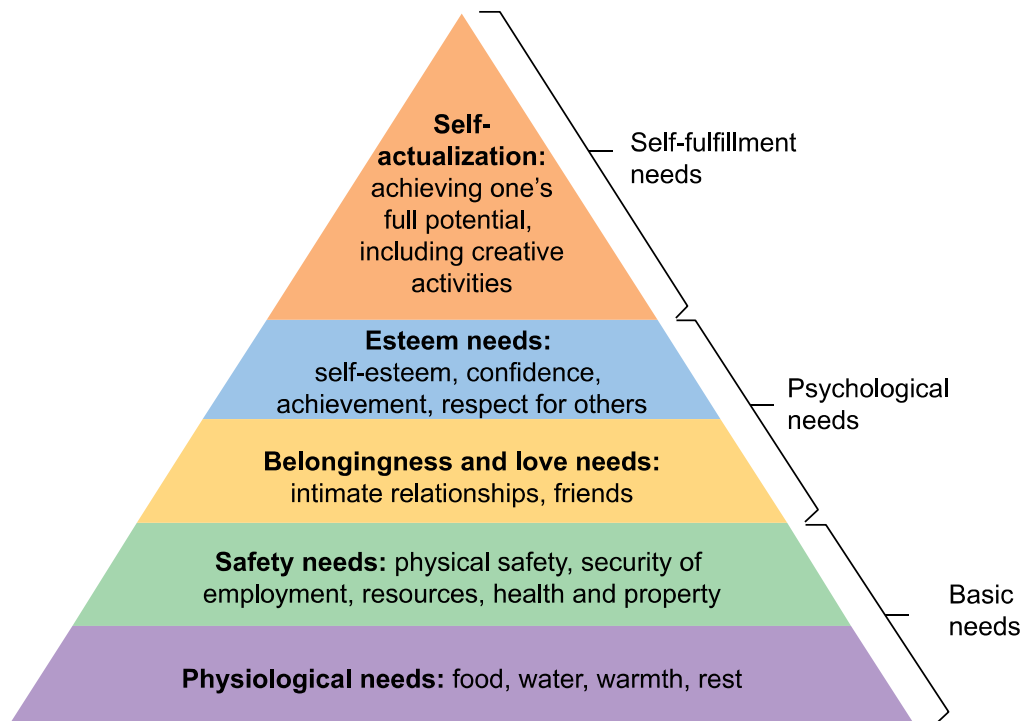
3. Examples of risk and protective factors that contribute to mental health outcomes

Risk factors	Protective factors
Individual-level	Individual-level
Genetic factors	Sense of self-efficacy
Exposure to injury, toxins, nutritional deficiencies	Positive social skills
Difficult temperament	Outgoing temperament
Family-level	Family-level
Witnessing/experiencing violence, abuse or neglect	Family stability
Parental substance abuse	Strong, positive parent-child relationships
Parental depression	Consistent and supportive parenting
Chronic family stress due to death, divorce, chronic poverty	Positive relationships with extended family members
School-level	School-level
Peer bullying, harassment	Positive peer relationships
Poor school environment	Positive school environment
Community-level	Community-level
Living in neighborhoods with concentrated poverty, high rates of crime, high resident mobility	Positive connection to community and neighbors
Social isolation	Support from non-family caring adults
Discrimination and racism	Access to age-appropriate resources
	Access to quality health care services

Considering “upstream” social determinants of mental health

A number of community-level risk and protective factors (e.g., concentrated poverty, exposure to violence, access to quality education, racism/discrimination) can also be referred to as “social determinants.” One way to understand the relationship between these social and economic conditions and mental health is through Maslow’s hierarchy of needs (Figure 4). The basic premise of this theory is that an individual’s most basic needs, such as access to food or personal safety, must be met in order for higher level needs, such as self-esteem and developing strong problem solving skills, to be addressed. When applied to mental health, this model suggests that individual mental health treatment can be enhanced when policies are enacted to improve the conditions in which youth live, learn, and play.

4. Maslow’s hierarchy of needs



Review of key indicators

The framework used to develop the Hennepin County Youth Mental Health and Wellness Dashboard explored potential measures in six different areas: youth demographic characteristics; the prevalence of mental illness/poor mental health among youth; protective factors that support resilience or contribute to positive mental health; risk factors that may lead to poor mental health or more severe symptoms of mental illness; social determinants of mental health; and the capacity to meet the service needs of youth who live in Hennepin County.

5. A proposed framework to assess youth mental health and wellness

Dashboard elements	Key indicator categories
Youth demographics	A. Race, ethnicity, and nativity
Mental health problems	B. Prevalence of emotional distress C. Prevalence of substance use/abuse
Mental health and wellness - Protective factors	D. Youth involvement in school, community E. Relationships F. Physical health and wellness
Mental health and wellness - Risk factors	G. Adverse experiences H. Bullying/harassment
Social determinants	I. Poverty, economic stress, household instability J. Neighborhood conditions
System capacity	K. Early identification of mental health problems L. System capacity, service utilization

This report section describes the key measures that were considered as potential indicators within each dashboard category. Each section includes a brief description of each measure explored and the most current data available (see the Appendix for a detailed description of each indicator and key disparities data), with the items in bold indicating key dashboard measures. A rationale for including indicators from each topical area into the final dashboard is provided, followed by a brief summary of key limitations or issues to consider in using the data. Recommendations for improving the quality of data available in each area are also offered.

Key indicators: Youth demographics

A. Race, ethnicity, and nativity of Hennepin County youth

Hennepin County is home to over 260,000 children and youth under the age of 18. Over half (56%) of youth in the county are white, and the population is becoming increasingly culturally diverse. Ten percent of youth in the county are African-American, U.S-born, and an additional 7 percent of youth are new immigrant or first generation African-American youth (Figure 6). Eight percent of youth are Asian or Southeast Asian, while 11 percent of youth are Hispanic/Latino.

6. Race and ethnicity of Hennepin County youth (age 0-17)

	N	%
Race (non-Hispanic)		
White	147,115	56%
Black, U.S. born	25,748	10%
Black, foreign born or parent foreign born	18,168	7%
Asian, not Southeast Asian	9,240	4%
Southeast Asian	9,151	4%
American Indian	2,840	1%
Two or more races	19,081	7%
Ethnicity		
Hispanic (any race)	28,825	11%

Source: Integrated Public Use Microdata Series (IPUMS) (Ruggles, Alexander, Genadek, Goeken, Schroeder, & Sobek, 2010). Analysis by Wilder Research.

Notes: All race categories exclude children who also identify as Hispanic. Children who are Hispanic may be of any race

Many recent immigrant and refugee families live in Hennepin County. Just over 15,000 youth (6% of youth in Hennepin County) are foreign-born. The largest percentage of foreign-born youth (29%) comes from Mexico and a variety of Central and South American countries. However, many of the youth who are foreign-born (18%) come from African nations, such as Kenya (8%), Liberia (8%), and Somalia (7%).

Key measure (bold font indicates a dashboard indicator)	Hennepin County
A1. Number of youth living in Hennepin County (2010) ^a	261,345
A2. Percentage of non-white youth living in Hennepin County ^b	44%
A3. Percentage of foreign-born youth living in Hennepin County ^b	6%

^a U.S. Census Bureau, Decennial Census (2010)

^b Integrated Public Use Microdata Series (IPUMS) from the U.S. Census Bureau, American Community Survey (2008-10)
Analysis by Wilder Research.

Rationale

The experience of recent immigrant and refugee families varies considerably. However, youth who have recently immigrated to the United States from war-torn nations are at high risk for developing mental health problems, including anxiety disorders, depression, and post-traumatic stress disorders (Pumariiega, Rothe, & Pumariiega, 2005). Many experienced trauma as a result of violence and may have lost part of their support network when moving to the United States. Some also have traumatized and overwhelmed parents who are not able to attend to their emotional needs. After arriving in the United States, youth whose parents are unable to obtain stable employment may live in poverty, in overcrowded apartments, or in unsafe neighborhoods. Discrimination and acculturation stress can also lead to greater risk of mental health problems. In addition, second generation youth (U.S.-born youth of immigrant parents) have been found to be at greater risk of substance abuse, conduct disturbance, and eating disorders than first generation youth (Pumariiega et al., 2005). A variety of stressors, including chronic stressors related to trauma, discrimination, and an insecure cultural identity, all may contribute to this observed difference.

Considerations

Opportunities to understand the mental health needs of immigrant and refugee youth through existing data sources are somewhat limited. While many data sources consider differences among youth by race or ethnicity, far fewer collect information from a large enough sample to report potential differences between youth from new immigrant/refugee families and those who have lived in the United States for many generations. However, given the diversity within the county, it is important to note that there are many youth who may be at greater risk of mental health problems, as a result of the past and ongoing trauma associated with the immigration experience.

Recommendations

- Encourage consistent data collection and reporting of race, ethnicity, and nativity data across child-serving agencies to better understand the needs and strengths of youth from different cultural backgrounds.

Key indicators: Mental health problems

B. Prevalence of emotional distress

Fifteen percent of ninth-grade students reported high levels of emotional distress during the past year. In addition, 10 percent of students self-reported having a diagnosed mental health condition. This aligns with national prevalence estimates. Local data also suggests an unmet treatment need exists. Less than half (43%) of the students who reported a mental health problem also reported they had received mental health treatment in the past year.

Key measure (bold font indicates a dashboard indicator)	Hennepin County
B1. Percentage of 9th grade students self-reporting high levels of emotional distress^a	15%
B2. Percentage of 9 th grade students self-reporting a mental/emotional health problem ^a	10%
B3. Among 9th grade students who self-reported having a long-term mental/emotional health problem (B2), the percentage of students who reported they <u>received mental health treatment</u> during the past year^a	43%
B4. Percentage of Hennepin County parents who were told by a doctor, teacher, or school counselor that their child needed professional help for emotional or behavioral problems ^b	8%
B5. Among parents who reported they were told their child needs professional help for emotional or behavioral problems (B4), the percentage of parents who report the child got the help he/she needed ^b	78%
Percentage of 9 th grade students who, in the last year, have:	
B6. Thought about killing themselves ^a	13%
B7. Tried to kill themselves ^a	3%
B8. Hurt themselves on purpose (e.g., cutting) ^a	10%

^a 2010 Minnesota Student Survey, analysis by Minnesota Department of Health

^b Hennepin County SHAPE 2010 - Child Survey; analysis by the Hennepin County Human Services and Public Health Department

Rationale

Self-reported symptoms of poor mental health, diagnosed mental health conditions, and concerning behaviors illustrate mental health problems youth experience. Indicators of both self-reported mental illness diagnoses and symptom-based indicators of poor mental health are offered in this section. These measures align with an approach that considers mental illness along a continuum, rather than looking only at the presence or absence of a diagnosis of mental illness.

Considerations

While the prevalence of diagnosed mental health disorders is an appropriate measure, it may under-represent the actual number of children and youth experiencing poor mental health. Therefore, a number of measures of mental health problems are offered. While service utilization (see section L of the dashboard) can identify the number of children who receive specific types of mental health services, this likely underrepresents the total number of youth who are experiencing mental health problems. Although insurance claims data can determine the percentage of children with a diagnosed mental health disorder, county-level data are not readily available among private health care plans.

Recommendations

- Develop a consistent approach among both private and public health care claims data to more accurately identify the number of children with a mental health diagnosis in Hennepin County.

C. Prevalence of substance use

Nearly one-third of Hennepin County 9th-grade students reported using alcohol, marijuana, or other illegal drugs during the past year. This is consistent with national data (Johnston, O'Malley, Bachman, & Schulenberg, 2011). Tobacco use was not included in this measure. Fewer students (9%) reported using one or more drugs frequently. Three percent of students reported receiving treatment for drug or alcohol use during the past school year.

Key measure (bold font indicates a dashboard indicator)	Hennepin County
C1. Percentage of 9 th -grade students who have used alcohol, marijuana, or other illegal drugs at least once during the past year ^a	30%
C2. Percentage of 9th-grade students who have used at least one drug ten or more times in the past year ^a	9%
C3. Percentage of 9th-grade students who self-reported having been treated for a substance use problem ^a	3%

^a 2010 Minnesota Student Survey, analysis by Minnesota Department of Health

Rationale

Substance use and mental illness are often co-morbid conditions; approximately two-thirds of youth with substance use disorders also have a diagnosable mental illness (Lamps, Sood, & Sood, 2008). Youth who have a mental illness or who are experiencing mental health symptoms may self-medicate with alcohol and drugs. Youth who use substances are more likely to be involved in the juvenile justice system. The potential

negative consequences of youth substance use can also include truancy, delinquent behavior, poorer academic outcomes, and ongoing substance abuse in adulthood.

Considerations

This high-level indicator focuses on overall student drug use. It does not explore the use of specific types of drugs, as this information can be found elsewhere (see www.sumn.org). Substance use screening does not occur consistently in health care settings.

Recommendations

- Consider opportunities to consistently screen adolescents for potential substance abuse issues in health care settings.

Key indicators: Mental health and wellness – protective factors

D. Youth involvement in school and community

Approximately 6 in every 10 youth report being “highly involved” in school academic or extracurricular activities, meaning they participate in at least one activity three times a week or more. Youth were less likely to report being involved in community activities, including community sports, clubs, and programs or religious activities. Part of this difference may simply be due to community programs being offered less often than extracurricular activities. However, additional information is needed to determine the reasons some youth do not participate as often.

Key measure (bold font indicates a dashboard indicator)	Hennepin County
D1. Percentage of 9th-grade students “highly involved” in school academic or extracurricular activities^a	61%
D2. Percentage of 9th-grade students “highly involved” in community activities^a	40%

^a 2010 Minnesota Student Survey, analysis by Minnesota Department of Health

Rationale

School and community involvement are often identified as factors that contribute to youth resilience (Benzies & Mychasiuk, 2009). Through involvement in structured out of school activities, children and youth have opportunities to form new relationships with peers and non-family adults, build a sense of self-esteem and self-acceptance, develop

positive social skills, and identify and work towards future goals. All of these individual-level factors contribute to youth resilience and support positive mental health and wellness.

Considerations

This measure reports the frequency of youth involvement in extra-curricular and community activities, but does not assess the type, quality, availability, or affordability of the activities.

Recommendations

- At a local level, consider assessing the availability of school and community activities and the factors, such as cost, location, or ability to provide bi-lingual or special needs services that may influence whether these services are accessible to all youth.

E. Relationships

Over 90 percent of 9th-grade youth report having strong support from parents and/or other family members. However, fewer youth have strong levels of support from their peers (78%) or other non-family adults (74%). “Strong support” is defined as the student having a friend, family member, or other community adult care about them “very much” or “quite a bit.” While many youth are connected to caring adults, 26 percent of parents report that their children do not spend any time with a non-family member adult.

Key measure (bold font indicates a dashboard indicator)	Hennepin County
E1. Percentage of 9th-grade students with “strong levels” of peer support ^a	78%
E2. Percentage of 9th-grade students with “strong levels” of family support ^a	93%
E3. Percentage of Hennepin County children who share regular meal times with their family 5 or more times a week ^b	64%
E4. Percentage of 9th-grade students with “strong levels” of non-family adult support ^a	74%
E5. Percentage of youth (age 10-17) who do not spend any time with a non-family member adult ^b	26%

^a 2010 Minnesota Student Survey, analysis by Minnesota Department of Health

^b Hennepin County SHAPE 2010 - Child Survey; analysis by the Hennepin County Human Services and Public Health Department

Rationale

Supportive and positive relationships with peers, family members, and other non-family adults are all considered protective factors that lead to improved youth outcomes in school and greater quality of life.

Considerations

Strong relationships with peers, parents, and other caring adults are also important for the healthy development of young children, not just older youth (National Scientific Council on the Developing Child, 2004). While there are validated tools available to measure parent-child attachment and other characteristics of the caregiver-child relationship, these instruments are administered to subgroups of children served through specific systems or by certain organizations and are not used and reported universally.

Recommendations

- Identify opportunities to assess relationships with caring adults and parent-child attachment among young children (age 0-5) in Hennepin County.

F. Physical health and wellness

Although most parents report that their children are healthy, relatively few children engage in the eating and physical activity behaviors that support optimal health and well-being. Although nearly 9 in every 10 parents in Hennepin County rate their child's health as "very good" or "excellent," far fewer report their child meets key recommended guidelines for healthy eating (19%) and physical activity (24%).

Key measure (bold font indicates a dashboard indicator)	Hennepin County
F1. Percentage of uninsured youth (age 0-17)	6%
F2. Percentage of preterm births ^b	8%
F3. Percentage of children born with low-birth weight ^b	5%
F4. Percentage of women who receive "adequate or better" prenatal care in the first trimester ^b	81%
F5. Percentage of children (age 24-35 months) with completed vaccine series ^b	54%
F6. Percentage of parents who rate their child's health as "very good" or "excellent"^c	87%
F7. Percentage of children (age 3-17) meeting the recommended guideline of eating 3 or more servings of vegetables per day ^c	19%
F8. Percentage of children (age 3-17) meeting the recommended guideline of being physically active for at least 60 minutes per day ^c	24%
F9. Percentage of children (age 0-17) getting at least 8 hours of sleep per night (not consecutive hours for infants) ^c	65%

^a Integrated Public Use Microdata Series (IPUMS) from the U.S. Census Bureau, American Community Survey (2008-10)
Analysis by Wilder Research.

^b County Health Tables, 2011

^c Hennepin County SHAPE 2010 - Child Survey; analysis by the Hennepin County Human Services and Public Health Department

Rationale

Overall health and lifestyle choices can influence, and are influenced by, mental health. Healthy early childhood development is critical in helping children gain the social-emotional skills and positive attachment with caregivers. These early attributes support ongoing childhood and adolescent growth and development. Regular physical activity can improve overall quality of life, and reduce feelings of anxiety, anger, and depression (Rothon et al., 2010). There are also studies exploring the influence of diet on treatment outcomes and reducing symptoms of poor mental health, though much of this research is preliminary (Milchap & Yee, 2012).

Considerations

Children who lack insurance may be less likely to receive preventive medical care or to receive mental health services, if needed. Although a number of children are also likely underinsured, meaning they have low levels of coverage, high-deductible plans, or high visit co-pays, there is not a source of existing data that includes this information.

The number of youth who follow a healthy diet is difficult to measure, as there are many different foods that can be considered healthy or unhealthy, based on the type of food and amount of consumption. Eating the recommended servings of daily vegetables is intended to be a proxy measure for maintaining a healthy diet.

Recommendations

- Consider developing a measure describing the number of schools/school districts that have fully implemented policies that encourage healthy eating and physical activity.

Key indicators: Mental health and wellness – risk factors

G. Adverse experiences

Over one-quarter of 9th-grade students have experienced one or more adverse experiences, such as experiencing/witnessing abuse or familial violence. A smaller percentage of students (6%) have experienced three or more of these types of traumatic events. Hennepin County data also can be used to identify how many youth have experienced traumatic or disrupting life events. For example, in 2010, nearly 5,000 treatment investigations were completed, with 1,311 cases being substantiated. Overall, the rate of substantiated child maltreatment cases is nearly 5 in every 1000 youth. Approximately 9 in every 1,000 Hennepin County children or youth (age 0-21), or 2,399 children and youth overall, have had an out of home placement.

Key measure (bold font indicates a dashboard indicator)	Hennepin County
Percentage of 9th-grade students reporting: ^a	
G1. one or more adverse experiences	28%
G2. three or more adverse experiences	6%
G3. Rate of child maltreatment investigation ^b	18.9
G4. Rate of determined maltreatment cases, per 1,000 ^b	4.7
G5. Percentage of children who were victims of substantiated child abuse/neglect cases who did not have another substantiated/ determined report within 12 months ^b	89%
G6. Rate of out of home placements, per 1,000 ^b	9.1
G7. Percentage of children discharged from foster care during the past 12 months that re-entered foster care in less than 12 months ^b	21%

^a Minnesota Student Survey, analysis by Minnesota Department of Health, 2010

^b Minnesota Department of Human Services Child Welfare Report, 2011

Rationale

There is a growing body of research that demonstrates the relationship between adverse childhood experiences (ACEs) and mental health and physical health conditions in adulthood (see www.cdc.gov/ace/outcomes.htm). For example, less than 20 percent of adults without any ACEs experience depression at some point in their life, while depression rates are over twice as high among adults who have experienced four or more ACEs (Anda & Brown, 2010). Recent research has also found that ACEs have a more immediate impact on adolescent mental health outcomes. In a study using Medicaid administrative data to identify past experiences of abuse, neglect, or other types of trauma, 11 percent of youth (age 10-17) without any adverse childhood experiences had a mental health problem, compared to 44 percent of youth with five or more of these negative experiences (Lucenko, Sharkova, Mansuco, & Felver, 2012).

Considerations

New items focused on adverse childhood experiences will be incorporated into the Minnesota Student Survey in 2013. ACE survey items were also integrated into Minnesota's Behavioral Risk Factor Surveillance System (BRFSS) survey in 2012, which will allow Hennepin County to look more closely at the relationships between childhood experiences and adult mental and physical health.

Recommendations

- Update the dashboard measure to reflect changes made to the 2013 Minnesota Student Survey items that focus on adverse childhood experiences.

H. Bullying/harassment

Approximately one in every ten 9th-grade students report they are frequently teased by their peers. Fewer parents (5%) report their child (age 6-17) has been frequently picked on, teased, or bullied by other children. This difference may reflect differences in how students and parents define and describe the frequency of bullying, the degree to which children and youth tell their parents about being bullied or teased at school, or the difference in age between children who are reflected in the Minnesota Student Survey (9th-grade students) and the Hennepin County SHAPE survey (children age 6-17).

Key measure (bold font indicates a dashboard indicator)	Hennepin County
H1. Percentage of 9th-grade students reporting being teased or excluded by other students at least once a week^a	9%
H2. Percentage of 9 th -grade students who reported experiencing three or more types of harassment/bullying on school property during the past year ^a	10%
H3. Percentage of Hennepin County parents who report their child (age 6-17) was picked on, teased, or bullied by other children “usually” or “always” during the past school year ^b	5%

^a 2010 Minnesota Student Survey, analysis by Minnesota Department of Health

^b Hennepin County SHAPE 2010 - Child Survey; analysis by the Hennepin County Human Services and Public Health Department

Rationale

Bullying includes actions to exclude or isolate others, as well as physical, verbal, and – as is the case with social media – written attacks intended to hurt or instill fear. Compared to those who are not bullied, students who are bullied tend to have higher rates of depression and anxiety, have more frequent physical complaints, experience less academic success, and exhibit poorer individual outcomes, such as lower levels of self-esteem (Rigby, 2003). Bullying often begins early and can continue from childhood into adolescence. The measures in the dashboard focus on identifying students who experience bullying repeatedly.

Considerations

Mental health outcomes related to bullying could be considered not only from the perspective of bullying victims, but also those who perpetrate or witness bullying. Some research suggests that bullying impacts not only those who experience it directly, but that those

who witness it are also at higher risk of developing mental health problems (Rivers, et al., 2009). In addition, recent research suggests that children with specific types of mental health disorders may be more likely to bully others than children without these disorders (American Academy of Pediatrics, 2012). While measures focused on perpetrators of bullying is beyond the scope of the dashboard, this research suggests that mental health may also need to be considered when developing anti-bullying interventions.

Recommendations

- Update the dashboard measure to reflect changes made to the 2013 Minnesota Student Survey items that focus on bullying.

Key indicators: Social determinants

I. Poverty, economic stress, household instability

Nearly one in five Hennepin County children live in poverty. Low-income households may be forced to consider how to prioritize the family's basic needs, including housing, health care, nutrition, or child care. As a result of the recent economic recession, more families in Hennepin County are facing these difficult decisions. The percentage of children living in poverty has doubled from 9 percent in 2000 to 19 percent in 2010. Median household income has also decreased approximately \$10,000 during the same time frame (from \$69,049 in 2000 to \$59,252 in 2010). In addition, over one-third of households are cost-burdened, meaning 30 percent or more of a household's monthly gross income is directed to housing costs. Statewide, regional, and county-level data all consistently demonstrate that poverty disproportionately impacts communities of color. Across all three measures, Hennepin County has a larger percentage of residents experiencing economic instability than the statewide average.

Key measure (bold font indicates a dashboard indicator)	Hennepin County
I1. Percentage of children (age 0-17) living in poverty (2010)^a	19%
I2. Median household income ^b	\$59,252
I3. Percentage of children who receive free/reduced price lunch ^c <i>NOTE: Households earning less than 185% of the Federal Poverty Level (FPL) qualify for free or reduced price school lunch, but not all eligible students participate in the program</i>	42%
I4. Percentage of cost-burdened households that spend more than 30 percent of their income on housing ^d	36%
I5. Percentage of Hennepin County adults who moved two or more times in the past two years ^e	10%
I6. Percentage of Hennepin County adults who “often” or “sometimes” worried that food would run out before they had money to buy more during the past 12 months ^e	14%
I7. Percentage of children born to teen mothers (age 15-17) ^f	14%
I8. Percent of children (age 0-17) living in single parent headed households ^g	29%

^a U.S. Census Bureau, Decennial Census, 2010

^b U.S. Census Bureau, Small Area Income and Poverty Estimates, 2010

^c Minnesota Department of Education, 2011

^d U.S. Census Bureau, Decennial Census and U.S. Census Bureau, American Community Survey

^e Hennepin County SHAPE 2010 - Adult Survey; analysis by the Hennepin County Human Services and Public Health Department

^f Minnesota Department of Health, Center for Health Statistics (2008-2010)

^g Minnesota Department of Health, County Health Tables; data from American Community Survey (2006-2010)

Rationale

Chronic poverty can impact children and youth in a variety of ways. On a daily basis, financial strain to make ends meet can lead to family stress and difficult choices about how to prioritize meeting the basic needs of the child and family. Poverty is also associated with stressful experiences, such as family conflict, divorce, and abuse, and can lead to delays in care, poor nutrition, instable housing, and violence. The stressful experiences associated with chronic and episodic poverty have been identified as risk factors for mental health symptoms among children and youth (Duncan, Brooks-Gunn, & Klebanov, 1994). Locally, youth who participated in the discussion groups identified financial instability and poverty as a source of their own stress, as well as stress for their families.

Considerations

While poverty is an important risk factor to consider, a number of mediating factors (i.e., strong coping skills, neighborhood safety, skilled parenting, social cohesion) can reduce the level of stress children experience as a result of the family's economic situation.

Recommendations

- At this time, there are no recommendations for improving this set of indicators and other key measures.

J. Neighborhood conditions

Overall, neighborhood safety and trust among neighbors is high in Hennepin County.

A majority of 9th-grade students (89%) feel safe in their neighborhoods and have not missed school in the past 30 days due to safety concerns. Similarly, most Hennepin County adults (87%) report that they live in a good community to raise children. While these percentages are high overall, they also demonstrate that 10-15 percent of residents do have community safety concerns.

Key measure (bold font indicates a dashboard indicator)	Hennepin County
J1. Percentage of 9th-grade students who feel safe in their neighborhoods and on their way to school^a	89%
J2. Percentage of Hennepin County adults who “agree” or “strongly agree” that they live in a neighborhood where children are safe	89%
J3. Violent crime rate (2007-2009) ^b	539 per 100,000 residents
J4. Rate of children/youth (age 10-17) arrested for serious crimes ^b	30.1 per 1000 youth
J5. Percentage of Hennepin County adults who “agree” or “strongly agree” that they live in a good community to raise children in ^c	87%
J6. Percentage of Hennepin County adults who “agree” or “strongly agree” that people in their neighborhood are willing to help one another ^c	80%
J7. Percentage of Hennepin County adults who “agree” or “strongly agree” that people in their neighborhood can be trusted ^c	83%
J8. Percentage of Hennepin County adults who “agree” or “strongly agree” that people in their neighborhood know one another ^c	70%

^a 2010 Minnesota Student Survey, analysis by Minnesota Department of Health

^b 2010 Uniform Crime Report

^c Hennepin County SHAPE 2010 - Adult Survey; analysis by the Hennepin County Human Services and Public Health Department

Rationale

Neighborhood cohesion describes a sense of “belonging” or “togetherness” among residents. A number of studies have observed an association between youth living in a disadvantaged neighborhood and internalizing problems, such as depression and anxiety (Leventhal, Dupéré, & Brooks-Gunn, 2009). Actual and perceived neighborhood safety can influence behavior. For example, youth living in neighborhoods where they do not feel safe may be less likely to participate in community activities.

Considerations

Although neighborhood cohesion has been measured differently through various surveys, it often incorporates elements of familiarity and trust among neighbors, as well as a willingness to help one another. A challenge in using this type of measure is that, while a “cohesive neighborhood” may be a positive experience for most residents in a geographic area, some residents may feel excluded by their neighbors and live in extreme isolation (Johnson, 2010). While the experiences of a small number of residents may not be captured using a county-level indicator, these issues could be explored closely at a local neighborhood level.

Recommendations

- Consider incorporating these key “neighborhood conditions” items into local surveys in order to determine perceptions of safety and neighborhood cohesion.

Key measures: Mental health system capacity

K. Early identification of mental health concerns

While efforts are being made to screen children for potential mental health concerns through a number of child-serving systems, not all eligible children are screened. In 2003, legislation was passed in Minnesota that requires mental health screening to be conducted for children and youth involved in the child protection and juvenile justice systems. In 2010, 82 percent of eligible youth were screened for mental health problems through the juvenile justice system, while fewer (71%) eligible children and youth were screened through the child protection system. Universal childhood screening also occurs in school districts. However, only 75 percent of children are screened for mental health or behavioral concerns by the school district by age 5. Universal screening is also encouraged in primary care settings, but occurs far less frequently. Based on billing codes, only 2 percent of children enrolled in public health insurance programs are screened for potential mental

health/social emotional development problems by the age of 5. However, due to the underutilization of appropriate billing codes, this is likely a low and unreliable estimate.

Key measure (bold font indicates a dashboard indicator)	Hennepin County
K1. Percentage of eligible youth (age 10-18) screened for mental health concerns through the Juvenile Justice system (2010)^a	82%
K2. Percentage of eligible youth (age 0-18) screened for mental health concerns through the Child Welfare system (2010)^b	71%
K3. Percentage of children screened for mental health concerns through the Hennepin County school district by age 5 (2010-11 school year)^c	75%
K4. Percentage of school districts that meet/exceed the statewide target for the percentage of infants and toddlers (age 0-3) with an IFSP ^c	50% (8 of 16 districts)
K5. Number and percentage of Minnesota Health Care Program (MHCP) enrollees who have received:	
J5. Developmental screening by age 5 ^d	23,165 (56%)
J6. Social-emotional screening by age 5 ^d	939 (2%)
J7. Both developmental and social-emotional screening by age 5 ^d	939 (2%)

^a Compiled by Hennepin County Department of Community Corrections and Rehabilitation and reported to the Minnesota Department of Human Services; not publicly available through existing reports, 2011.

^b Children and Community Services Act Annual Performance Report, Minnesota Department of Human Services, 2011

^c Minnesota Department of Education, Early Learning Services: Early Childhood Screening Completion Report, 2010-11.

^d DHS data warehouse: MMIS claims, analysis by Hennepin County Human Services and Public Health Department

Rationale

Universal screening is recommended as a key strategy to identify children most likely to experience mental health problems (New Freedom Commission on Mental Health, 2003). The early identification of mental health problems can lead to better outcomes by helping to ensure children and youth receive appropriate services as early as possible.

Considerations

Although mental health screening is required and reported through multiple child-serving sectors (e.g., juvenile justice, child protection, education, primary care), data from these systems cannot be combined to understand overall, the percentage of children across the county who are not being screened for mental health concerns in any of these child-serving sectors. Although screening rates in primary care settings may include information for a broader number of children, inconsistent use of billing codes for social-emotional screening may lead to under-reporting and there is the challenge of obtaining similar claims data from both public and private health insurance plans. Finally, the data sources

currently available can be used to report the number of screens that occur, but do not demonstrate how often elevated screens lead to further assessment, a mental health diagnosis, or use of mental health services.

Recommendations

- Encourage juvenile justice, child protection, and local school districts to expand their tracking capacity to also monitor and report the frequency of elevated screening scores, the frequency of referrals made for assessments, and the outcomes of the assessment (e.g., mental health diagnosis provided).
- Continue to encourage primary care providers and other medical professionals to consistently use the code modifier that indicates a social-emotional screener was administered.

L. System capacity, service utilization

Current measures of system capacity and service utilization paint a partial picture of how well the county's mental health system is meeting the needs of youth and their families. Although both youth and adults report there are unmet children's mental health service needs (see the key indicators included in section B of the report), gaps in existing data make it difficult to fully understand which types of services may be lacking in the county and the barriers that youth and families face when seeking services.

Overall, 11 percent of children (age 0-17) enrolled in a public health care program receive mental health services. While this overall total is lower than would be expected, based on national prevalence rates, this is likely due to the large number of young children insured through public programs. The use of mental health services is much more common among older children age 6-17 (17%), than among children age 5 and younger (4%). Mental health utilization among children age 6-17 is much lower for Minnesota Health Care Programs (MHCP)-enrolled Asian children (5%), than for children identified as black (16%), white (23%), Native American (24%), or Hispanic (12%).

Key measure (bold font indicates a dashboard indicator)	Hennepin County
L1. Number of licensed child/adolescent psychiatrists in Hennepin County who provided treatment to MHCP-enrolled children/youth (age 0-17) in 2011 ^a	46
Number and percentage of MHCP-enrolled children/youth (age 0-17) who received the following service in 2011: ^a	
L2. Any mental health service	11,296 (11%)
L3. Assessment services	5,887 (6%)
L4. County case management	493 (<1%)
L5. Emergency/crisis services	847 (<1%)
L6. Community support services	2,801 (3%)
L7. Outpatient services	9,737 (3%)
L8. Day treatment services	493 (<1%)
L9. Inpatient services	469 (<1%)

^a DHS data warehouse: MMIS claims, analysis by Hennepin County Human Services and Public Health Department

Rationale

Youth with mental health problems and their families have treatment and support needs that vary based on the child's age, diagnosis, and symptoms, as well as the family's treatment preferences and support needs. Therefore, an array of services and supports are needed in the county, including school-based services, case management services, family support and education, outpatient therapy, home-based services, day treatment/partial hospitalization, therapeutic foster care/group homes, residential treatment centers, and parent/peer support programs (Pires, 2002). Understanding the continuum of services available in the county is an important step in identifying service gaps and unmet needs.

Considerations

There are a number of limitations to consider when using these measures to understand service availability and accessibility. While claims data available through Hennepin County can be used to report mental health service utilization for all children enrolled in Minnesota Health Care Programs (MHCPs), this county-level information is not available for children insured through private health care plans. In addition, it is not known how well service utilization reflects the degree to which youth and family needs are being addressed. Parent/youth peer support, provided through advocacy organizations and other support groups or offered informally by friends and family and religious institutions, is an important aspect of care, but not captured through any existing data sources. In addition, the degree to which the services used by youth and families are developmentally appropriate

and culturally/linguistically competent, cannot be determined using existing sources of information. Overall, additional work is needed to understand what types of services are available in Hennepin County and to identify gaps in service availability and accessibility.

Recommendations

- Due to the limitations of these measures, no service capacity/utilization indicators are recommended for inclusion in the dashboard at this time.
- Continue to work with private health plans to explore data sharing options that would help provide a more complete understanding of service availability in the county.
- Consider new data collection strategies to better understand the availability of peer support programs and culturally competent, developmentally appropriate services.

Other factors considered

Availability of mental health services

Mental health services are available in multiple settings (i.e., schools, community-based mental health clinics, primary care clinics), are provided by a variety of different types of professionals/providers, and are funded in a variety of ways (i.e., public/private insurance, grant-funded initiatives, state/federal funding to school districts). Existing tracking and reporting systems may use inconsistent definitions of services and cannot be easily merged into an aggregate format. As a result, it is difficult to identify a series of indicators that could be used to describe the degree to which the appropriate array of services is in place to meet the needs of children and youth in the county.

Green space

Some evidence suggests an association between green space and improved mental health symptoms. However, while it is possible to report the amount of green space in the county and its proximity to residents, additional data are needed to assess the quality and utilization of these areas.

Individual characteristics

A number of individual characteristics support resilience and contribute to youth mental health and well-being, including: strong attachment to caregivers, a sense of self-esteem, optimism for the future, and self-acceptance. While important, these measures are not currently incorporated into any existing data sources.

Psychotropic medication use

The use of medications to address mental health symptoms among youth is a controversial issue among the general public. Through recent efforts, guidelines have been developed to minimize the inappropriate use or over-prescribing of psychotropic medications. Although there was interest among stakeholders in identifying a key measure that could be used to monitor and report the use of psychotropic medications, this information is not regularly being gathered at the state or county level. It may be possible to identify a key measure in this area as the guidelines are implemented and systems are put in place to monitor adherence to these best practices.

Racism/discrimination

Racism and discrimination can contribute to poor mental health outcomes in a number of ways (Williams & Williams-Morris, 2000). Institutional racism can lead to policies that contribute to disparities in socioeconomic status and living conditions and result in some residents being more likely to live in neighborhoods that do not support mental health. The stress of direct discrimination can also contribute to mental health problems. Based on data from the Hennepin County SHAPE survey, approximately 3 percent of county adults report that they are in situations where they feel unaccepted because of their race, ethnicity, or culture at least once a week. However, this varies considerably by geographic area (<1% - 9%) and socioeconomic status (2%-18%). While this information demonstrates that racism and discrimination are issues in Hennepin County, it does not directly measure the experience of youth and is not included in the list of potential dashboard measures.

School-based services

Schools are a critical partner in meeting the mental health needs of youth with diagnosed problems and in providing an environment that supports the positive mental health and wellness of all students. The Collaborative has been a strong supporter of and advocate for school-based mental health services. However, throughout the county, school districts define, fund, and staff school-based mental health services and preventive interventions in a variety of ways. Through conversations with the Minnesota Department of Education, a variety of measures were considered as indicators of the school environment and availability of school-based services. However, better indicators of school-based services and supports can likely be gathered through new data collection efforts at a school- or district-level. As a result, no school-based services indicators are incorporated into the dashboard at this time.

Spirituality

A sense of spirituality is often considered in a religious context, but is intended to include belief in a higher power on a broader level. A number of potential links between spirituality and positive mental health have been suggested, including having a stronger sense of meaning or purpose, greater optimism or hopefulness, or a framework to better handle stress. These are all factors that are thought to strengthen resilience. Although connections to religious institutions are considered to some degree in existing surveys, there are not any existing data sources that look more closely at factors that contribute to resilience.

Youth Mental Health and Wellness Dashboard

Based on the data reviewed and recommendations provided by the study’s advisory committee, the following Youth Mental Health and Wellness Dashboard was developed. For many measures, disparities are evident, based on race/ethnicity and socioeconomic status. The specific items/definitions used for each indicator and a description of the data sources used can be found in the appendix.

7. Hennepin County Youth Mental Health and Wellness Dashboard

Description of key measure		Most recent data available
Youth demographics	Number of youth (age 0-17) living in Hennepin County ^a	260,829
	Percentage of non-white youth (age 0-17) living in Hennepin County ^b	46%
	Percentage of foreign-born youth (age 0-17) living in Hennepin County ^b	6%
Mental health problems	Percentage of 9 th -grade students self-reporting high levels of emotional distress. ^c	15%
	Among 9 th -grade students who self-reported having a long-term mental/emotional health problem, the percentage of students who reported they <u>received mental health treatment</u> during the past year. ^c	43%
Mental health and wellness: Protective factors	Percentage of 9 th -grade students who have used at least one drug ten or more times in the past year ^c	9%
	Percentage of 9 th -grade students who self reported having been treated for a substance use problem ^c	3%
	Percentage of 9 th -grade students “highly involved” in school academic or extracurricular activities ^c	61%
	Percentage of 9 th -grade students “highly involved” in community activities ^c	40%
	Percentage of 9 th -grade students with “strong levels” of peer support ^c	78%
	Percentage of 9 th -grade students with “strong levels” of family support ^c	93%
	Percentage of 9 th -grade students with “strong levels” of non-family adult support ^c	74%
	Percentage of uninsured youth (age 0-17) ^b	6%
	Percentage of parents who rate their child’s health as “very good” or “excellent” ^d	89%

7. Hennepin County Youth Mental Health and Wellness Dashboard (continued)

Description of key measure		Most recent data available
Mental health and wellness: Risk factors	Percentage of 9 th -grade students reporting: ^c	
	one or more adverse experiences	28%
	three or more adverse experiences	6%
	Rate of determined maltreatment cases, per 1,000 ^e	4.7 (n=1,311)
	Rate of out of home placements, per 1,000 ^e	9.1 per 1000 (n=2,302)
Mental health and wellness: Risk factors	Percentage of 9 th -grade students reporting being teased or excluded by other students at least once a week ^c	9%
Social determinants	Percentage of children (age 0-17) living in poverty (2010) ^a	19%
	Percentage of 9 th -grade students who feel safe in their neighborhoods ^c	89%
System capacity	Percentage of eligible youth (age 0-18) screened for mental health concerns through the Juvenile Justice system ^f	82%
	Percentage of eligible youth (age 0-18) screened for mental health concerns through the Child Welfare system ^g	71%
	Percentage of children screened for mental health concerns through the school district by age 5 ^h	75%

^a U.S. Census Bureau, Decennial Census (2010)

^b Integrated Public Use Microdata Series, U.S. Census Bureau, American Community Survey (2008-10); analysis by Wilder Research.

^c 2010 Minnesota Student Survey, analysis by Minnesota Department of Health

^d 2010 Hennepin County SHAPE – Child Survey, analysis by the Hennepin County Human Services and Public Health Department

^e Minnesota Department of Human Services Child Welfare Report, 2011

^f Compiled by Hennepin County Department of Community Corrections and Rehabilitation and reported to the Minnesota Department of Human Services; not publicly available through existing reports.

^g Children and Community Services Act Annual Performance Report, Minnesota Department of Human Services, 2011

^h Minnesota Department of Education, Early Learning Services: Early Childhood Screening Completion Reports, 2010-11

Using the dashboard

In many ways, the value of any dashboard does not come through its completion, but through its utilization. In the Georgetown monograph, the authors identify three core steps that are needed to drive action: assessing, intervening, and ensuring. Following that approach, the creation of this dashboard is simply the first step in a process of creating a common vision of how youth mental health and wellness should be supported within the county and determining the steps then needed to achieve that vision. The following set of questions could be considered as the Collaborative and other Hennepin County stakeholders begin to convene conversations to inform how to best use the data included in the dashboard:

- What should the future look like, in terms of how Hennepin County supports the mental health and well-being of youth? Which areas should be prioritized?
- How can stakeholders from different fields work together to better address some of the underlying economic, social, and familial issues that contribute to poorer youth outcomes?
- What interventions are currently in place to treat mental health problems/support the mental health and well-being of all youth?
- How can current interventions and program be expanded to not only address the individual needs of the child, but to support families, build community connections, and strengthen neighborhoods?
- What additional research is needed in order to better understand factors that contribute to poor mental health outcomes, as well as ways that the community can support positive mental health and wellness?

Applying the dashboard to guide neighborhood-level action

While the dashboard focuses on reporting county-level indicators, the same framework can be used to consider how to support the mental health and well-being of youth within a more targeted geographic area, such as a neighborhood, city, or school district. The dashboard items from the Minnesota Student Survey, for example, can be analyzed at a school or school district level to guide local efforts to improve the mental health and well-being of youth. Although not all data sources can be used to guide these more local decision-making efforts, key items from the dashboard can be incorporated into surveys administered to residents of a neighborhood or participants in a program.

This report also identifies a number of data gaps that would help provide a more comprehensive understanding of the needs of youth in Hennepin County and may be more feasible to measure at a neighborhood level. For example, measures of individual characteristics that support resilience may be more easily assessed for targeted groups of youth, rather than working to modify existing population-level surveys. Similarly, observational studies that explore the quality of green space or neighborhood conditions can be more easily done in smaller, targeted areas than across the entire county.

Using the dashboard to measure change over time

The dashboard can be updated as new information from existing data sources becomes available. Although data from some sources could be updated annually, the Minnesota Student Survey and Hennepin County SHAPE survey are administered less frequently (every 3 and every 4 years, respectively). Updating the dashboard every 3-5 years would better align with the availability of new information and allow time to implement interventions and for change to be observed.

Although some dashboard measures, particularly those focused on the prevalence of mental health disorders, are unlikely to change significantly over time, many of the indicators selected for the dashboard are leading indicators, meaning that appropriate interventions could lead to observable changes to occur in a relatively short (1-3 year) period of time. However, the size and scope of any intervention or policy change will influence the degree to which county-level changes can be observed. Therefore, stakeholders using the dashboard are encouraged to consider incorporating additional process and immediate outcome measures into evaluations for initiatives and to use local data to monitor the impact of initiatives that are targeted to specific neighborhoods, cultural communities, or school districts.

Potential next steps and future recommendations

The Collaborative will be developing a process to share this proposed framework with representatives from Hennepin County departments, local school districts, and advocacy groups, as well as parents and youth, and to then consider how to use this information to guide strategic planning and intervention efforts. The following recommendations are suggestions for the Collaborative to consider as they begin to engage stakeholders in these future discussions:

- **Incorporate, but do not focus solely on, aspects of positive mental health and wellness.** The dashboard framework introduced in this document uses a dual continuum model that describes both mental illness and positive mental health as

separate constructs. While broadening conversations around mental illness to include prevention and early intervention activities allows the Collaborative and other stakeholders to consider new opportunities to better support all youth, an exclusive emphasis on positive mental health could contribute to greater stigma around mental illness. A balanced approach is needed when sharing the dashboard with multiple stakeholder groups.

- **Identify additional sources of information that can be used to provide further context to the dashboard indicators.** Although many potential sources of information were explored in the development of this dashboard, state agencies, county departments, school districts, or other organizations may also use other sources of information to guide planning and decision-making efforts. This information may provide stakeholders with additional information that can help inform future interventions.
- **Support the work of county departments, school districts, and other partners to collect and report key data.** Although the Minnesota Student Survey and Hennepin County SHAPE survey are two key tools that provide the Collaborative with key insights into the experiences of youth, funding to administer these surveys has been reduced over time. High quality data are needed in order for the dashboard indicators to be a reliable and useful source of information. The Collaborative may need to consider ways to encourage or build support for the ongoing administration of existing surveys or new data collection activities.
- **Build and maintain relationships with youth advocacy organizations.** Youth who participated in the series of discussion groups were very interested in talking about ways they experienced and dealt with stress, and they were also willing to offer suggestions about ways they could be better supported in home, at school, and within the community. The Collaborative may want to thoughtfully consider ways to create opportunities for youth to contribute to and participate in planning interventions that address important areas of concern and that are relevant to youth.
- **Engage state agencies, county departments, and health care plans in conversations to explore the consistent use of claims data to understand the mental health needs of youth and availability of mental health services throughout the county.** The collection and reporting of data is influenced by legislative mandates, reimbursement requirements, and internal quality improvement activities. However, without consistency in the data collected and reported by different sectors, it is very difficult to understand the needs of children and youth who receive mental health services through public health care plans, private health care plans, and county uncompensated funds.

Although there are many barriers to consistent data collection and reporting across multiple sectors, this is a key area to continue exploring.

- **Consider opportunities to better understand the needs of youth from specific cultural communities.** The current race and ethnicity categories typically used by most sectors are broad federal categories (e.g., African American, Asian, American Indian, White, Hispanic/Latino, More than one race). However, in a diverse county, such as Hennepin County, these broad categories do not allow stakeholders to understand the similarities and differences among youth that should be considered when developing interventions. Local or county level efforts could be made to develop a common set of more specific racial/ethnic categories and other key demographic information and incorporate these questions into existing surveys and other sources of data.
- **Work with school districts and neighborhood organizations to develop strategies to measure and report the availability of mental health services and supports in the county.** Some sources of county-level data provide some insight into the types of services and supports available to children in the county. However, service data is typically available by funding stream (e.g., public/private health care plan, grant funds), making it difficult to gather a holistic understanding of the services available to youth and families. Given the limitations of existing data sources, it may be more meaningful to develop new data collection tools that can be used consistently across the county to provide a more comprehensive assessment of service availability and gaps.

References

- American Academy of Pediatrics. (2012, October 22). *Children with mental health disorders more often identified as bullies* (Press Release). Retrieved from <http://www.aap.org>
- Anda, R. F., & Brown, D. W. (2010). *Adverse childhood experiences and population health in Washington: The face of a chronic public health disaster*. Retrieved from Family Policy Council website: <http://www.fpc.wa.gov/publications/ACEs%20in%20Washington.2009%20BRFSS.Final%20Report%207%20%202010.pdf>
- Benzies, K., & Mychasiuk, R. (2009). Fostering family resiliency: A review of the key protective factors. *Child and Family Social Work, 14*, 103-144.
- Duncan, G. J., Brooks-Gunn, J., & Klebanov, P. (1994). Economic deprivation and early childhood development. *Child Development, 65*, 296-318.
- Johnson, R. (2010). Metrics and measures for tackling the social determinants of health – the example of mental health and housing. *Journal of Public Mental Health, 9*(3), 36-44.
- Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2011, December 14). *Marijuana use continues to rise among U.S. teens, while alcohol hits historic lows*. Retrieved from <http://www.monitoringthefuture.org>
- Kessler, R. C., Berglund, P. A., Demler, O., Jin, R., & Waters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication (NCS-R). *Archives of General Psychiatry, 62*, 593-602.
- Keyes, C. (2007). Promoting and protecting mental health as flourishing: A complementary strategy for improving national mental health. *American Psychologist, 62*(2), 95-108.
- Lamps, C. A., Sood, A. B., & Sood, R. (2008). Youth with substance abuse and comorbid mental health disorders. *Current Psychiatric Reports, 10*, 265-271.
- Leventhal, T., Dupéré, V., and Brooks-Gunn, J. (2009). Neighborhood influences on adolescent development. In R.M. Lerner, & L. Steingberg (Eds.), *Handbook of adolescent psychology* (pp. 411-413). Hoboken, NJ: Wiley.

- Lucenko, B., Sharkova, I., Mansuco, D., & Felver, B. E. M. (2012). Adverse childhood experiences associated with behavioral health problems in adolescents: Findings from administrative data for youth age 12 to 17 enrolled in Medicaid. Retrieved from Washington State Department of Social and Human Services website: <http://www.dshs.wa.gov/pdf/ms/rda/research/11/178.pdf>.
- Milchap, J. G., & Yee, M. M. (2012). The diet factor in Attention-Deficit/Hyperactivity Disorder. *Pediatrics*, 129(2), 330-337.
- Miles, J., Espiritu, R. C., Horen, N., Sebian, J., & Waetzig, E. (2010). *A public health approach to children's mental health: A conceptual framework*. Washington DC: Georgetown University Center for Child and Human Development, National Technical Assistance Center for Children's Mental Health.
- National Research Council and Institute of Medicine, Board on Children, Youth, and Families. (2009). *Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities*. Washington, D.C.: The National Academies Press.
- National Scientific Council on the Developing Child. (2004). *Young children develop in an environment of relationships* (Working Paper No 1). Retrieved from <http://www.developingchild.net>
- New Freedom Commission on Mental Health, *Achieving the Promise: Transforming Mental Health Care in America. Final Report*. DHHS Pub. No. SMA-03-3832. Rockville, MD: 2003.
- Pires, S.A. (2002). *Building systems of care: A primer*. Washington DE: National Technical Assistance Center for Children's Mental Health.
- Pumariega, A. J., Rothe, E., & Pumariega, J. B. (2005). Mental health of immigrants and refugees. *Community Mental Health Journal*, 41(5), 581-597.
- Rigby, K. (2003). Consequences of bullying in schools. *The Canadian Journal of Psychiatry*, 48(9), 583-590.
- Rivers et al. (2009). Observing bullying at school: The mental health implications of witness status. *School Psychology Quarterly*, 24 (4): 211.
- Rothon, C., Edwards, P., Bhui, K., Viner, R. M., Taylor, S., & Stansfeld, S. A. (2010). Physical activity and depressive symptoms in adolescents: A prospective study. *BMC Medicine*, 8(32). Retrieved from <http://www.biomedcentral.com/1741-7015/8/32>

- Ruggles, S. J., Alexander, T., Genadek, K., Goeken, R., Schroeder, M. B., & Sobek, M. (2010). *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database]. Minneapolis: University of Minnesota.
- Wilkinson, J., Bywaters, J., Simms, S., Chappel, D., & Glover, G. (2008). Developing mental health indicators in England. *Public Health*, 122, 897-905.
- Williams, D., & Williams-Morris, R. (2000). Racism and mental health: The African American experience. *Ethnicity & Health*, 5(3/4), 243-268.
- Wille, N., Bettge, S., Ravens-Sieberer, U., & BELLA study group. (2008). Risk and protective factors for children's and adolescents' mental health: Results of the BELLA study. *European Journal of Adolescent Psychiatry*, 17(Supplement 1), 133-147.
- World Health Organization. (2004). *Promoting mental health: Concepts, emerging evidence, practice* (Summary report). Retrieved from http://www.who.int/mental_health/evidence/en/promoting_mhh.pdf

Appendix

Detailed descriptions of key indicators

Key indicator, brief description	Source	Relevant survey item(s)/detailed description of measure
Number of youth (age 0-17) living in Hennepin County	Source:	U.S. Census Bureau, Decennial Census (2010)
Percentage of non-white youth living in Hennepin County	Source:	Integrated Public Use Microdata Series (IPUMS) (Ruggles, Alexander, Genadek, Goeken, Schroeder, & Sobek, 2008-10).
Percentage of foreign-born youth living in Hennepin County	Source:	Integrated Public Use Microdata Series (IPUMS) (Ruggles, Alexander, Genadek, Goeken, Schroeder, & Sobek, 2008-10).
Percentage of youth experiencing "high emotional distress"	Source:	Minnesota Student Survey (MSS) - 2010 Notes: The indicator is defined as the percentage of 9 th -grade students who met <u>at least 2</u> of the following criteria: Q50. During the last 30 days, have you felt you were under any stress or pressure? • Responded "Yes, almost more than I could take" Q51. During the last 30 days, have you felt sad? • Responded "All the time" or "Most of the time" Q52. During the last 30 days, have you felt so discouraged or hopeless that you wondered if anything was worthwhile? • Responded "Extremely so..." or "Quite a bit" Q53. During the last 30 days, have you felt nervous, worried, or upset? • Responded "All the time" or "Most of the time"
Among 9 th -grade students who self-reported having a long-term mental/emotional health problem, the percentage of students who reported they <u>received mental health treatment</u> during the past year.	Source:	Minnesota Student Survey (MSS) - 2010 Notes: The indicator is defined as the percentage of 9 th -grade students who: • Responded "yes" to Q35: Do you have a mental or emotional health program that has lasted at least 12 months? AND • Responded "yes, during the last year" to Q36: Have you ever been treated for a mental or emotional health problem?

Key indicator, brief description	Source	Relevant survey item(s)/detailed description of measure
Percentage of 9 th -grade students who have used one or more drugs (alcohol, marijuana, or other illegal drugs) at least ten times during the past year	Source: Minnesota Student Survey (MSS) - 2010 Notes:	The indicator is defined as the percentage of 9 th -grade students who: Percent of students who respond “10-19 days” or more frequently to at least one of the following items: Q80: During the last 12 months, on how many occasions (if any) have you had alcoholic beverages to drink? Q87: During the last 12 months, on how many occasions (if any) have you used marijuana or hashish? Q93-101: During the last 12 months, on how many occasions (if any) have you used LSD or other psychedelics (Q93), ecstasy (Q94), crack/cocaine (Q95) , heroin (Q96), methamphetamine (Q97), stimulants prescribed by a doctor (Q98), ADD/ADHD drugs to get high (Q99), prescription pain relievers to get high (Q100), or tranquilizers/sedatives/barbiturates to get high (Q101).
Percentage of 9 th -grade students self-reporting having been treated for a substance use problem	Source: Minnesota Student Survey (MSS) - 2010 Notes:	The indicator is defined as the percentage of 9 th -grade students who responded “Yes, during the last year” or “Yes, more than a year ago” to Q37: Have you ever been treated for an alcohol or other drug problem?
Percentage of 9 th -grade students “highly involved” in school academic or extracurricular activities	Source: Minnesota Student Survey (MSS) - 2010 Notes:	The indicator is defined as the percentage of 9 th -grade students who participate in at least one school activity (fine arts activities, school sports teams, and/or tutoring, homework help or other academic programs) 3-4 times per week or more often (Q26)
Percentage of 9 th -grade students “highly involved” in community activities	Source: Minnesota Student Survey (MSS) - 2010 Notes:	The indicator is defined as the percentage of 9 th -grade students who participate in at least one community activity (club or community sports teams, community clubs and programs, religious activities) 3-4 times per week or more often (Q26)
Percentage of 9 th -grade students with “strong levels” of peer support	Source: Minnesota Student Survey (MSS) - 2010 Notes:	The indicator is defined as the percentage of 9 th -grade students who respond “quite a bit” or “very much” to following item: How much do you feel friends care about you? (Q48)
Percentage of 9 th -grade students with “strong levels” of family support ^a	Source: Minnesota Student Survey (MSS) - 2010 Notes:	The indicator is defined as the percentage of 9 th -grade students who respond “quite a bit” or “very much” to one of the following items: How much do you feel <u>your parents</u> care about you? How much do you feel <u>other adult relatives</u> care about you? (Q48)
Percentage of 9 th -grade students with “strong levels” of non-family adult support ^a	Source: Minnesota Student Survey (MSS) - 2010 Notes:	The indicator is defined as the percentage of 9 th -grade students who respond “quite a bit” or “very much” to one of the following items: How much do you feel <u>teachers/other adults</u> at school care about you? How much do you feel <u>religious/spiritual leaders</u> care about you? How much do you feel <u>other adults in your community</u> care about you? (Q48)

Key indicator, brief description	Source	Relevant survey item(s)/detailed description of measure
Percentage of uninsured youth (age 0-17)	Source:	Integrated Public Use Microdata Series (IPUMS) (Ruggles, Alexander, Genadek, Goeken, Schroeder, & Sobek, 2008-10).
Percentage of parents who rate their child's health as "very good" or "excellent"	Source: Notes:	Hennepin County SHAPE survey – Child version (2010) The indicator is defined as the percentage of parents who describe the child's health as "very good" or "excellent" (on a 5-point scale, ranging from excellent to poor.
Percentage of 9 th -grade students reporting: one or more adverse experiences three or more adverse experiences	Source: Notes:	Minnesota Student Survey (MSS) - 2010 The indicator is defined as the percentage of 9 th -grade students who respond "yes" to 1 or more or 3 or more of the following items (Q58-63): <ul style="list-style-type: none"> • Has alcohol use by any family member repeatedly caused family, health, job, or legal problems? • Has drug use by any family member repeatedly caused family, health, job, or legal problems? • Has any adult in your household ever hit you so hard or so often that you had marks or were afraid of that person? • Has anyone in the family ever hit anyone else in the family so hard or so often that they had marks or were afraid of that person? • Has any adult or other person outside the family ever touched you sexually against your wishes or forced you to touch them sexually? • Has any older or stronger member of your family ever touched you sexually or had you touch them sexually? [NOTE: These items will change in the 2013 survey]
Rate of determined maltreatment cases, per 1,000	Source:	Minnesota Department of Human Services – Minnesota's Child Welfare Report 2011
Rate of out of home placements, per 1,000	Source:	Minnesota Department of Human Services – Minnesota's Child Welfare Report 2011
Percentage of 9 th -grade students reporting being teased or excluded by other students at least once a week	Source: Notes:	Minnesota Student Survey (MSS) - 2010 The indicator is defined as the percentage of 9 th -grade students who respond "once a week" or more often to Q24: During the last 30 days, how often has another student or group of students made fun of or teased you in a hurtful way, or excluded you from friends or activities?
Percentage of children (age 0-17) living in poverty	Source:	American Community Survey (2010)
Percentage of 9 th -grade students who feel safe in their neighborhoods	Source: Notes:	Minnesota Student Survey (MSS) - 2010 The indicator is defined as the percentage of 9 th -grade students who: <ul style="list-style-type: none"> • "Agree" or "strongly agree" to the item, "I feel safe in my neighborhood" (Q17) AND <ul style="list-style-type: none"> • Answer "0 days" to: During the past 30 days, how many days did you not go to school because you felt you would be unsafe at school or on your way to or from school? (Q21)

Key indicator, brief description	Source	Relevant survey item(s)/detailed description of measure
Percentage of eligible youth (age 10-18) screened for mental health concerns through the Juvenile Justice system	Source: Notes:	Compiled by Hennepin County Department of Community Corrections and Rehabilitation and reported to the Minnesota Department of Human Services; not publicly available through existing reports. Youth age 10-18 who have been found to be delinquent, who have committed three or more petty offenses, or who have been charged with a delinquent offense and have been ordered to remain in detention following a detention hearing are eligible for screening. Hennepin County currently reports data on mental health screening performed post-adjudication; data on screening conducted with youth in detention is not included. Children are exempt from screening if they have received screening or a diagnostic assessment within the past six months, are receiving children's mental health case management services, or are under the care of a mental health professional. Parents must consent to screening.
Percentage of eligible youth (age 0-18) screened for mental health concerns through the Child Welfare system	Source: Notes:	Children and Community Services Act Annual Performance Report, Minnesota Department of Human Services Children age 3 months-18 years who are receiving child protection case management services, who are in out-of-home placement for 30 days or longer, or whose parents have terminated their parental rights are eligible for screening. Children are exempt from screening if they have received screening or a diagnostic assessment within the past six months, have a children's mental health case manager, or are under the care of a mental health professional. Parents must consent to screening.
Percentage of children screened for mental health concerns through the Hennepin County school district by age 5 (2010-11 school year)	Source: Notes:	Minnesota Department of Education, Early Learning Services: Early Childhood Screening Report Early Childhood Screening is required for entrance into Minnesota's public schools or within 30 days of entrance into kindergarten. Screening can be completed by the school district or a comparable non-school provider (e.g., Head Start, Child & Teen Checkups, or health care provider). This percentage includes only children screened through the school district. The report is available through the Minnesota Department of Education online Data Center: http://w20.education.state.mn.us/MDEAnalytics/Data.jsp .

Youth Mental Health and Wellness Dashboard – Key disparities data included

Key measures with racial/ethnic and socioeconomic disparities data (when available)	Most recent data available
Number of youth (age 0-17) living in Hennepin County ^a	261, 345
Percentage of non-white youth living in Hennepin County ^b	44%
Percentage of foreign-born youth living in Hennepin County ^b	6%
Percentage of 9 th -grade students self-reporting high levels of emotional distress. ^c	15%
African American	20%
American Indian	24%
Asian	19%
Hispanic	21%
White	12%
Free/reduced-price lunch	21%
No free/reduced-price lunch	12%
Among 9 th -grade students who self-reported having a long-term mental/emotional health problem, the percentage of students who reported they <u>received mental health treatment</u> during the past year. ^c	43%
African American	33%
American Indian	40%
Asian	34%
Hispanic	44%
White	47%
Free/reduced-price lunch	38%
No free/reduced-price lunch	45%
Percentage of 9 th -grade students who have used one or more drugs (alcohol, marijuana, or other illegal drugs) at least ten times during the past year ^c	9%
African American	12%
American Indian	19%
Asian	8%
Hispanic	16%
White	8%
Free/reduced-price lunch	13%
No free/reduced-price lunch	7%
Percentage of 9 th -grade students who self reported having been treated for a substance use problem ^c	3%
African American	3%
American Indian	4%
Asian	3%
Hispanic	5%
White	2%
Free/reduced-price lunch	4%
No free/reduced-price lunch	2%

Key measures with racial/ethnic and socioeconomic disparities data (when available)	Most recent data available
Percentage of 9th-grade students “highly involved” in school academic or extracurricular activities ^c	61%
<i>African American</i>	53%
<i>American Indian</i>	51%
<i>Asian</i>	47%
<i>Hispanic</i>	45%
<i>White</i>	67%
<i>Free/reduced-price lunch</i>	45%
<i>No free/reduced-price lunch</i>	67%
Percentage of 9th-grade students “highly involved” in community activities ^c	40%
<i>African American</i>	33%
<i>American Indian</i>	29%
<i>Asian</i>	26%
<i>Hispanic</i>	31%
<i>White</i>	44%
<i>Free/reduced-price lunch</i>	29%
<i>No free/reduced-price lunch</i>	44%
Percentage of 9th-grade students with “strong levels” of peer support ^c	78%
<i>African American</i>	71%
<i>American Indian</i>	76%
<i>Asian</i>	69%
<i>Hispanic</i>	71%
<i>White</i>	82%
<i>Free/reduced-price lunch</i>	70%
<i>No free/reduced-price lunch</i>	82%
Percentage of 9th-grade students with “strong levels” of family support ^c	93%
<i>African American</i>	92%
<i>American Indian</i>	90%
<i>Asian</i>	88%
<i>Hispanic</i>	91%
<i>White</i>	95%
<i>Free/reduced-price lunch</i>	90%
<i>No free/reduced-price lunch</i>	95%
Percentage of 9th-grade students with “strong levels” of non-family adult support ^c	74%
<i>African American</i>	72%
<i>American Indian</i>	63%
<i>Asian</i>	64%
<i>Hispanic</i>	65%
<i>White</i>	77%
<i>Free/reduced-price lunch</i>	66%
<i>No free/reduced-price lunch</i>	78%

Key measures with racial/ethnic and socioeconomic disparities data (when available)	Most recent data available
Percentage of uninsured youth (age 0-17) (2006-2010)^b <i>Beginning in 2008, health insurance status has been included in the American Community Survey. Estimates by race are currently unreliable, due to the relatively small numbers of children of some specific racial/ethnic groups.</i>	6%
Percentage of parents who rate their child's health as "very good" or "excellent"^d <div> <div>Low income</div> <div>Not low income</div> </div>	89% <div> <div>78%</div> <div>93%</div> </div>
Percentage of 9th-grade students reporting:^c <div> <div>one or more "adverse experiences"</div> <div>African American</div> <div>American Indian</div> <div>Asian</div> <div>Hispanic</div> <div>White</div> <div>Free/reduced-price lunch</div> <div>No free/reduced-price lunch</div> <div>three or more "adverse experiences"</div> <div>African American</div> <div>American Indian</div> <div>Asian</div> <div>Hispanic</div> <div>White</div> <div>Free/reduced-price lunch</div> <div>No free/reduced-price lunch</div> </div>	28% <div> <div>40%</div> <div>49%</div> <div>31%</div> <div>38%</div> <div>24%</div> <div>41%</div> <div>23%</div> </div> 6% <div> <div>12%</div> <div>14%</div> <div>6%</div> <div>13%</div> <div>5%</div> <div>12%</div> <div>4%</div> </div>
Rate of determined maltreatment cases, per 1,000^e <i>County-level race/ethnicity and age distributions are not readily available through existing reports</i>	4.7
Rate of out of home placements, per 1,000^e <div> <div>Age distribution of children and youth (age 0-21) in out of home placement (2011)</div> <div>Age 0-3</div> <div>Age 4-5</div> <div>Age 6-11</div> <div>Age 12-14</div> <div>Age 15-17</div> <div>Age 18-21</div> <div>Race/ethnicity distribution of children and youth (age 0-21) in out of home placement (2011)</div> <div>African-American</div> <div>American Indian</div> <div>Asian</div> <div>White</div> <div>Two or more races</div> <div>Unknown</div> <div>Hispanic</div> </div>	9.1 <div> <div>21%</div> <div>7%</div> <div>18%</div> <div>13%</div> <div>23%</div> <div>18%</div> </div> <div> <div>45%</div> <div>12%</div> <div>3%</div> <div>20%</div> <div>18%</div> <div><1%</div> <div>12%</div> </div>

Key measures with racial/ethnic and socioeconomic disparities data (when available)	Most recent data available
Percentage of 9th-grade students reporting being teased or excluded by other students at least once a week^c	9%
<i>African American</i>	9%
<i>American Indian</i>	13%
<i>Asian</i>	9%
<i>Hispanic</i>	9%
<i>White</i>	9%
<i>Free/reduced-price lunch</i>	9%
<i>No free/reduced-price lunch</i>	9%
Percentage of children (age 0-17) living in poverty^{a, f}	19%
<i>African American</i>	45%
<i>American Indian</i>	46%
<i>Asian</i>	23%
<i>White</i>	6%
<i>Two or more races</i>	20%
<i>Other race</i>	25%
<i>Hispanic (all races)</i>	26%
Percentage of 9th-grade students who feel safe in their neighborhoods^c	89%
<i>African American</i>	82%
<i>American Indian</i>	78%
<i>Asian</i>	83%
<i>Hispanic</i>	80%
<i>White</i>	93%
<i>Free/reduced-price lunch</i>	80%
<i>No free/reduced-price lunch</i>	93%
Percentage of eligible youth (age 10-18) screened for mental health concerns through the Juvenile Justice system^g	82%
<i>Screening data by race/ethnicity is not readily available</i>	
Percentage of eligible youth (age 0-18) screened for mental health concerns through the Child Welfare system^h	71%
<i>Screening data by race/ethnicity is not readily available</i>	
Percentage of children screened for mental health concerns through the Hennepin County school district by age 5 (2010-11 school year)ⁱ	75%
<i>Screening data by race/ethnicity is not readily available</i>	

^a U.S. Census Bureau, Decennial Census (2010)

^b Integrated Public Use Microdata Series, U.S. Census Bureau, American Community Survey (2008-10); analysis by Wilder Research.

^c 2010 Minnesota Student Survey, analysis by Minnesota Department of Health

NOTES: Free and reduced price lunch status is used as a proxy measure for low-income households. However, not all students eligible for this benefit may receive it. Students are identified into these descriptive categories based on their response to Q11 of the 2010 MSS: "Do you currently get free or reduced-price lunch at school?"

Consistent with how MSS data is reported through various state-level summaries, the responses of students who self-identify more than one race/ethnicity are included in each category.

^d Hennepin County SHAPE survey – Child version, analysis by the Hennepin County Human Services and Public Health Department
NOTE: "Low income households" are those where the child received free or reduced price lunch at school, the child's current health insurance coverage is provided by a publicly funded source serving low-income families, or the child survey was matched with an Adult SHAPE survey from the same household where household income level data was available.

^e Minnesota Department of Human Services Child Welfare Report, 2011

^f Integrated Public Use Microdata Series, U.S. Census Bureau, American Community Survey (2006-10); analysis by Wilder Research.

^g Compiled by Hennepin County Department of Community Corrections and Rehabilitation and reported to the Minnesota Department of Human Services; not publicly available through existing reports.

^h Children and Community Services Act Annual Performance Report, Minnesota Department of Human Services, 2011

ⁱ Minnesota Department of Education, Early Learning Services: Early Childhood Screening Completion Reports, 2010-11

Additional information about select data sources used

County Health Tables

The County Health Tables are a compilation of public health data for Minnesota and its 87 counties. Data from a variety of sources are compiled annually by the Minnesota Department of Health (MDH), Minnesota Center for Health Statistics. The tables can be found on the MDH website:

<http://www.health.state.mn.us/divs/chs/countytables/profiles2011/index.html>

Hennepin County service utilization data

Data describing mental health service utilization among children/youth enrolled in Minnesota Health Care Programs was drawn from the Minnesota Department of Human Services Data Warehouse, MMIS tables in December 2012. Data were also obtained from the Minnesota Counties Data Collaborative reports P70-P75. Analyses of these data were conducted by the Hennepin County Human Services and Public Health Department, Operation Resources and Support, Information Management Practice Team.

Hennepin County SHAPE 2010

The Hennepin County Survey of the Health of All the Population and the Environment (SHAPE) was initiated in 1998 to collect information related to the following health topics: overall health; health care access and utilization; healthy lifestyle and behaviors; and social-environmental factors. The survey is administered by the Hennepin County Human Services and Public Health Department. Although different data collection strategies have been used over time to gather resident data, the 2010 adult version collected data using self-administered surveys mailed to a sample of Hennepin County households. The surveys were only available in English. Similarly, the child version of the tool was mailed to a random sample of households and the caregiver most familiar with the health of the child whose birthday was coming up next was instructed to complete the form. While the samples did not allow for reporting by race/ethnicity, the data collected were weighted so that the perspectives of residents are proportionally represented in aggregate totals. SHAPE is expected to be revised in 2013, to better align with the Metro Adult Health Survey, used by other Twin Cities metro counties.

Minnesota Department of Human Services Child Welfare Report

The Child Welfare Report is published annually to describe the state of children in Minnesota's child protection, out-of-home care, and adoptions systems. Data presented in

the report are collected through the Social Services Information System (SSIS). Many of the measures in the report are performance indicators for state and federal quality improvement initiatives.

Minnesota Student Survey

The Minnesota Student Survey (MSS) is jointly administered every three years by the Minnesota Departments of Education, Health, Human Services, and Public Safety. The MSS is administered every three years to 6th-, 9th-, and 12th-grade students in regular public schools, including charter and tribal schools. The dashboard reports information collected in 2010 from over 9,000 9th-grade students enrolled in school districts located in Hennepin County. Students or their parents can choose to opt out of the survey; in addition, students who were absent from school on the day the survey was administered are not included. Sixteen of the 22 school districts located in Hennepin County (73%) participated in the MSS in 2010.

The MSS will be revised significantly in 2013. A summary of these changes can be found online (http://www.emprc.org/sites/default/files/mss_changes_summary.pdf). Most importantly, some content areas have changed or been added, and the survey will now be administered to students in grades 5, 8, 9, and 11. Attempts were made to focus on selecting measures that will remain consistent in the revised version. However, some measures, such as those related to bullying and adverse childhood experiences, will change in 2013. A review of the dashboard indicators will be needed and potentially revised to reflect these changes and to incorporate new items.