



Eliminating Health Disparities Initiative: Infant Mortality Grants Fiscal Years 2015 to 2017

**Report to the Minnesota Legislature 2018
06/15/2018**

Eliminating Health Disparities Initiative Infant Mortality Grants

Report to the Minnesota Legislature 2018

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Executive Summary

The Eliminating Health Disparities Initiative (EHDI) is a grant program within the Minnesota Department of Health Center for Health Equity. Established in 2001 by the Minnesota Legislature (Minnesota Statute 145.928), the initiative was a response to mounting evidence that disparities in health outcomes between Minnesota's white residents and those from populations of color and American Indian communities were distressingly wide and on a clear trajectory to grow even wider. Even though Minnesota ranks high in terms of general health status compared to other states, it has some of the worst racial and ethnic health disparities.

EHDI provides funds to close the gap in the health status of Africans/African Americans, American Indians, Asian/Pacific Islanders, and Hispanics/Latinos in Minnesota compared to whites in eight priority health areas: Breast and Cervical Cancer Screening, Diabetes, Heart Disease & Stroke, HIV/AIDS and Sexually Transmitted Infections, Immunizations for Adults and Children, Teen Pregnancy Prevention, Unintentional Injury and Violence, and Infant Mortality. The initiative was designed to strengthen local control and decision-making in communities across the state towards elimination of these disparities in the four priority populations. Funding sources include state General Funds and Federal Temporary Assistance to Needy Families or TANF (only Teen Pregnancy Prevention grantees receive TANF funds).

Based on 2010-2014 data, the five leading causes of infant deaths in Minnesota are congenital anomalies or birth defects (26.4% of all infant deaths), prematurity (18.5%), obstetric conditions or pregnancy complications (12.4%), Sudden Unexpected Infant Deaths or SUIDS (10.8%), and injury (1.8%). These causes vary by population. Sleep-related causes are a primary source of infant deaths in the American Indian community, while it is birth defects for other populations.

Infant mortality rates for the country as a whole have exhibited a declining trend. Rates in Minnesota are lower than U.S. rates, but they mask significant disparities in certain populations. Data from 2011-2015 show that the infant mortality rate for American Indians (10.4) and for African Americans (9.6) was more than double the rate for whites (4.2).

Infant mortality rates may be explained by variations in maternal characteristics, behaviors and access to health care, as well as social, economic and environmental determinants of health (SDOH). Policies and programs give rise to the living and working conditions that can pose risks to the health of the mother and baby, leading to diminished opportunities for a healthy future.

This report covers EHDI data for fiscal years 2015 and 2016 (July 1, 2015 to June 30, 2016 grant period), as well as fiscal year 2017 (July 1, 2016 through June 30, 2017).

FY 2015 - 2016

In fiscal year 2014-2015, three organizations were awarded EHDI grants to implement infant mortality programs: American Indian Family Center, Leech Lake Band of Ojibwe, and Minnesota Visiting Nurses Association or MVNA. The same grantees with the exception of MVNA received funding again in fiscal year 2015-2016 (MVNA declined EHDI funding due to a change in priorities brought about by its integration with Hennepin County Medical Center).

The infant mortality grantees received a total of \$375,296 in funding in fiscal year 2015, and \$337,844 in fiscal year 2016. Their programs focused on two objectives:

- Improve the health status of women before, during and between pregnancies, and
- Improve the health status and safety of infants from birth to one year.

Examples of strategies they employed include:

- Increasing access to preventative care before, during, and between pregnancies
- Providing culturally-specific outreach and care coordination during pregnancy and birth
- Providing education and support to high-risk pregnant and parenting teens
- Addressing maternal psychosocial skills
- Reducing infant deaths from SIDS and sleep-related unintentional injuries

Grantees reached 2,249 individuals in fiscal year 2015 (three grantees) and 4,654 individuals in fiscal year 2016 (two grantees) through both direct and indirect contacts.

Some of the accomplishments reported by grantees based on in their evaluations are:

- Increased participants' knowledge of diseases that could affect the baby's health or of activities to reduce stress
- Increased confidence in participants' ability to parent or to make healthy decisions for themselves and their children
- Increased motivation among men to encourage and support the women in their lives so they can have a healthy pregnancy
- Mothers have developed relationships with other mothers
- Informal mentoring has occurred between more experienced moms and new moms
- Increased the community's trust in their programs

Grantees also worked on policy and system changes that would bring about more lasting and sustainable improvements in their communities. For example, Leech Lake Band of Ojibwe (LLBO) developed a policies and procedures manual describing the many details and logistics of a home-visiting program. The manual would ensure that the Family Spirit Program (FSP) was implemented consistently by all staff members at all times, and would serve as a reference tool when questions arise about how to handle certain situations with a client. Additionally, the LLBO FSP has joined the Drug Endangered Task Force formed by LLBO to address the state of

emergency regarding the future of the Nation resulting from the epidemic of babies born with neonatal abstinence syndrome (NAS). The LLBO FSP has been instrumental in delivering NAS education to the community, and as a result, more women are coming forward for assistance in becoming clean and sober to keep their unborn fetus safe.

FY 2017

MDH awarded EHDl grants to three organizations to implement infant mortality programs from July 1, 2016 through June 30, 2019: American Indian Family Center, Leech Lake Band of Ojibwe, and NorthPoint Health and Wellness Center. Total funding for the three programs out of General Funds was \$430,687 in fiscal year 2017.

The three infant mortality grantees served Africans/African Americans in Minneapolis and American Indians in three metro counties and the Leech Lake Reservation. They reached 3,231 individuals during the year through both direct and indirect contacts.

They implemented evidence-based practices and culturally responsive practices that focused on two objectives: 1.) Improve the health status of women before, during and between pregnancies, and 2.) Improve the health status and safety of infants from birth to one year.

Examples of strategies they employed include: increasing access to health and preventative care before, during, and between pregnancies; providing culturally-specific outreach and care coordination during pregnancy and birth; changing behaviors that lead to acute and chronic conditions; improving infant nutrition and healthy physical growth and development; and, reducing infant deaths from unintentional injury and violence.

It is still too early to determine the impact of program interventions, this being the first year of the current EHDl cycle 2016-2019, Nonetheless, grantees reported accomplishments such as:

- Enrolled participants in classes, trainings, or workshops
- Facilitated support groups (non-educational)
- Hosted community events
- Provided services, referrals, materials, and other aids to participants
- Increased their capacity to serve their priority populations, for example, staff completing certification trainings and ongoing professional development
- Strengthened or improved their collaborations or partnerships
- Participants reporting increased interest to learn more about their own culture and values, and increased social connections and support

Grantees also worked on policy and system changes. For example, American Indian Family Center (AIFC) is building the infrastructure for third party billing which will help support programming. Leech Lake Band of Ojibwe (LLBO) is developing a policies and procedures manual to ensure consistent implementation of the Family Spirit Program (FSP), and has joined the LLBO Drug Endangered Task Force to address the neonatal abstinence syndrome (NAS)

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epidemic. NorthPoint extended the care coordination model into the post-partum period increasing the babies' chances of leading healthier lives.

Finally, the grantees are making concerted efforts to sustain their programs. They have secured and continue to look for other financial and in-kind supports, have developed sources of revenue, have improved their internal infrastructure to support programming such as improved billing systems and staff hiring and professional development, and have cultivated internal and external partnerships which have resulted in resource-sharing among its many benefits.

Infant Mortality Overview

Introduction

The mission of the Minnesota Department of Health (MDH) is to protect, maintain, and improve the health of all Minnesotans. The elimination of health disparities and achievement of health equity are department-wide goals. Achieving optimal health for all Minnesotans requires creating an environment in which everyone has access to what they need to be healthy.

Minnesota's reputation as a healthy state obscures significant and longstanding health disparities that are the result of inequitable opportunities to achieve optimal health for some populations in Minnesota. An important example of these disparities is exhibited in the higher rates of infant mortality in African American and American Indian populations compared to non-Hispanic whites in Minnesota.

The Center for Health Equity provides leadership for MDH's efforts to advance health equity. The Eliminating Health Disparities Initiative (EHDI) is a grant program within the Center for Health Equity. It was established by the Minnesota Legislature in 2001 (Minnesota Statute 145.928) in response to mounting evidence that disparities in health outcomes between Minnesota's white residents and residents from populations of color and American Indian communities were distressingly wide and on a clear trajectory to grow even wider. Even though Minnesota ranks high in terms of general health status compared to other states, the state has some of the worst racial/ethnic health disparities between groups in the nation.

EHDI provides funds to close the gap in the health status of Africans/African Americans, American Indians, Asian/Pacific Islanders, and Hispanics/Latinos in Minnesota compared to whites in eight priority health areas: Breast and Cervical Cancer Screening, Diabetes, Heart Disease and Stroke, HIV/AIDS and Sexually Transmitted Infections, Immunizations for Adults and Children, Teen Pregnancy Prevention, Unintentional Injury and Violence, and Infant Mortality. The initiative was designed to strengthen local control and decision-making in communities across the state toward the elimination of these disparities in the four priority

populations. Funding sources for the grant are state General Funds and federal Temporary Assistance to Needy Families or TANF funds (only Teen Pregnancy Prevention grantees receive TANF funds).

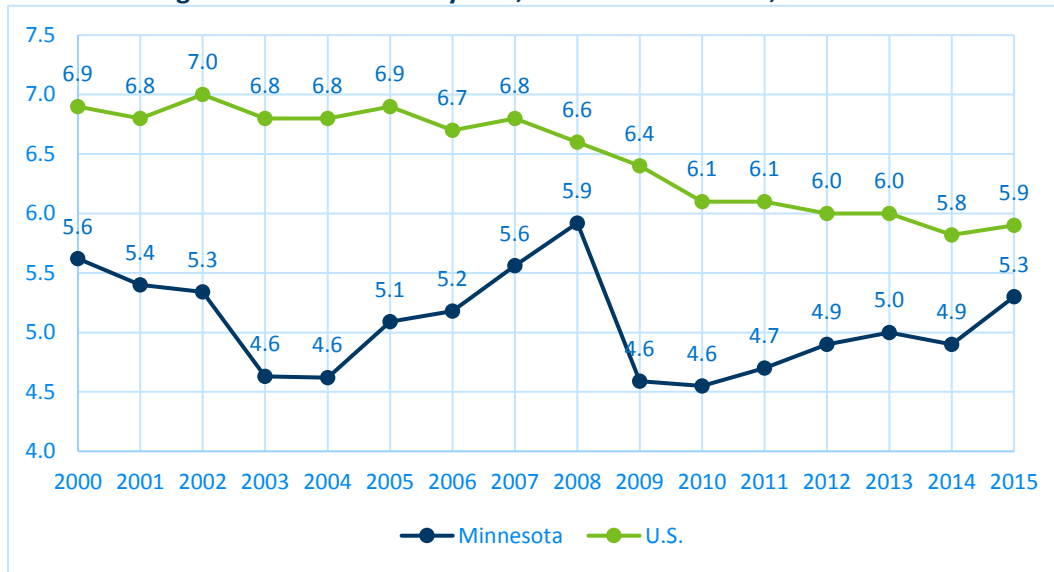
A new competitive grant process began in December 2015 with the release of a new Request for Proposals (RFP) made available approximately \$5 million in funding, with approximately \$2 million coming from Federal Temporary Assistance for Needy Families (TANF) funds and approximately \$3 million from state general funds. Grants were awarded to 33 programs (32 organizations) for the period July 1, 2016 through June 30, 2017 with the possibility of a two-year extension contingent upon satisfactory performance and availability of funding. Funding amounts ranged from \$56,055 to \$247,286. Three awardees targeted infant mortality: American Indian Family Center, Leech Lake Band of Ojibwe, and NorthPoint Health and Wellness Center. All three were EHDl grantees in the previous grant cycle, but with NorthPoint focused on Heart Disease & Stroke and Diabetes.

Background

Infant mortality is defined as the death of an infant before his or her first birthday. The infant mortality rate is measured in terms of the number of infant deaths per 1,000 live births. It is considered a key indicator of maternal and child health, as well as overall societal health. According to the U.S. Centers for Disease Control (CDC), there were close to 4 million live births in the U.S. in 2015. The sad news is that more than 23,000 infants died in the same year. The infant mortality rate in the United States in 2015 was 5.9; for Minnesota this number was 5.2.¹ This means that for every 1,000 infants that were born alive in Minnesota, five died before their first birthday. Nonetheless, these rates still fall below the Healthy People 2020 goal of reducing infant mortality in the U.S. to 6.0 deaths per 1,000 live births by the year 2020.

Figure 1 shows that the infant mortality rate in the U.S. exhibited a declining trend from 2000-2015. Minnesota rates were lower than those for the U.S. throughout this period. Most recently it was at its lowest in 2009 at 4.6, but since then has been inching closer to the national rates.

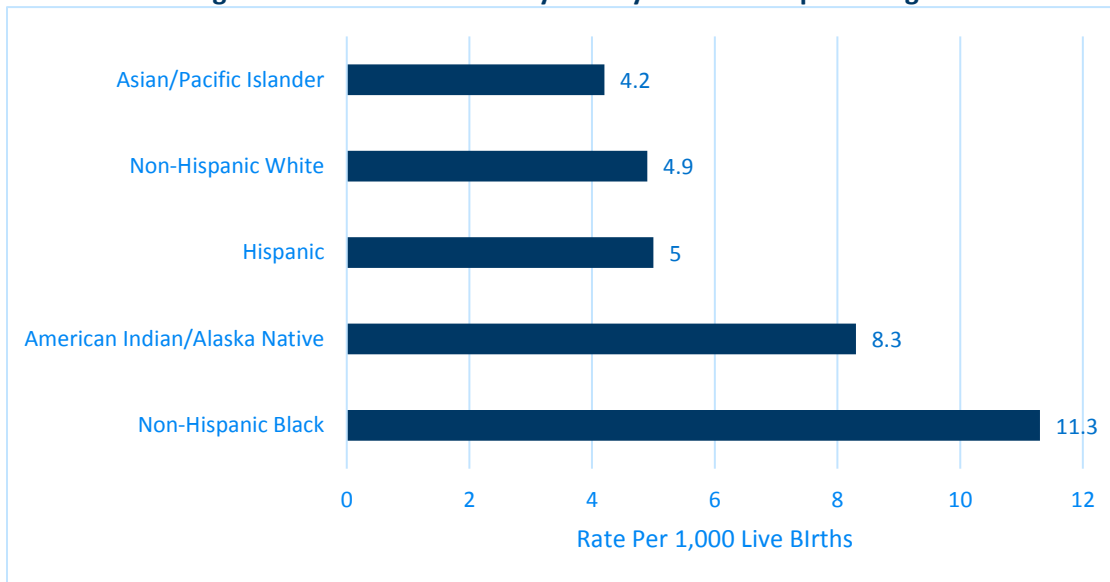
Figure 1. Infant mortality rate, U.S. and Minnesota, 2000-2015.



Source: MDH Center for Health Statistics.

However, the declining infant mortality rates mask significant disparities in certain groups. For example, nationally the infant mortality rate is over two times as high for black infants than for white infants (11.3 versus 4.9 in 2015 as shown in Figure 2), and is still significantly higher among babies born to teenage mothers than older mothers across races and ethnicities, and geographically, rates in the southern states of the U.S. remain higher.

Figure 2. U.S. Infant mortality rate by race and Hispanic origin



Source: Centers for Disease Control and Prevention. <http://www.cdc.gov/features/infantmortality/index.html>. Accessed on October 13, 2017.

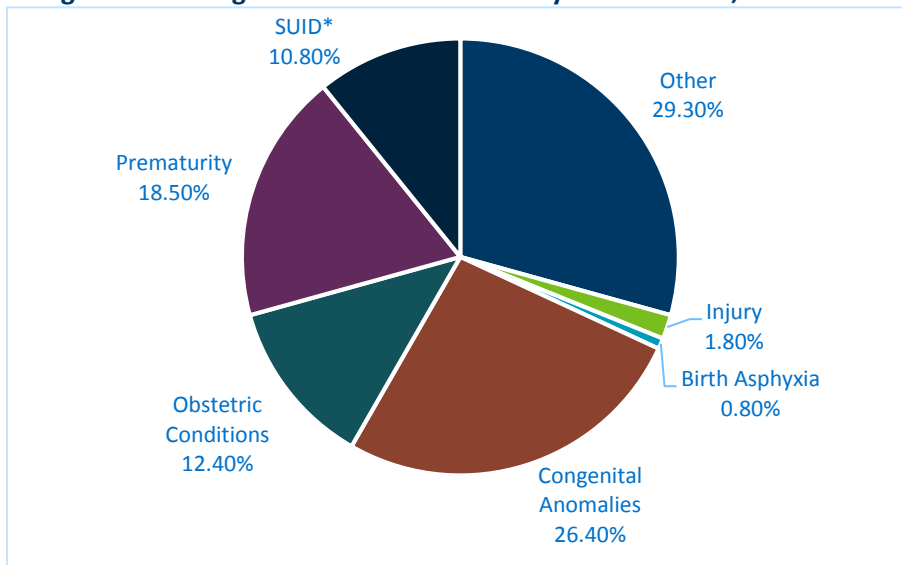
Leading Causes of Infant Mortality

The CDC identified the following as the leading causes of infant mortality in the U.S. in 2015:

- Birth defects
- Preterm birth and low birth weight
- Sudden infant death syndrome (SIDS)
- Maternal pregnancy complications
- Injuries

In Minnesota, the five leading causes of infant deaths are congenital anomalies or birth defects (26.4% of all infant deaths), prematurity (18.5%), obstetric conditions or pregnancy complications (12.4%), Sudden Unexpected Infant Deaths or SUIDS (10.8%), then injury (1.8%), as seen in Figure 3.

Figure 3. Leading causes of infant mortality in Minnesota, 2010-2014.



Source. MDH Center for Health Statistics

*SUID includes SIDS and sleep related infant deaths

The causes of infant mortality vary by population (Table 1). Sleep-related causes, such as sudden infant death syndrome or SIDS, are a primary source of infant deaths in the American Indian community, while for other population groups the primary source is congenital anomalies (birth defects).

Table 1. Top Five Leading Causes of Infant Mortality by Race/Ethnicity of Mother, Minnesota, 2011-2015

Race/Ethnicity	First	Second	Third	Fourth	Fifth
Black/African American	Congenital Anomalies (24.5%)	Prematurity (22.3%)	Obstetric Conditions (14.9%)	SUID ² (9.9%)	Injury (0.6%)
American Indian	SUID ² (27.1%)	Congenital Anomalies (20%)	Prematurity (10%)	Obstetric Conditions (5.7%)	Injury (2.9%)
Asian	Congenital Anomalies (26.3%)	Prematurity (25.6%)	Obstetric Conditions (15.8%)	SUID ² (3%)	Injury (0.8%)
Hispanic¹	Congenital Anomalies (26.6%)	Prematurity (20.3%)	Obstetric Conditions (13.9%)	SUID ² (7.6%)	Injury (6.3%)
White	Congenital Anomalies (27.8%)	Prematurity (17.6%)	Obstetric Conditions (11.5%)	SUID ² (9.7%)	Injury or Birth Asphyxia ³ (1.2%)
Total MN	Congenital Anomalies (26.4%)	Prematurity (18.5%)	Obstetric Conditions (12.4%)	SUID ² (10.8%)	Injury (1.8%)

¹Hispanic can be any race

²Includes SIDS and sleep-related infant deaths

³Percent of deaths by injury and birth asphyxia for whites was similar, 1.2% each

Chart does not include deaths classified as "Other"

Source: MDH Center for Health Statistics

Infant Mortality Disparities in Minnesota

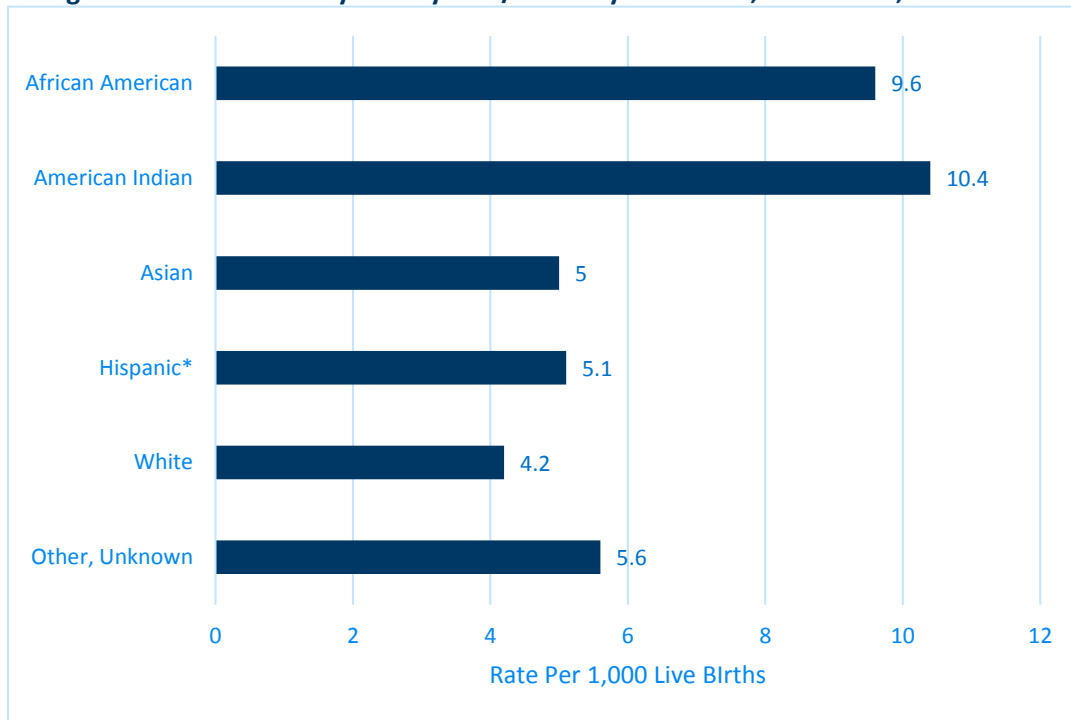
Infant mortality rates may be explained by variations in maternal characteristics, behaviors and access to health care, as well as external factors including environmental and psychosocial stressors such as the loss of a job or home or unclean and unsafe surroundings.

Maternal attributes such as race/ethnicity, age, marital status, maternal birthplace, and health are linked to birth outcomes. For example, the risk of infant mortality is highest among teens, unmarried mothers and those who are U.S.-born. The mother's own health influences her

pregnancy outcome as well. Pre-existing medical conditions such as hypertension or diabetes can lead to adverse birth outcomes, so do behaviors such as smoking tobacco and drinking alcohol during pregnancy. Her access to care and the quality of care she receives also have been associated with pregnancy outcomes.²

Racial/ethnic disparities in infant mortality in Minnesota are shown in Figure 4 for the years 2011-2015. The rates for American Indians (10.4) and for African Americans (9.6) are more than double the rate for whites (4.2).

Figure 4. Infant mortality rate by race/ethnicity of mother, Minnesota, 2011-2015.

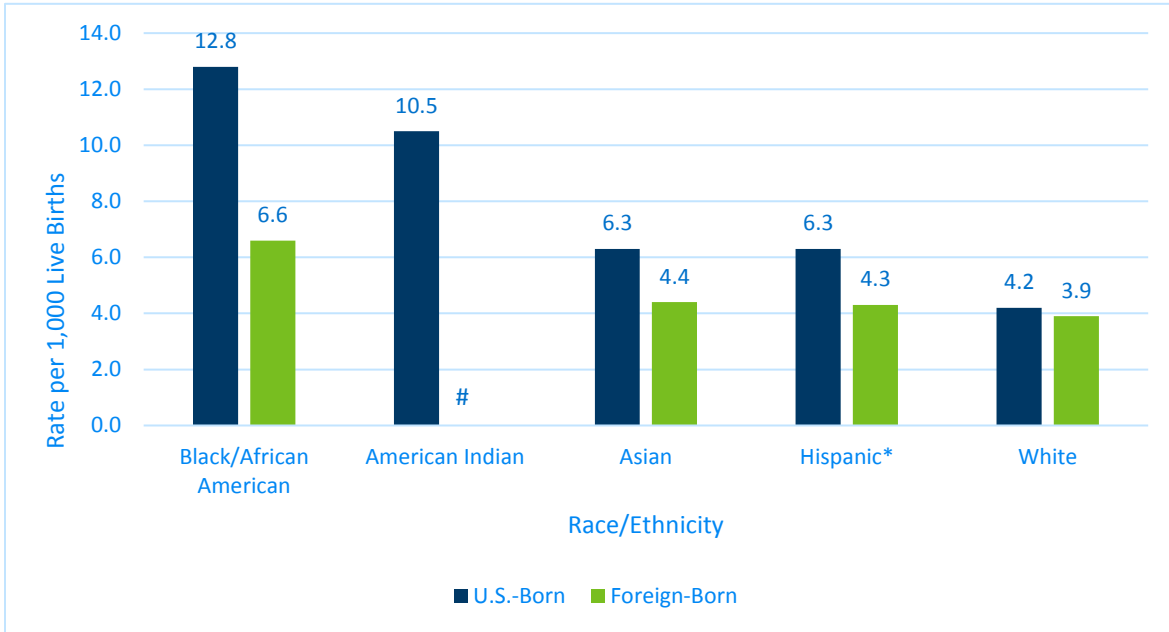


*Hispanic can be any race

Source: MDH Center for Health Statistics

Figure 5 shows the same racial disparities, but also the health advantage that foreign-born mothers have over those born in the U.S. as shown by their lower infant mortality rates.

Figure 5. Infant mortality rates by nativity and by race/ethnicity, Minnesota, 2011-2015



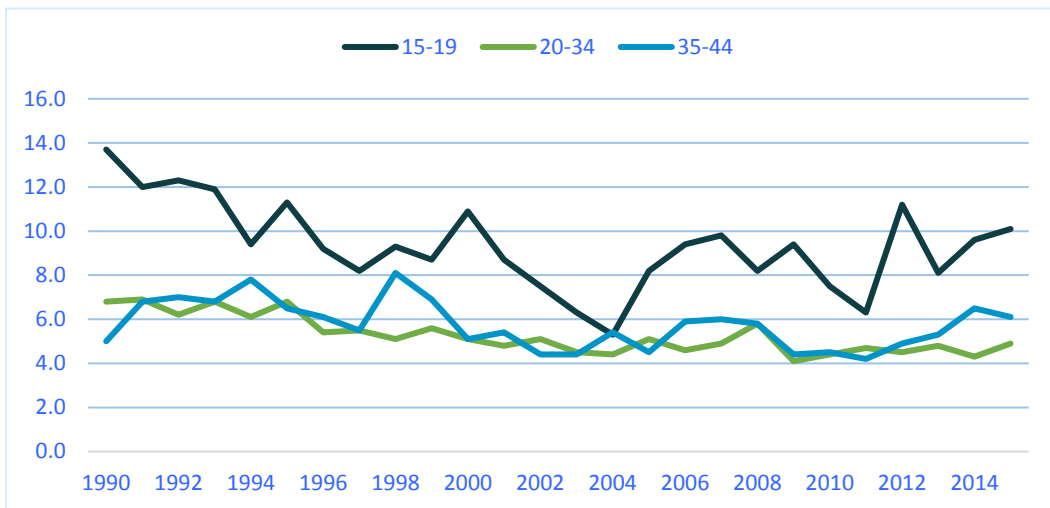
*Hispanic can be any race

#Unstable rates; fewer than 20 cases

Source: MDH Center for Health Statistics

The mother’s age is another factor. Figure 6 shows that from 1990 to 2015, in general the mortality rate was highest for babies born to teenagers 15-19 years old compared to babies born to older moms age 20-34 or 35-44.

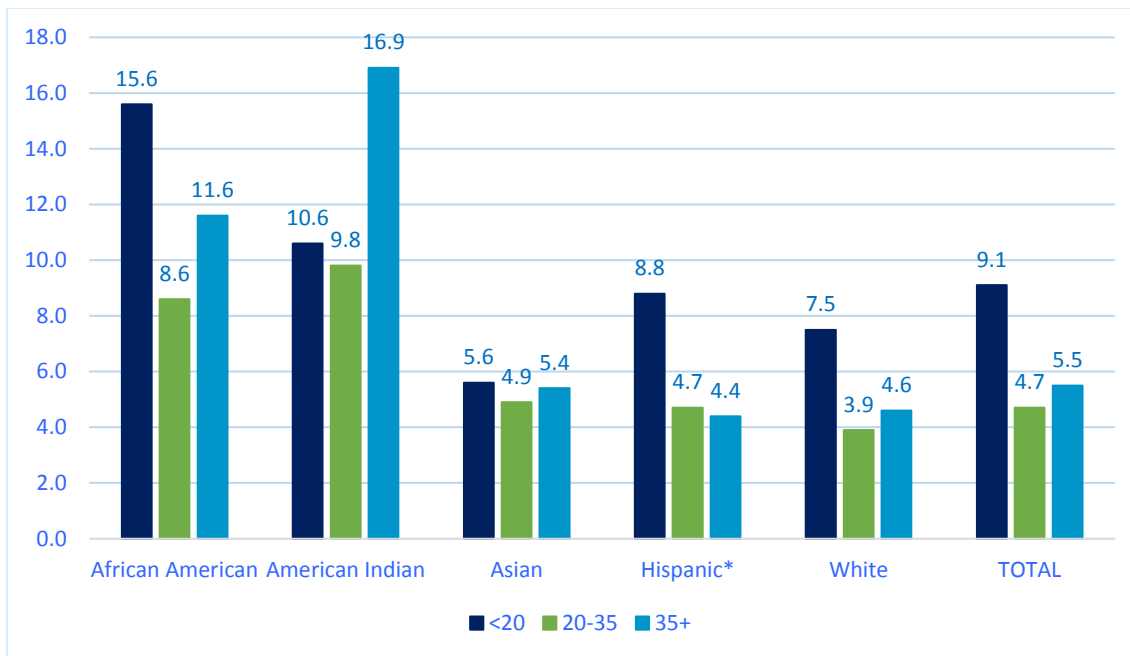
Figure 6. Infant mortality rate by age of mother, Minnesota, 1990-2015 (birth year)



Source: MDH Center for Health Statistics

By race/ethnicity and age as seen in Figure 7, from 2011-2015 infant mortality rates were higher for African Americans and American Indians compared to their white counterparts in all age groups.

Figure 7. Infant mortality rates by age and race/ethnicity of mother, Minnesota, 2011-2015



* Hispanic can be any race

Indicates unstable rates; fewer than 20 cases

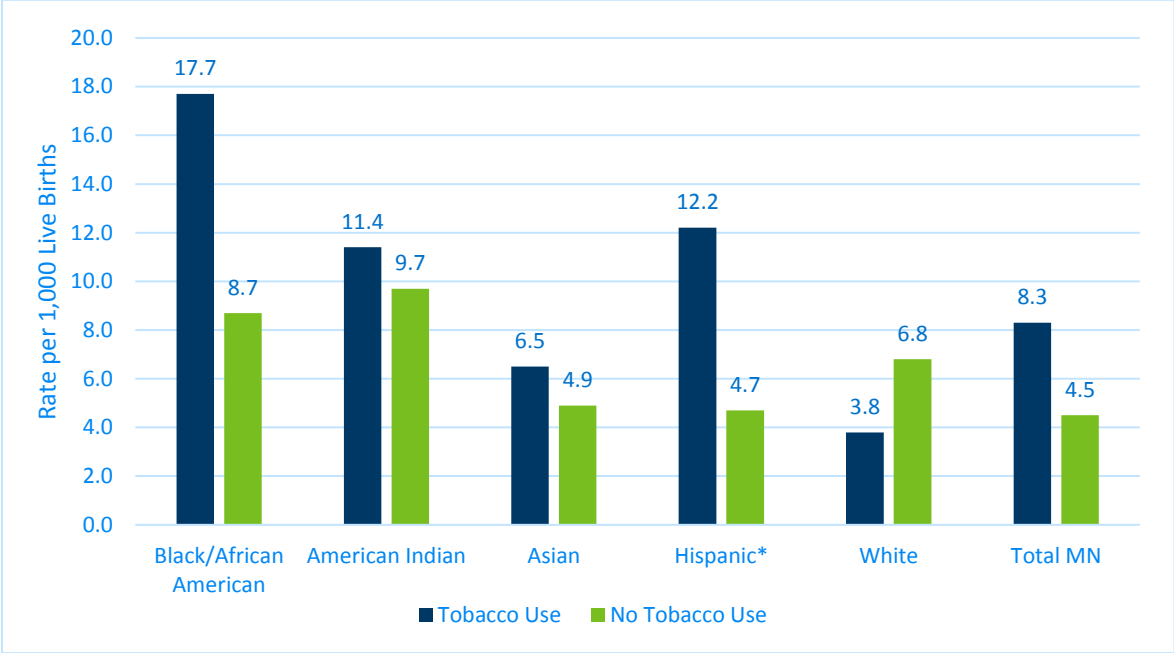
Source: MDH Center for Health Statistics

In general, teen mothers have higher infant mortality rates compared to mothers in older age groups (Figure 7). Evidence shows that teen moms are less likely to receive prenatal care (even if they do, they enter late into prenatal care) and are more likely to: smoke during pregnancy, suffer from sexually transmitted diseases, have short inter-pregnancy intervals, and to have a birth that is preterm and/or low-birthweight. This is also true by race/ethnicity, except for American Indians.

Smoking during pregnancy can cause babies to be born too early or have low birth weight, which can lead to death. It can cause problems with the placenta (the baby's source of food and oxygen) and can lead to birth defects, and it has been associated with Sudden Infant Death Syndrome or SIDS.

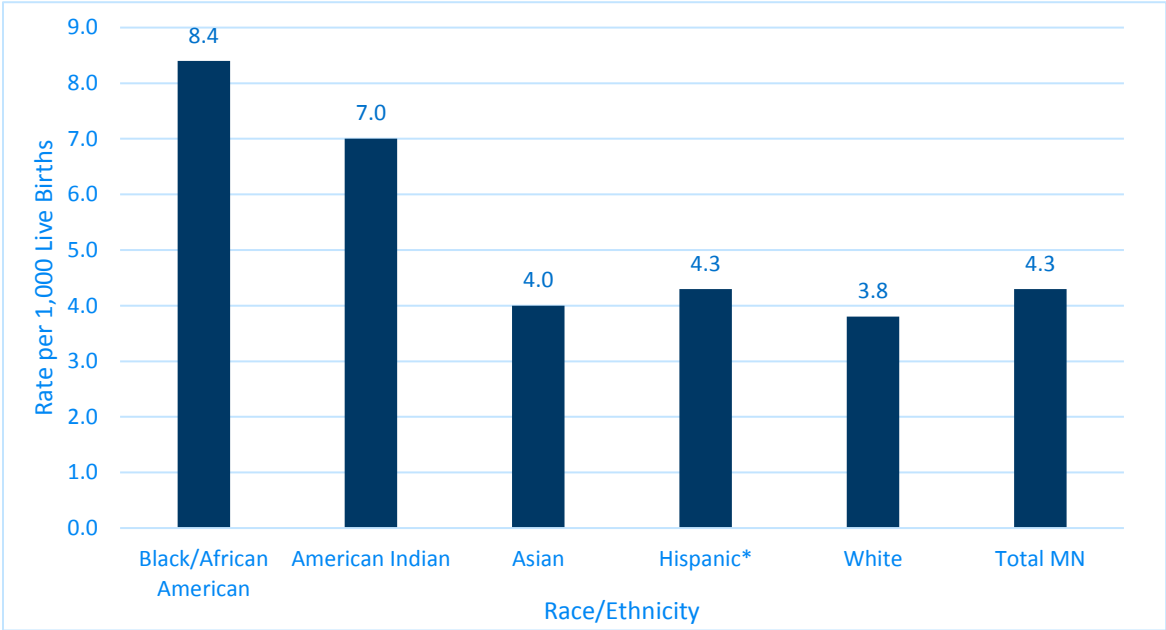
Figure 8 shows that in the state, the infant mortality rate for mothers who use tobacco is higher than the rate for non-users, and this is true for all races/ethnicities except whites. Among smokers, the infant mortality rate was lowest for whites and highest for blacks (almost five times that of whites).

Figure 8. Infant mortality rates by smoking status and race/ethnicity of mother, Minnesota, 2011-2015



It is known that the earlier prenatal care begins the healthier the pregnancy. Despite initiating prenatal care in the first trimester, however, certain populations fare worse. Figure 9 shows that the rate is lowest for whites and highest for blacks.

Figure 9. Infant mortality rates by first trimester prenatal care initiation by race/ethnicity of mother, Minnesota, 2010-2014.

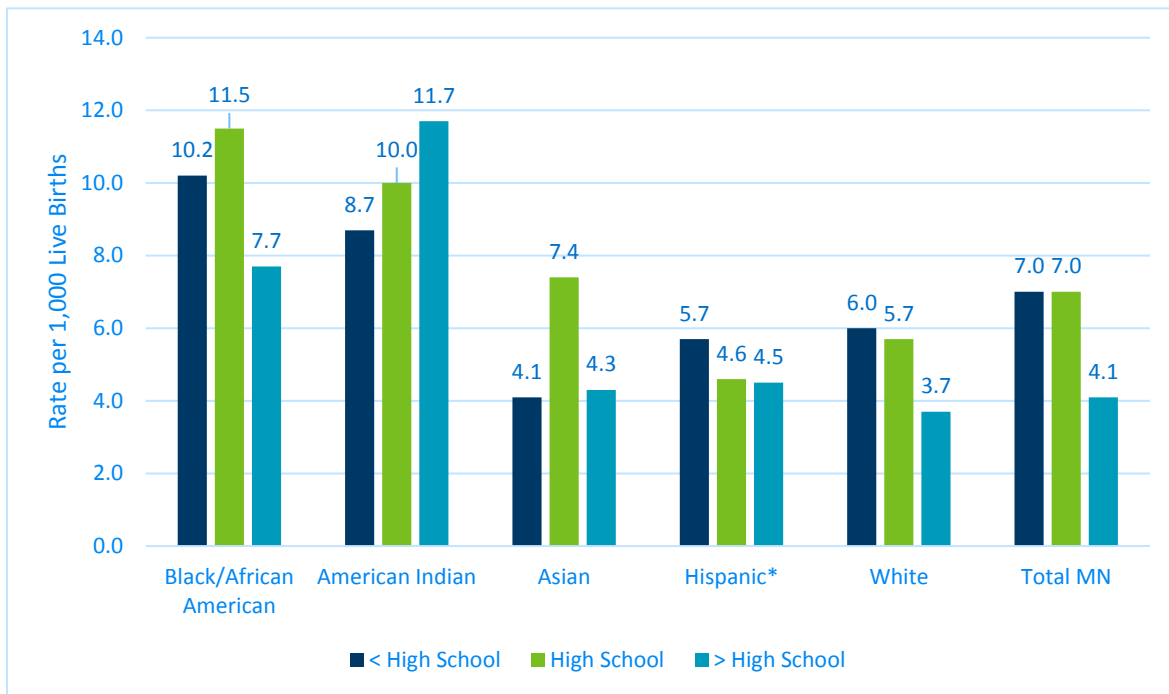


* Hispanic can be any race
 Source: MDH Center for Health Statistics

The preceding discussion showed how maternal characteristics, behaviors and access to health care impact infant mortality. Other factors over which the mother does not have much control

are also at play. These are the social determinants of health - living and working conditions that influence health such as poverty, employment, housing, education, or structural racism which has been shown to cause chronic stress. They increase risks to the health of the mother and her baby, leading to diminished opportunities for a healthy future. Figure 10 illustrates this point. It shows that regardless of race/ethnicity, the infant mortality rate is higher for mothers who have had a high school education or less. Even more striking, even the most educated African American and American Indian mothers experience mortality rates that are higher than white mothers who have had less education.

Figure 10. Infant mortality rates by education and race/ethnicity of mother, Minnesota, 2011-2015



* Hispanic can be any race

Source: MDH Center for Health Statistics

This example underscores the importance of looking at policies and systems that impact infant mortality. According to MDH’s Advancing Health Equity Report, inequities in social and economic factors are the key contributors to health disparities and ultimately are what need to change if health equity is to be advanced.³

Infant Mortality Reduction Plan for Minnesota

MDH released the [Infant Mortality Reduction Plan for Minnesota: Part 1](#) in March of 2015. The document serves as a “call-to-action” to address the persistent racial and ethnic disparities in infant mortality and poor birth outcomes in the state. The plan was developed with input from a diverse group of stakeholders from diverse groups of communities and professionals to identify the sources of infant mortality disparities and to gather their perspectives on changes

the state could make in systems, policies, and practices in order to improve birth outcomes. It lists seven recommendations to reduce infant mortality:

1. Improve health equity and address the social determinants of health that most significantly impact disparities in birth outcomes.
2. Reduce the rate of Sudden Unexpected Infant Deaths (SUID), which includes SIDS and sleep-related infant deaths in Minnesota.
3. Assure a comprehensive statewide system that monitors infant mortality.
4. Provide comprehensive, culturally appropriate, coordinated health care to all women during the preconception, pregnancy and post-partum period.
5. Reduce the rate of preterm births in Minnesota.
6. Improve the rate of pregnancies that are planned, including reducing the rate of teen pregnancies.
7. Establish an ongoing task force of stakeholders to oversee implementation of recommendations and action steps.

Recognizing the importance of eliminating racial and ethnic disparities in infant mortality, Minnesota has implemented various programs and policies designed to improve birth outcomes. EHDI is one of several statewide efforts to reduce infant mortality rates. This initiative is in a good position to take action to implement Recommendations 1, 2, 4, 5, and 6 of the Infant Mortality Reduction Plan. In fact, several of EHDI's infant mortality and teen pregnancy prevention grantees have carried out and continue to carry out activities in these specific areas. With continued support from the state, their efforts can make important contributions to the elimination of disparities in infant mortality in Minnesota.

EHDI Infant Mortality Grantees in Fiscal Years 2014-2015 and 2015-2016

Information in this section was obtained from annual reports submitted by grantees in July 2015 on EHDI activities during the reporting period July 1, 2014 through June 30, 2015 (fiscal year 2015), and from reports submitted in July 2016 covering the reporting period July 1, 2015 through June 30, 2016 (fiscal year 2016).

Funded Programs

In fiscal year 2014-2015, three organizations were awarded EHDI grants to implement infant mortality programs: American Indian Family Center, Leech Lake Band of Ojibwe, and Minnesota Visiting Nurses Association (MVNA). They served Africans/African Americans in Minneapolis and American Indians in three metro counties and the Leech Lake Reservation. In fiscal year 2015-2016, all three organizations received continued funding for another year. However, MVNA declined EHDI funding due to a change in priorities brought about by the full integration of its

operations with Hennepin County Medical Center (HCMC). The two grantees served American Indian communities in the same geographic locations as in the previous year (see Table 2).

Table 2. EHDl Infant Mortality Grantees Program Description and Population and Geography Served, Fiscal Years 2015 and 2016

Grantee Organization/ EHDl Program	Description	Population(s) Served	Geography Served
American Indian Family Center (Wakanyeja Kin Wakan Pi or Our Children Are Sacred)	A specific, comprehensive, wrap-around model for women who are pregnant and/or parenting	American Indian	East Metro area including Ramsey, Washington and Dakota counties
Leech Lake Band of Ojibwe (Family Spirit)	Assists pregnant women from 28 weeks gestation into the third year of the child’s life by educating mothers, families and community about pregnancy, prenatal care, substance abuse before, during, and after pregnancy within a traditional Ojibwe belief system.	Leech Lake Band of Ojibwe members	Leech Lake Reservation encompassing four counties: Beltrami, Cass, Hubbard and Itasca
MN Visiting Nurses Association (MVNA)¹	Improving the health status and safety of infants and improving the health status of women before, during, and between pregnancies	African/African American, American Indian	Minneapolis

¹MVNA was not an EHDl grantee in fiscal year 2016.

Funding Levels

For the grant period July 1, 2014 – June 30, 2015, MDH awarded grant funds totaling \$275,991 to the four infant mortality grantees (Table 3). For the grant period July 1, 2015 – June 30, 2016, the three infant mortality grantees received a total of \$237,226.

Table 3: Total Funds Awarded to Infant Mortality Grantees, Fiscal Years 2015 and 2016.

Fiscal Year 2015 (July 1, 2014 – June 30, 2015)	Amount (\$)
American Indian Family Center	114,373
Leech Lake Band of Ojibwe	37,228
Minnesota Visiting Nurses Association (MVNA)	124,390
Total Amount Funded FY 2015	275,991

Fiscal Year 2016 (July 1, 2015 – June 30, 2016)	Amount (\$)
American Indian Family Center	125,686
Leech Lake Band of Ojibwe	111,540
Total Amount Funded FY 2016	237,226

Appropriation Retained for Administrative Purposes

Grants are allocated through the EHDI RFP selection process, and MDH does not retain funds for administrative and associated expenses. The total amount of funds appropriated for these grants is allocated to community grantees.

Objectives, Strategies and Activities

As part of the Request for Proposal (RFP) process, MDH recommended that grantees align their projects with MDH-recommended key objectives, strategies, and associated evidence-based or promising practices. Grantees were required to choose at least one of the objectives from the menu of options provided in the RFP and incorporate additional strategies and activities tailored to meet the needs of the communities they served.

Grantees were also encouraged to implement evidenced-based, promising, and culturally responsive practices that:

- Meet the needs of population of color and American Indians already affected by teen pregnancy or affected by the underlying contributing risk factors for teen pregnancy
- Provide individual or group-based services; or change policies, systems, or the environment
- Are culturally responsive and linguistically appropriate
- Give community residents a voice in program planning, implementation, and evaluation
- Strengthen working relationships and partnerships in the community

Table 4 summarizes the objectives, strategies, and practices selected by grantees in fiscal year 2016 (they were largely unchanged from fiscal year 2015 for the two 2016 grantees). It shows that infant mortality grantees utilized a diverse array of strategies to serve their priority populations, some of which they developed on their own (Leech Lake).

Table 4. Objectives and Strategies of Infant Mortality Grantees in Fiscal Year 2016.¹

RFP Objectives	AIFC	LLBO	MVNA
Improve the health status of women before, during and between pregnancies	•	•	•
Improve the health status and safety of infants from birth to one year			•
RFP or Own Strategies	AIFC	LLBO	MVNA
Increase access to health and preventative care before, during and between pregnancies.	•		•
Provide culturally specific outreach and care coordination during pregnancy and birth.	•		•
Change behaviors that lead to acute and chronic conditions.	•		
Provide education and support for (high risk) pregnant and parenting teens			•
Improve infant nutrition and healthy physical growth and development			•
Reduce infant deaths from SIDS & sleep-related unintentional			•
Increase parenting knowledge and skills		•	
Address maternal psychosocial skills		•	
Promote optimal development for children 0-3		•	
Prepare children for early school success		•	
Ensure well-child visits		•	

¹Leech Lake designed their own strategies and did not select from RFP Menu of Activities.

Examples of activities they implemented are:

Strategy: Increase access to health and preventative care before, during and between pregnancies.

- Provide a monthly two-hour Mother’s Circle support/education group to promote healthy lifestyles (AIFC)

Strategy: Provide culturally specific outreach and care coordination during pregnancy and birth.

- Provide culturally supportive care coordination and case management for pregnant and/or parenting American Indian women to achieve Family Wellness Care Plan goals. (AIFC)
- Co-facilitated culturally sensitive support groups for pregnant and parenting women and their partners and linked them to needed services. (MVNA)

Strategy: Promote optimal development for children 0-3 (LLBO)

- Utilization of Infant Care Core Components, Growing Child Core Components, and Toddler Care Core Components among participants

Table 5 shows the evidence-based infant mortality models and practices they implemented, and culturally-specific practices they themselves develop and implemented.

Table 5. Types Practices of Infant Mortality Grantees in Fiscal Year 2016.

<p><u>Evidence-Based Practices</u></p> <p>Evidence-based practices are interventions that have demonstrated their effectiveness based on the principles of scientific evidence, including systematic uses of data and information systems, and appropriate use of behavioral science theory in order to explicitly demonstrate effectiveness.</p> <ul style="list-style-type: none">• Positive Indian Parenting - utilizes traditional American Indian parenting techniques to promote wellness within the family• Family Spirit Program - designed to be delivered by Native American paraprofessionals as a core strategy to support young, Native parents from pregnancy to three years post-partum• Parents as Teachers Model - a relationship-based and parenting-centered home visiting model focused on education and support for families• Growing Great Kids - an evidence-based model of home visiting devoted to the parent-child relationship and creating the right home environment for kids• Motivational Interviewing - increase awareness and encourage the pursuit of goals as it strengthens the clients' own commitment to change• Ages and Stages Questionnaire and Ages and Stages Questionnaire- Social Emotional (ASQ and ASQ-SE) - a set of developmental screenings done incrementally from two months of age through five and a half years
<p><u>Promising Practices</u></p> <p>EHDI grantees were also encouraged to implement promising practices, interventions that have demonstrated their effectiveness based on local practices and/or cultural experiences or practitioners' experiences but for which scientific evidence is limited. None of the EHDI infant mortality grantees in fiscal years 2015 and 2016 implemented promising practices.</p>
<p><u>Culturally-Responsive Practices</u></p> <p>Culturally-responsive practices are interventions that have been adapted to meet the unique cultural needs of different communities but may lack evidence of effectiveness.</p> <ul style="list-style-type: none">• Traditional Regalia Making - practices utilized to teach participants how to make their own traditional regalia while receiving historic and cultural knowledge and its significance and impact on cultural identity• Ojibwe Cradleboard Making - traditional teaching practice that nurtures cultural roles and lifestyle as the participants have expressed an interest in• Traditional Midwifery Teachings - Sessions consist of learning the Anishinabe cycle of coming into motherhood and the continuity of nurturing the newborn child throughout life

Reach

EHDI grantees have reached a large number of individuals and families over the years. Table 6 shows the number of individuals reached by infant mortality grantees through direct and indirect contacts. The variation in numbers reached reflects differences in programs and the settings where activities are implemented. For example, AIFC conducts several group activities such as parent and early childhood classes and Mothers Circles in three counties, whereas MVNA's work takes them mainly to people's homes in Minneapolis having one-on-one interactions with family members.

Direct contacts include one-to-one/individual contact (e.g. counseling, clinical services, screenings, education in private settings) as well as group contacts (e.g. classes, workshops, and group education sessions). There may be duplicate numbers in the total number of direct contacts if a person participated in both individual-type and group-type contacts (e.g., received individual counseling but was also part of a class). EHDI infant mortality grantees directly reached a total of 982 individuals in fiscal year 2015 and 1,684 individuals in fiscal year 2016.

Indirect contacts are usually minimal or fleeting, such as when an organization conducts outreach at a large event by handing out flyers, publishes an article in a newspaper, or appears on an education segment on radio, television, or online, in which case circulation or audience size or website visits are used to estimate indirect numbers. Altogether, EHDI infant mortality grantees reached 1,267 individuals in fiscal year 2015 and 2,970 individuals in fiscal year 2016 through indirect contact.

Table 6. Number of Individuals Reached by EHDI Infant Mortality Grantees by Type of Contact, Fiscal Years 2015 and 2016

Grantee Name	2014-2015			2015-2016		
	Direct Contacts	Indirect Contacts	Total	Direct Contacts	Indirect Contacts	Total
American Indian Family Center	544	967	1,511	1,116	1,552	2,668
Leech Lake Band of Ojibwe	130	130	260	568	1,418	1,986
MN Visiting Nurses Association (MVNA) ¹	308	170	478	--	--	--
Total	982	1,267	2,249	1,684	2,970	4,654

¹MVNA was not a grantee in fiscal year 2016

Evaluation

Grantees are required to conduct an evaluation of their programs, including the development of a logic model and an evaluation work plan. There are no prescribed evaluation outcome measures; rather, grantees are encouraged to develop community-based solutions to address disparities in infant mortality, and ways to define and measure success using community input.

Grantees reported specific and measurable outputs and process and summative outcomes as part of their evaluation.

Outputs are counts of people, events, or products at a single point in time (i.e., not comparing across time). Outputs reported by grantees include:

- Participation in classes, trainings, or workshops such as prenatal education, Early Childhood Family Education, Positive Parenting, Stress Management, and Child Brain Development
- Services provided such as prenatal screening and assessment, culturally supportive care coordination and case management during the pregnancy and after the birth of the child, and referrals to community partners for services such as family home visiting case management or counseling and education
- Community events such as Community Baby Shower, picnic, and outreach events
- Groups (non-educational) such as Mothers Circle, breastfeeding group, and culturally sensitive support group for pregnant and parenting women and their partners

Process outcomes measure whether program activities were implemented as intended, the results of which are helpful in determining how future activities can be improved. Process outcomes that grantees reported include:

- Collected participant feedback (e.g., focus groups) regarding their preferences for culturally-specific outreach and prevention education and support
- Increased capacity to serve their priority populations, for example, staff professional development, program expansion, improved recruitment and retention, leveraging funding, improved protocols
- Strengthened or improved collaborations or partnerships

Summative outcomes are changes observed in or reported by participants as a result of program interventions. Outcomes reported by grantees include:

- Increased knowledge
- Increased motivation
- Increased confidence
- Improved decision-making ability
- Increased trust with the community
- Improved social connections

Appendix B provides more details on the grantees' evaluation outcomes.

Grantees are also working on policy and system changes that would bring about more lasting and sustainable improvements in their communities. For example, during 2015-2016 the Leech Lake Band of Ojibwe was developing a policies and procedures manual describing the many details and logistics of a home-visiting program. The manual would ensure that the Family Spirit program was implemented consistently by all staff members at all times. Additionally, it would serve as a reference tool when questions arose about how to handle certain situations with a client. Initial changes have had a positive impact on staff as they have become more vested in seeking appropriate resources and partnerships to extend outreach services.

The LLBO Family Spirit Program also has become part of the Drug Endangered Task Force formed by the former LLBO Chairwoman to address the state of emergency regarding the future of the Nation resulting from the epidemic of babies born with neonatal abstinence syndrome (NAS), whereby newborns experience withdrawal problems due to being exposed to opiate drugs while in the mother's womb. The LLBO FSP has been instrumental in delivering NAS education to the community, and as a result more women are coming forward for assistance in becoming clean and sober to keep their unborn fetus safe.

Sustainability

The infant mortality grantees reported potential savings in health care costs from implementing their EHDI programs. These cost savings to society come in the form of:

- Helping women in the program get regular and consistent prenatal and postnatal care (AIFC). Prenatal care increases the mother's chances of having a healthy pregnancy and delivery, thus avoiding the risk of low birthweight and neonatal deaths, while through postnatal care she is able to take care of her own health.
- Reduction in the number of babies born with NAS (LLBO). Through home visiting services, pregnant women are able to obtain treatment for their drug use and babies are born free of drug dependency.
- Health education aimed at improving the health status and safety of infants and women has the potential to reduce rates of obesity, diabetes, heart disease, asthma, sexually transmitted infections, and unintended pregnancies (MVNA).

Grantees engaged in activities to sustain their programs beyond EHDI. These include: pursuing additional funding from other sources, securing donations of time and resources from providers, building infrastructure for third party billing, providing Community Health Worker (CHW) training to staff to increase billable services, and leveraging the education and experience of staff in building organizational capacity.

AIFC

- Worked with local providers and corporations to obtain in-kind funds to support programming.
- Providers donated their time in providing education and resources.
- Successfully secured funding from external sources to support educational efforts
- Building infrastructure for third party billing to supplement existing programming.

LLBO

- Two FSP staff attended CHW training. Having certified CHWS will allow the FSP to bill for services and provide financial sustainability.
- FSP's new supervisor, a Licensed Practical Nurse with 33 years of public health, clinical, and community educational experience, is teaching staff the Ojibwe language and carries her own caseload of participants.

MVNA had no sustainability plans since they did not plan to continue with their EHDI program after the FY 2015 grant year.

Stories

American Indian Family Center, July 2016

Cassie and her partner Tony (not their real names) are both members of the Mille Lacs Band of Ojibwe. They entered the Wakanyeja Kin Wakan Pi program when their daughter was 3 months old. Cassie and Tony were actively involved in the parenting program and in other community events that occurred throughout the year. This was their first child and they were eager and motivated to learn as much as possible so that they could be the best parents to their child. In addition to Wakanyeja Kin Wakan Pi, they attended and successfully completed the culturally specific Early Childhood Family Education (ECFE) classes for American Indian families. Cassie received an opportunity to work with the Mille Lacs Band of Ojibwe in their Work Experience (WEX) program and was able to obtain an internship experience at Interfaith Action (formally known as Division of Indian Work). WEX program participants work 720 hours as interns to gain valuable work experience. Once completed, Cassie was able to apply for a position that had opened up and became Interfaith Action's new intake worker and Bridge to Benefits worker. Within a short period of time after starting in this position, she applied for a higher position within Interfaith Action and soon became their Interim Program Director.

Leech Lake Band of Ojibwe, July 2016

Since the LLBO Family Spirit Program (FSP) began conducting local presentations in order to reach more people in the community, requests from various programs, schools and other community partners for these educational presentations have come in. The presentation focuses on SUIDS/Safe Sleep, Shaken Baby, Smoking During Pregnancy, FASD, and The Cultural Ojibwe Belief on Pregnancy, Birth and Families. Activities engage the observer as the FSP presenter relates her own personal story of witnessing trauma and loss in the community working as a tribal nurse, all the while applying an Ojibwe perspective. This strategy has impacted many of the younger generation's beliefs about pregnancy and the safety of the fetus in the womb while learning the effects of ingesting illicit and prescribed drugs, alcohol and smoking during pregnancy. With these presentations and the home visits, participants are more eager to be involved in some of the community events related to the cycle of traditional life as it once was, and to learn the language, the ceremonies surrounding life, and how to respect themselves and their children who are the future of their families and the Tribal Nations. There is greater awareness of neonatal abstinence syndrome (NAS) issues and as a result more participants are requesting assistance on how to stay clean and sober during pregnancy. Caregivers also are learning more about how to care for a baby with NAS. There are more requests for a home visitor to learn about child care and cultural teachings. And new participants requesting education are also walking in the clinics for further information.

Minnesota Visiting Nurses Association, July 2015

As a result of the focus group and conversations with program participants held during the grant period 2014-2015, staff learned that they were interested in learning about continuing

education opportunities. Several participants had not yet completed high school, or a GED, or were interested in learning about which associate degrees might be a good fit for them. In an effort to meet participants' interests and utilize the wealth of knowledge that existed among MVNA staff, they and members of the Minnesota Family Investment Program (MFIP) staff led a group on continuing education and career development at the Engagement Sites, which are locations around the Twin Cities where individuals could take career inventories, be assessed for GED preparation, and receive career development services. They helped participants explore career options and GED opportunities. Staff then followed-up with the participants to provide further information on how to utilize these services in order to advance their education or career.

EHDI Infant Mortality Grantees in Fiscal Year 2016-2017

Information in this section came from annual reports submitted by grantees in July 2017 on EHDI activities during the period July 1, 2016 through June 30, 2017.

Funded Programs

MDH awarded EHDI grants to 32 organizations (33 programs) in fiscal year 2017. Three organizations received funds to implement infant mortality programs from July 1, 2016 through June 30, 2017: American Indian Family Center, Leech Lake Band of Ojibwe, and NorthPoint Health and Wellness Center. Tables 7 describes the programs, the target populations and geographies, and funding amount (Appendix B provides more detailed program descriptions). Altogether, the three infant mortality grantees serve Africans/African Americans in Minneapolis and American Indians in three metro counties and the Leech Lake Reservation. Total funding for the three programs was \$430,687. In May 2016, MDH announced that all 33 EHDI grantee programs would receive two-year extensions through June 30, 2019.

Table 7. EHDI Infant Mortality Grantees Program Description, Population and Geography Targeted, and Funding Level Fiscal Year 2017 (July 1, 2016-June 30, 2017)

Grantee Organization/ EHDI Program	Description	Population Targeted	Geography Targeted	Funding Level
American Indian Family Center/ Wakanyeja Kin Wakan Pi (Our Children Are Sacred)	A specific, comprehensive, wrap-around model for women who are pregnant and/or parenting	American Indian	East Metro including Ramsey, Washington and Dakota counties	\$123,232
Leech Lake Band of Ojibwe/Family Spirit	Home visiting program that assists pregnant women from 28 weeks gestation into the third year of the child's life through education and support within a traditional Ojibwe belief system	Leech Lake Band of Ojibwe members	Leech Lake Reservation	\$138,161
NorthPoint Health and Wellness Center/Healthy Families	Provides intensive care coordination, psychiatric diagnostic assessments and ongoing therapy support to previously identified high-risk pregnant women through the post-partum period, up until the baby's first year of life	African/ African American	Near Northside of Minneapolis	\$169,294

Appropriation Retained for Administrative Purposes

Grants are allocated through the EHDI RFP selection process, and MDH does not retain funds for administrative and associated expenses. The total amount of funds appropriated for these grants is allocated to community grantees.

Objectives, Strategies and Activities

As part of the Request for Proposals (RFP) process, MDH recommended that grantees align their projects with MDH-recommended key objectives, strategies, and associated evidence-based or promising practices. Grantees were required to choose at least one of the objectives from the menu of options provided in the RFP and incorporate additional strategies and activities tailored to meet the needs of the communities they served.

Grantees were also encouraged to implement evidenced-based, promising, and culturally responsive practices that:

- Meet the needs of population of color and American Indians already affected by teen pregnancy or affected by the underlying contributing risk factors for teen pregnancy
- Provide individual or group-based services, or change policies, systems, or environment
- Are culturally responsive and linguistically appropriate
- Give community residents a voice in program planning, implementation, and evaluation
- Strengthen working relationships and partnerships in the community

Tables 8 and 9 summarize the objectives, strategies, and practices selected by grantees, and provides examples of activities they conducted in fiscal year 2017. It shows that infant mortality grantees utilized a diverse array of strategies to serve their priority populations, some of which they developed on their own (Leech Lake). They implemented known evidence-based infant mortality models and practices, and developed culturally specific practices themselves which they also implemented.

Table 8. Objectives and Strategies of Infant Mortality Grantees in Fiscal Year 2017.

RFP Objectives	AIFC	LLBO	NP
A. Improve the health status of women before, during and between pregnancies	●	●	●
B. Improve the health status and safety of infants from birth to one year	●		
RFP or Own Strategies	AIFC	LLBO	NP
A.1. Increase access to health and preventative care before, during and between pregnancies.	●	●	●
A.2. Provide culturally specific outreach and care coordination during pregnancy and birth.	●	●	●
A.3. Change behaviors that lead to acute and chronic conditions.	●		
B.3. Improve infant nutrition and healthy physical growth and development	●	●	
B.4. Reduce infant deaths from unintentional injury and violence	●		
Own strategy: Conduct a holistic intake process	●		
Own strategy: Host Community Baby Shower that provides women with necessities and resources for infancy	●		
Own strategy: Address maternal psychosocial risks		●	
Own strategy: Ensure well-child visits and health care		●	
Own strategy: Promote traditional Ojibwe and family values		●	

Examples of activities they implemented are:

Strategy A.1: Increase access to health and preventative care before, during and between pregnancies.

- Track Wakanyeja Kin Wakan. Pi (WKWP) participants' prenatal and postnatal visits to ensure adequate care (AIFC)
- Implement Prenatal Care Module, Infant Care Core Module, Your Growing Child Module, Toddler Care Module, My Family and Me Core Module, and Healthy Living Core Module among participants (LLBO)

- Provide care coordination to ensure that preventive services are accessed according to recommended schedule for mother and infant, e.g., implement Centering Pregnancy and Healthy Start programs (NorthPoint)
- Provide well-child visits, immunizations, post-partum care, family planning, parenting and education support classes, dental care, behavioral health, and enabling services (NorthPoint)
- Provide assistance in accessing health insurance (NorthPoint)
- Screening for domestic violence and behavioral health concerns and connect to needed services (NorthPoint)

Strategy B.3: Improve infant nutrition and healthy physical growth and development

- Provide, promote and support culturally informed and accurate information about breastfeeding (AIFC)
- Ensure low-income women are linked to nutrition resources such as WIC and food stamps (AIFC)

Own strategy: Conduct a holistic intake process (AIFC)

- Screen and assess needs through a holistic intake process that identifies strengths and risks (domestic violence, mental health, chemical use, health condition, housing and food access)

Table 4 shows the evidence-based infant mortality models and practices they implemented, and culturally-specific practices they themselves developed and implemented.

Table 9. Types Practices of Infant Mortality Grantees in Fiscal Year 2017.

Evidence-Based Practices

Evidence-based practices are interventions that have demonstrated their effectiveness based on the principles of scientific evidence, including systematic uses of data and information systems, and appropriate use of behavioral science theory to demonstrate effectiveness.

- Positive Indian Parenting (AIFC) - utilizes traditional American Indian parenting techniques to promote wellness within the family
- Family Spirit Program (LLBO) - designed to be delivered by Native American paraprofessionals as a core strategy to support young, Native parents from pregnancy to three years post-partum
- The Centering Pregnancy Care Model (NP) - a group care model for 6-10 pregnant women with similar gestational ages who come together 10 times over six months (prenatal to postpartum) under the guidance of a health care professional who also facilitates the group. The visits consist of prenatal risk assessment and care within the group setting where the women are encouraged to take their own vitals and measurements, culturally appropriate education on various topics with discussion, and sharing with one another.
- Circle of Security Network (NP) - an evidence-based intervention program for parents and children that focuses on relationships. The program is particularly useful for families with a child in residential care or in a temporary out-of-home placement.

Since these evidence-based programs were developed to work with populations of color or American Indians, none of the grantees had to make any cultural adaptation. However, they added certain elements to make them even more culturally specific.

- AIFC invites local community elders to come and speak about the values and traditions their own parents taught them, and how historical trauma affected their lives while growing up. They also added Native American crafts to the curriculum so parents can learn to create things they can choose to give to their children.
- LLBO FSP staff provide continued support to participants as they put into practice or teach to others what they learned about Ojibwe cultural rites, language, behaviors, beliefs, and activities.
- NorthPoint held several meetings with the care coordination staff and provider staff to increase buy-in into the Centering and Circle of Security programs, and staff completed in-house and external trainings to ensure effective implementation. Staff also reflects the community they serve - NorthPoint's perinatal care coordination staff is 90 percent African American. Having a good understanding of their community's culture helps build and strengthen relationships with the patients.

Promising Practices

EHDI grantees were also encouraged to implement promising practices, interventions that have demonstrated their effectiveness based on local practices and/or cultural experiences or practitioners' experiences but for which scientific evidence is limited. None of the EHDI infant mortality grantees in fiscal year 2017 implemented promising practices.

Culturally Responsive Practices

Culturally responsive practices are interventions that have been adapted to meet the unique cultural needs of different communities but may lack evidence of effectiveness.

- Traditional Gathering Camp (LLBO) - held four times a year. Participants learn traditional ways of food gathering and ways to cook them. The main activities in each season consist of: fishing in the spring, berry picking in the summer, Mahnoomin (wild rice) harvesting in the fall, and storytelling and regalia making in the winter.
- Traditional Birthing Teachings (LLBO) - learned by Family Spirit staff in a 2-year birthing class. They also attend periodic refresher classes and other meetings to enhance their skills.
- Cultural Immersion Camps (LLBO) - held twice a year on weekends during the summer for staff and participants to learn about how to speak the Ojibwe language, learn about ceremonies surrounding giving names to children, and learning the stories and history of their people.
- Ojibwe Traditional Classes (LLBO) - the LLBO Tribal College offers various Ojibwe traditional classes on sewing, cradleboard making, moccasin making, language, gardening, natural herbs and medicine recognition, flute music, cooking, and many other traditional gathering and craft skills along with classes in breastfeeding and family values.

Reach

EHDI grantees have reached a large number of individuals and families over the years. Table 10 shows the number of individuals reached by infant mortality grantees through direct and indirect contacts. In total, EHDI infant mortality grantees reached 3,231 individuals in fiscal year

2017. The variation in numbers reached reflects differences in programs and the settings where grantees implement activities. For example, AIFC conducts several group activities such as parent and early childhood classes and community baby showers in three counties, whereas NorthPoint’s activities take place mainly in a clinical setting and only in Minneapolis.

Direct contacts include one-to-one/individual contact (e.g. counseling, clinical services, screenings, education in private settings) as well as group contacts (e.g. classes, workshops, and group education sessions). There may be duplicate numbers in the total number of direct contacts if a person participated in both individual-type and group-type contacts (e.g., received individual counseling but was also part of a class). EHDl infant mortality grantees directly reached 1,368 individuals in fiscal year 2017.

Indirect contacts are usually minimal or fleeting, such as when an organization conducts outreach at a large event by handing out flyers, publishes an article in a newspaper, or appears on an education segment on radio, television, or online, in which case circulation or audience size or website visits is used to estimate indirect numbers. EHDl infant mortality grantees reached 1,863 individuals in fiscal year 2017 through indirect contacts.

Table 10. Number of Individuals Reached by EHDl Infant Mortality Grantees by Type of Contact, Fiscal Years 2015 and 2016

2016-2017			
Grantee Name	Direct Contacts	Indirect Contacts	Total
American Indian Family Center	229 ¹	1,200	1,429
Leech Lake Band of Ojibwe	1,005	609	1,614
NorthPoint Health & Wellness Center	134	54	188
Total	1,368	1,863	3,231

¹AIFC direct reach includes individuals not belonging to its EHDl target populations.

Evaluation

Grantees are required to conduct an evaluation of their programs, including the development of a logic model and an evaluation work plan. There are no prescribed evaluation outcome measures; rather, with community input, grantees are encouraged to develop community-based solutions to address disparities in infant mortality, and ways to define and measure their success.

Grantees reported specific and measurable outputs and process and summative outcomes as part of their evaluation.

Outputs are counts of people, events, or products at a single point in time (i.e., not comparing across time). Outputs reported by grantees include:

- Participation or enrollment in program activities
- Classes, trainings, or workshops conducted such as parenting, safe sleep, shaken baby, dangers of second- and third-hand smoke, car seat safety, home safety
- Groups (non-educational) facilitated such as a monthly Mothers Circle covering topics that include talking circle, self-care, Positive Indian Parenting, healthy minds/bodies, wellness fair, Montessori education, healthy eating and nutrition
- Community events hosted such as Community Baby Shower, picnic, and outreach events
- Services, materials, or aids provided such as: culturally appropriate supportive care coordination and case management services; chemical use recovery; mental health therapy; food and housing assistance; nutrition information and referrals; medical, dental, behavioral health, and social worker services; domestic violence advocacy; infant car seats

Process outcomes measure the quality and extent of implementation of certain program components for the purpose of program improvement. Process outcomes that grantees reported include:

- Held regular management meetings in order to plan and track program activities
- Conducted outreach in order to improve participant recruitment and retention
- Increased capacity to serve their priority populations, for example, staff completing certification trainings and ongoing professional development
- Strengthened or improved collaborations or partnerships

Summative outcomes are changes observed among participants that were the result of program interventions. Available outcome data are limited since the three infant mortality programs have been operating for only a year. AIFC reported the following changes among its participants:

- Increased interest to learn more about their own culture and values
- Increased social connections and support

Appendix C provides more details on the fiscal year 2017 grantees' evaluation outcomes, including those on which they expect to report data in the coming months.

Grantees are also working on policy and system changes that would bring about more lasting and sustainable improvements both in their organization and in their communities. For example:

- AIFC is building the infrastructure for third party billing which will help support programming
- The LLBO is developing a Policies and Procedures Manual describing the many details and logistics of a home-visiting program. This would ensure that all staff members consistently implement the FSP model at all times. It would also serve as a reference tool when questions arise about how to handle certain situations with a client. Initial changes have

had a positive impact on staff - they have become more vested in seeking appropriate resources and partnerships to extend outreach services.

- The FSP has joined the LLBO Drug Endangered Task Force to address the state of emergency regarding the future of the Nation resulting from the epidemic of babies born with neonatal abstinence syndrome (NAS), whereby newborns experience withdrawal problems due to exposure to opiate drugs while in the mother's womb. The LLBO FSP has been instrumental in delivering NAS education to the community, and as a result, more women are coming forward for assistance in becoming clean and sober to keep their unborn fetus safe.
- NorthPoint extended the care coordination model into the post-partum period, thus increasing the babies' chances of leading healthier lives.

Sustainability

The infant mortality grantees reported potential savings in health care costs from implementing their EHDl programs. These cost savings to society come in the form of:

- Prevention of preterm birth or low birth weight which come at a higher cost than term births, and avoidance of special education costs and lost household and labor market productivity for taking care of a preterm or low birth weight child (AIFC)
- Prevention of babies born with Neonatal Abstinence Syndrome (NAS) and infant deaths (LLBO)
- Management of co-existing mental health or chronic disease within the ambulatory care setting thus keeping patients out of the hospital; policy opportunities to support the transformation of all primary care sites serving vulnerable patients to medical homes and to create financial incentives to sustain them; providing an array of basic health services to patients, thus reducing cost and duplication of services; utilization of NorthPoint gap services for uninsured adults thus avoiding serious health consequences due to lack of preventive care or delayed care; and preventing child out-of-home placement and associated county court and legal fees for mothers at risk of Child Protection Services involvement. (NorthPoint)

Grantees are making concerted efforts to sustain their programs, suggesting that EHDl investment in these community programs will continue to pay off in the long run. They have secured and continue to look for other financial and in-kind support, have developed sources of revenue, have improved their internal infrastructure to support programming such as improved billing systems and staff hiring and professional development, and have benefited from resource-sharing out of the partnerships they cultivated. The grantees reported the following sustainability efforts:

AIFC

- Worked with local providers and corporations to obtain in-kind funds to support programming, and providers also donate their time in providing education and resources

- Secured additional external funding to support FASD educational efforts and to hire a Parenting Training Coordinator to address the gap in services for parents with children between the ages of 13 months and 5 years
- Building the infrastructure for third party billing continues, which will help supplement existing programming

LLBO

- Family Spirit program (FSP) staff attended a “Billing and Coding” class to learn how to chart and bill for allowable services by the state, making it easier for staff to understand the billing procedure and why it is so important to chart for billing
- FSP graduated Community Health Workers (CHWs), which would allow the FSP to bill for their services and provide some financial sustainability
- The FSP supervisor, a Licensed Practical Nurse with 34 years of public health, clinical, and community educational experience continues to teach staff the Ojibwe language and assigns them to trainings regarding the Ojibwe beliefs and celebrations regarding pregnancy, birth and family
- FSP staff attend LLBO Tribal College classes pertaining to family services as they arise, attend trainings offered through the Miiwizhaa non-profit organization pertaining to breastfeeding and Ojibwe birthing classes
- Continuing to seek ongoing support through networking and collaborating with other LLBO programs and area entities

NorthPoint

- The extension of the patient/care coordinator relationship into the post-partum period during pregnant women's pregnancy has been a well-received addition to NorthPoint's prenatal program, and its leadership is committed to finding resources to help ingrain and sustain this care model within the organization
- Providing care coordination to post-partum women has increased patient visits within the medical department and has increased provider productivity, ultimately creating more revenue for the clinic, evidence of which are:
 - Increase in the percentage of pregnant women returning for post-partum visits to 89 percent
 - Increase in pediatric visits by 10 percent
 - Increase in the percentage of pregnant women presenting for post-partum visits at least 6-8 weeks after delivery
 - Increase in the number of high-risk mother returning their babies to the clinic for well exams and immunizations
- Continue to cultivate internal and external partnerships which has generated resource-sharing among its many benefits

Stories

American Indian Family Center, July 2017

Danielle (not her real name), 33, is a single mother of five children, two girls and three boys. She is currently pregnant with her sixth child. Danielle has overcome many obstacles in her life before coming to the American Indian Family Center. Her first child died of SIDS and she recently suffered a mental breakdown when the father of her baby passed away. Eventually, Child Protection Services (CPS) took over care of her children and did not allow any contact with them. Danielle began attending parenting classes in March 2017 in the Wakanyeya Kin Wakan Pi (WKWP) project. The WKWP Outreach Specialist assisted Danielle by writing a letter to CPS and the court and informing them of her participation in the project. In May 2017, she began supervised visitation with her children who joined her in the parenting classes and support groups. Danielle's children are now home with her. Today, Danielle continues to be a committed WKWP participant and offers her support to other group participants, and is a motivated and dedicated mother to her children.

Leech Lake Band of Ojibwe, July 2017

One of the families in the Family Spirit program (FSP) was struggling with methamphetamine abuse. They have five children ranging from ages 1 year to 16 years. The 16 year old was the caretaker of her siblings while the parents were under the influence of drugs and alcohol. Despite their predicament, the couple have always shown great love for each other. During home visits, the FSP provided the family education on a variety of topics, but focused on the effects of drug abuse on family. The 16 year old always listened in on the lessons and asked many questions on how to do certain things, such as how to do CPR in case her parents overdosed or got hurt. FSP staff assisted the 16 year old in cooking, shopping, and learning first aid. They also talked to the parents at great length about treatment, to which they finally agreed. Both sobered up and came to realize they did not want to be together anymore and contemplated divorce. The mom noticed her children would not come to her for hugs or help but instead would go to the 16 year old, and that the 16 year old never hung out with friends but was always home cleaning or cooking. FSP staff talked with the parents about how the children were so accustomed to the eldest child taking care of them, how this child did not trust them and was possibly waiting for them to "fall off the wagon," thus preferring to stay home to care for the siblings. The parents agreed to go to LLBO Behavioral Health for Couples Therapy and take the children to Family Therapy. Today, the family still goes to therapy but some major changes are slowly happening. The parents rediscovered their love for each other, and the 16 year old is doing well in school and participating in school events. The younger children are leading normal lives, and the parents are relearning to parent. The entire family has completed the curriculum but continue to learn about Ojibwe customs and traditions and attend community events. FSP staff remain supportive of this family.

NorthPoint Health and Wellness Center, July 2017

Sometimes it takes courage and reliance on the support of systems, community, and care providers to attain health. In the past year, NorthPoint Healthy Families helped a young mother of two escape an abusive relationship. The risk indicators for this case were high anxiety, depression, and violence in the home. She would say everything was fine, until one day she broke down crying and said, "I can't take it. I need to get out." She revealed that she was constantly holding her baby as a way to avoid violence from her partner, and stashing weapons around the house "just in case." NorthPoint's community health worker (CHW) practiced empathy, having heard about her circumstances before, but this time she asked, "What do you want to do about it?" After her partner left for work in the morning, the mother packed her children and belongings and left the home with help from NorthPoint staff. The CHW stayed with her to provide support and help her navigate through emergency housing and resources. With assistance from United Way 211 community helpline, Hennepin County Family Shelter System, NorthPoint Inc. food shelf, Harriet Tubman Center, and Cradle of Hope, this young woman is now working, staying in a shelter, and receiving therapy and support at the NorthPoint clinic. With a happier and more supported mom, her baby (now 6 months old) has a better chance of leading a healthy and safe first year of life.

Conclusions

The Minnesota Legislature established EHDI in 2001 to close the gap in the health status of Africans/African Americans, American Indians, Asian/Pacific Islanders, and Hispanics/Latinos in Minnesota compared to whites in eight priority health areas, including infant mortality. EHDI is grounded in the philosophy that community issues require community solutions. By empowering community-based organizations to develop health improvement strategies that build on community strengths, community members are more likely to be reached, engaged, and impacted.

Information gathered from infant mortality grantees in fiscal years 2015 and 2016 indicate that EHDI is making significant contributions towards the goal of reducing infant mortality disparities. Grantees reached a total of 2,249 individuals in fiscal year 2015 and 4,654 individuals in fiscal year 2016 through both direct and indirect contacts. In addition, the following conclusions can be derived based on information gathered from their annual reports:

1. The grantees are serving the populations most impacted by infant mortality disparities. Through both direct and indirect means, they reached 3,231 individuals in the American Indian and African/African American communities, the populations experiencing the biggest infant mortality disparities in the state. They provided services in the metro area and Leech Lake Reservation.
2. It is still too early to determine the impact of program interventions on infant mortality disparities. Nonetheless, the grantees have reported a number of accomplishments that shows they are making good progress towards their goals. For example, they have: enrolled participants in classes, trainings, workshops and support groups; held community events to honor and support their participants and to increase awareness of infant mortality; provided health and social services and referrals to improve the health of mothers and babies; increased organizational capacity to serve their priority populations; and, strengthened or improved their collaborations or partnerships. Participants also have reported increased interest to learn more about their own culture and values and increased social connections and support.
3. They are implementing evidence-based practices shown to be effective in reducing infant mortality, choosing to focus on the objectives of improving the health status of women before, during and between pregnancies, and improving the health status and safety of infants. Strategies they employ include increasing health care access, providing culturally specific outreach and care coordination, changing behaviors, improving infant growth and development, and reducing infant deaths.
4. They are utilizing community assets and strengths by implementing culturally responsive practices, for example, incorporating cultural elements into their programming.
5. Their sustainability and cost saving efforts are sound investments in the health of their communities that can pay off in the long run.

- a. Grantees are working on policy and system changes that would bring about more lasting and sustainable improvements within their organizations and in their communities. For example:
 - AIFC is building the infrastructure for third party billing which will help support programming
 - LLBO is developing a policies and procedures manual that would ensure staff are implementing the program consistently at all times
 - FSP has joined the LLBO Drug Endangered Task Force to address the state of emergency regarding the future of the Nation resulting from the epidemic of babies born with neonatal abstinence syndrome (NAS)
 - NorthPoint extended the care coordination model into the post-partum period increasing the babies' chances of leading healthier lives
- b. To sustain their programs, they have secured and continue to look for other financial and in-kind support, have developed sources of revenue, have improved their internal infrastructure to support programming such as improved billing systems and staff hiring and professional development, and have cultivated internal and external partnerships.
- c. They have identified potential sources of health care cost savings from implementing their programs. Examples of these cost savings to society are:
 - Prevention of preterm birth or low birth weight
 - Avoidance of special education costs and lost household and labor market productivity, prevention of infant deaths and babies born with NAS
 - Management of co-existing mental health or chronic disease within the ambulatory care setting which keeps patients out of the hospital
 - Utilization of gap services for uninsured adults which avoids serious health consequences due to lack of preventive care or delayed care
 - Preempting Child Protection Services involvement

Available data from 2000-2015 show that U.S. infant mortality rates have been declining. In Minnesota, rates have gone up and down but are still lower than national rate and most states. However, the gaps between whites and populations of color and American Indians remain. For instance, infant mortality rates among African American and American Indian women are more than twice that of white women. Low birthweight among African American women is more than twice that of whites.

But if Minnesota is to advance health equity, the state must pay attention to inequities in social and economic factors which are the key contributors to health disparities and ultimately are what need to change. The EHDI infant mortality grantees are doing just that. The American Indian Family Center was able to connect one of its participants to a work experience program at another organization, who was then offered a temporary position after that experience, and eventually was able to secure a permanent position within the organization. MVNA, using feedback gathered from participants, started a group on continuing education and career development for those who wanted to advance their situation in life and it was well-received.

There are strong arguments to be made in favor of supporting the EHDI grant program which tackles infant mortality as one of its priority areas. From an economic point of view, significant savings in medical costs can accrue, for example, from preventing low birth weight. One study estimates that an increase of 250 grams (about half a pound) in birth weight saves an average of \$12,000 to \$16,000 in first year medical expenses, or prenatal interventions that result in a normal birth (over 2500 grams or 5.5 pounds) saves \$59,700 in medical expenses in the infant's first year.⁵ Another study estimated that Medicaid costs in Minnesota are reduced by \$10,231 per low birth weight birth prevented and by \$35,106 per very low birth weight birth prevented.⁶

EHDI, in partnership with MDH and the Minnesota State Legislature, is committed to making an impact on infant mortality disparities and inequities through the efforts of grantees. This work is a worthy investment in the current and future health of Minnesota's populations of color and American Indians and the state a whole.

Appendix A: Minnesota Statute 145.928

Subdivision 1. Goal; establishment. It is the goal of the state, by 2010, to decrease by 50 percent the disparities in infant mortality rates and adult and child immunization rates for American Indians and populations of color, as compared with rates for whites. To do so and to achieve other measurable outcomes, the commissioner of health shall establish a program to close the gap in the health status of American Indians and populations of color as compared with whites in the following priority areas: infant mortality, breast and cervical cancer screening, HIV/AIDS and sexually transmitted infections, adult and child immunizations, cardiovascular disease, diabetes, and accidental injuries and violence.

Subd. 2. State-community partnerships; plan. The commissioner, in partnership with culturally based community organizations; the Indian Affairs Council under section 3.922; the Minnesota Council on Latino Affairs under section 15.0145; the Council for Minnesotans of African Heritage under section 15.0145; the Council on Asian-Pacific Minnesotans under section 15.0145; community health boards as defined in section 145A.02; and tribal governments, shall develop and implement a comprehensive, coordinated plan to reduce health disparities in the health disparity priority areas identified in subdivision 1.

Subd. 3. Measurable outcomes. The commissioner, in consultation with the community partners listed in subdivision 2, shall establish measurable outcomes to achieve the goal specified in subdivision 1 and to determine the effectiveness of the grants and other activities funded under this section in reducing health disparities in the priority areas identified in subdivision 1. The development of measurable outcomes must be completed before any funds are distributed under this section.

Subd. 4. Statewide assessment. The commissioner shall enhance current data tools to ensure a statewide assessment of the risk behaviors associated with the health disparity priority areas identified in subdivision 1. The statewide assessment must be used to establish a baseline to measure the effect of activities funded under this section. To the extent feasible, the commissioner shall conduct the assessment so that the results may be compared to national data.

Subd. 5. Technical assistance. The commissioner shall provide the necessary expertise to grant applicants to ensure that submitted proposals are likely to be successful in reducing the health disparities identified in subdivision 1. The commissioner shall provide grant recipients with guidance and training on best or most promising strategies to use to reduce the health disparities identified in subdivision 1. The commissioner shall also assist grant recipients in the development of materials and procedures to evaluate local community activities.

Subd. 6. Process. (a) The commissioner, in consultation with the community partners listed in subdivision 2, shall develop the criteria and procedures used to allocate grants under this section. In developing the criteria, the commissioner shall establish an administrative cost limit for grant recipients. At the time a grant is awarded, the commissioner must provide a grant recipient with information on the outcomes established according to subdivision 3. (b) A grant recipient must coordinate its activities to reduce health disparities with other entities receiving funds under this section that are in the grant recipient's service area.

Subd. 7. Community grant program; immunization rates and infant mortality rates. (a) The commissioner shall award grants to eligible applicants for local or regional projects and initiatives directed at reducing health disparities in one or both of the following priority areas:

- (1) decreasing racial and ethnic disparities in infant mortality rates; or
- (2) increasing adult and child immunization rates in nonwhite racial and ethnic populations.

(b) The commissioner may award up to 20 percent of the funds available as planning grants.

Planning grants must be used to address such areas as community assessment, coordination activities, and development of community supported strategies.

(c) Eligible applicants may include, but are not limited to, faith-based organizations, social service organizations, community nonprofit organizations, community health boards, tribal governments, and community clinics. Applicants must submit proposals to the commissioner.

A proposal must specify the strategies to be implemented to address one or both of the priority areas listed in paragraph (a) and must be targeted to achieve the outcomes established according to subdivision 3.

(d) The commissioner shall give priority to applicants who demonstrate that their proposed project or initiative:

- 1) is supported by the community the applicant will serve;
- (2) is research-based or based on promising strategies;
- (3) is designed to complement other related community activities;
- (4) utilizes strategies that positively impact both priority areas;
- (5) reflects racially and ethnically appropriate approaches; and
- (6) will be implemented through or with community-based organizations that reflect the race or ethnicity of the population to be reached.

Subd. 7a. Minority-run health care professional associations.

The commissioner shall award grants to minority-run health care professional associations to achieve the following:

- (1) provide collaborative mental health services to minority residents;
- (2) provide collaborative, holistic, and culturally competent health care services in communities with high concentrations of minority residents; and
- (3) collaborate on recruitment, training, and placement of minorities with health care providers.

Subd. 8. Community grant program; other health disparities. (a) The commissioner shall award grants to eligible applicants for local or regional projects and initiatives directed at reducing health disparities in one or more of the following priority areas:

- (1) decreasing racial and ethnic disparities in morbidity and mortality rates from breast and cervical cancer;
- (2) decreasing racial and ethnic disparities in morbidity and mortality rates from HIV/AIDS and sexually transmitted infections;
- (3) decreasing racial and ethnic disparities in morbidity and mortality rates from cardiovascular disease;
- (4) decreasing racial and ethnic disparities in morbidity and mortality rates from diabetes; or
- (5) decreasing racial and ethnic disparities in morbidity and mortality rates from accidental injuries or violence.

(b) The commissioner may award up to 20 percent of the funds available as planning grants. Planning grants must be used to address such areas as community assessment, determining community priority areas, coordination activities, and development of community supported strategies.

(c) Eligible applicants may include, but are not limited to, faith-based organizations, social service organizations, community nonprofit organizations, community health boards, and community clinics. Applicants shall submit proposals to the commissioner. A proposal must specify the strategies to be implemented to address one or more of the priority areas listed in paragraph (a) and must be targeted to achieve the outcomes established according to subdivision 3.

(d) The commissioner shall give priority to applicants who demonstrate that their proposed project or initiative:

- (1) is supported by the community the applicant will serve;
- (2) is research-based or based on promising strategies;
- (3) is designed to complement other related community activities;
- (4) utilizes strategies that positively impact more than one priority area;

(5) reflects racially and ethnically appropriate approaches; and

(6) will be implemented through or with community-based organizations that reflect the race or ethnicity of the population to be reached.

Subd. 9. Health of foreign-born persons. (a) The commissioner shall distribute funds to community health boards for health screening and follow-up services for tuberculosis for foreign-born persons. Funds shall be distributed based on the following formula:

(1) \$1,500 per foreign-born person with pulmonary tuberculosis in the community health board's service area;

(2) \$500 per foreign-born person with extrapulmonary tuberculosis in the community health board's service area;

(3) \$500 per month of directly observed therapy provided by the community health board for each uninsured foreign-born person with pulmonary or extrapulmonary tuberculosis; and

(4) \$50 per foreign-born person in the community health board's service area.

(b) Payments must be made at the end of each state fiscal year. The amount paid per tuberculosis case, per month of directly observed therapy, and per foreign-born person must be proportionately increased or decreased to fit the actual amount appropriated for that fiscal year.

Subd. 10. Tribal governments. The commissioner shall award grants to American Indian tribal governments for implementation of community interventions to reduce health disparities for the priority areas listed in subdivisions 7 and 8. A community intervention must be targeted to achieve the outcomes established according to subdivision 3. Tribal governments must submit proposals to the commissioner and must demonstrate partnerships with local public health entities. The distribution formula shall be determined by the commissioner, in consultation with the tribal governments.

Subd. 11. Coordination. The commissioner shall coordinate the projects and initiatives funded under this section with other efforts at the local, state, or national level to avoid duplication and promote complementary efforts.

Subd. 12. Evaluation. Using the outcomes established according to subdivision 3, the commissioner shall conduct a biennial evaluation of the community grant programs, community health board activities, and tribal government activities funded under this section. Grant recipients, tribal governments, and community health boards shall cooperate with the commissioner in the evaluation and shall provide the commissioner with the information needed to conduct the evaluation.

Subd. 13. Report. (a) The commissioner shall submit a biennial report to the legislature on the local community projects, tribal government, and community health board prevention activities funded under this section. These reports must include information on grant recipients, activities

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that were conducted using grant funds, evaluation data, and outcome measures, if available. These reports are due by January 15 of every other year, beginning in the year 2003. (b) The commissioner shall submit an annual report to the chairs and ranking minority members of the House of Representatives and senate committees with jurisdiction over public health on grants made under subdivision 7 to decrease racial and ethnic disparities in infant mortality rates. The report must provide specific information on the amount of each grant awarded to each agency or organization, the population served by each agency or organization, outcomes of the programs funded by each grant, and the amount of the appropriation retained by the commissioner for administrative and associated expenses. The commissioner shall issue a report each January 15 for the previous fiscal year beginning January 15, 2016.

Subd. 14. Supplantation of existing funds. Funds received under this section must be used to develop new programs or expand current programs that reduce health disparities. Funds must not be used to supplant current county or tribal expenditures.

Subd. 15. Promising strategies. For all grants awarded under this section, the commissioner shall consider applicants that present evidence of a promising strategy to accomplish the applicant's objective. A promising strategy shall be given the same weight as a research or evidence-based strategy based on potential value and measurable outcomes.

Appendix B: EHDI Infant Mortality 2015 Grantees Evaluation

Program	Description	Target Groups	Potential Cost Savings	Evaluation Findings ¹
American Indian Family Center (Wakanyeja Kin Wakan Pi or Our Children are Sacred Program)	A specific, comprehensive, wrap-around model for all American Indian women who are pregnant and/or parenting	American Indian community in the East Metro area including Ramsey, Washington and Dakota counties	Support from the program enabled participants to maintain their prenatal and postnatal care on a consistent basis, and this reduced the likelihood of experiencing complications during pregnancy and delivery, thereby avoiding additional medical expenses	<ul style="list-style-type: none"> ▪ Enrolled 34 women, exceeding the goal of 30 women ▪ 197 participants in nutrition and good health ▪ Conducted 26 Parenting Education classes, exceeding the goal of 24 classes ▪ Conducted 2 semesters of Early Childhood Family Education (ECFE) classes attended by adults, infants, and preschool- and school-age children ▪ Conducted 9 Mothers Circle classes ▪ 34 women received screening and assessment of needs ▪ 34 received culturally supportive care coordination and case management during and after the pregnancy ▪ 34 women in the parenting group received support and encouragement about the benefits of breastfeeding ▪ Held annual picnic ▪ 34 women participated in prenatal group education, exceeding the goal of reaching 22 women ▪ Held a Community Baby Shower for new babies in the program ▪ Added a workshop Men Make Babies Too about ways men can support and promote a healthy pregnancy for the women in their lives ▪ Funding was secured for a parent mentor program which fills a gap in current programming for women who are parenting children aged 1 to 5 years ▪ Collaborates with the Minnesota Organization on Fetal Alcohol Syndrome (MOFAS) on education and Every

				<p>Spirit Counts campaign to promote non-use of alcohol and drugs during pregnancy</p> <ul style="list-style-type: none"> ▪ Through parenting education classes, new mothers developed relationships with other new moms, and informal mentoring developed between new and more experienced moms ▪ By educating men about the impact of alcohol during pregnancy, they were motivated to provide encouragement and support to the women in their lives who were attempting to have a healthy pregnancy
Leech Lake Band of Ojibwe (Family Spirit Program)	Assists pregnant women from 28 weeks gestation into the 3rd year of the child's life by educating mothers, families and community about pregnancy, prenatal care, substance abuse before, during and after pregnancy and within a traditional Ojibwe belief system.	Leech Lake Band of Ojibwe members.	Management and supervision led to reduction of babies born with Neonatal abstinence syndrome (NAS) as indirect cost savings.	<ul style="list-style-type: none"> ▪ Conducted community outreach to meet new participants and maintain current participants. ▪ FSP Health Educators completed certification training to improve services: Community Health Worker (CHW), Community Outreach Perinatal Educator, and Ojibwe birthing and cultural practices ▪ Developing a Policies and Procedure manual containing information on home visiting in order to have consistent program implementation by all staff ▪ Ongoing networking and collaboration with other Leech Lake Band of Ojibwe programs and entities, e.g., attending Community Health Task Force meetings to reduce neonatal abstinence syndrome (NAS) ▪ Provided clients with referrals to various Tribal entities for consultation, assessments, treatment plans and counseling. ▪ New collaboration with the Beltrami County Public Health Nursing to serve other areas not reached by the program ▪ Increased trust between the program and the community.
MN Visiting Nurses	Aimed to decrease infant morbidity and	African American and Native	Addressing health care-related topics	<ul style="list-style-type: none"> ▪ Served a total of 115 women and 193 children directly through case management, support groups, and

<p>Association (MVNA)</p>	<p>mortality by improving the health status and safety of infants from birth to one year and improving the health status of women before, during, and between pregnancies.</p>	<p>American women in Minneapolis.</p>	<p>(e.g. obesity, diabetes and heart disease, unintended pregnancies, and asthma) aimed at improving the health status and safety of infants and women to reduce health care costs.</p>	<p>educational groups, and another 257 were reached indirectly through Facebook and flyers.</p> <ul style="list-style-type: none"> ▪ Conducted 20 culturally-specific group education sessions at two childcare locations in North Minneapolis ▪ Held two co-facilitated culturally-sensitive support groups for pregnant and parenting women and their partners and linked them to needed services ▪ In collaboration with MFIP, led a group on continuing education and career development at the Engagement Sites to help participants with education and career advancement ▪ Provided 16 current clients referrals to community partners for family home visiting case management and education ▪ Conducted a focus group with participants to determine culturally-specific outreach and prevention education and support services ▪ To improve recruitment and retention, reached out to community organizations, held meetings with key referring individuals, left flyers at clinics and libraries and handed them out to clients during one-on-one Family Health nursing home visits, sent referral postcards and reminders to nurses, and posted messages on Facebook ▪ All participants reported that as a result of the EHDl program, they have made or will make better decisions about their own health and their child's health, and they are more confident in their parenting abilities ▪ Program participants increased their knowledge by an average of 0.73 point on a 5-point Likert scale, and there was knowledge gain 76 of the 83 test questions
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¹Evaluation findings are for fiscal year 2016 for AIFC and Leech Lake, and for fiscal year 2015 for MVNA (MVNA was not a grantee in 2015-2016).

Appendix C: EHDI Infant Mortality 2017 Grantees Evaluation

Grantee/EHDI Program	Description	Target Groups	Potential Cost Savings	Evaluation Findings
American Indian Family Center/ Wakanyeja Kin Wakan Pi (Our Children are Sacred)	<p>WKWP is a culturally specific, comprehensive, wrap-around model for American Indian women who are pregnant and/or parenting. It provides intensive case management support and parenting education groups to participants. The current program is an expansion of a previously EHDI-funded program; it now aligns with another component of WKWP focused on preventing Fetal Alcohol Spectrum Disorder (FASD) thereby streamlining intake, screening, and communication, and improves outreach to, recruitment of, and participation by pregnant and parenting American Indian women and families as well as those</p>	<p>American Indian community in the East Metro area including Ramsey, Washington and Dakota counties</p>	<p>Cost savings come from healthy term births as opposed to preterm birth or low birth weight and developmental consequences. Cost estimates came from an Institute of Medicine study on preterm births.¹ The program had 8 healthy births during the grant period costing \$33,363 (2017 \$) in initial delivery and hospitalizations costs. Had they been all born preterm they would have cost \$324,349. Additional cost savings would also come from early intervention services, special education costs, and lost household and labor market productivity.</p>	<ul style="list-style-type: none"> ▪ 28 pregnant & parenting women were enrolled in the program (vs. target of 68% of 45 or 31) ▪ All 28 women were screened at intake ▪ All 28 women-participants attended the prenatal/parenting groups in the past year (vs. target of 75% of 45 or 34) with an average attendance of 64%. ▪ 8 healthy births in the past year ▪ 20 of 28 women or 71% enrolled in the program have developed a care plan (vs. target of 100%) ▪ Held 33 weekly Parenting Education classes for expectant and/or parenting mothers of infants under 13 months old (vs. goal of 24 classes) on topics such as safe sleep, shaken baby, 2nd/3rd hand smoke dangers, domestic violence etc. ▪ Conducted 2 sessions of 14 classes per session of culturally specific Early Childhood Education classes for parents ▪ All 28 women received information on four mandatory topics (safe sleep education, shaken baby, 2nd/3rd hand smoke dangers, and car seat safety) and home safety (vs. target of 100%) ▪ All 28 women who attended the presentations received information on

Grantee/EHDI Program	Description	Target Groups	Potential Cost Savings	Evaluation Findings
	struggling with chemical health issues.			<p>healthy nutrition resources and referrals to WIC and to the Ramsey County Public Health Nurses.</p> <ul style="list-style-type: none"> ▪ All 28 women received an infant car seat after attending the car seat safety class. ▪ Held Annual Picnic with women in the program ▪ Conducted 2 Community Baby Showers to honor and support the women who were expecting and had given birth during the year, attended by 20 moms with their children and guests ▪ Held regular monthly Mother’s Circle Parent Support Group for all mothers in the community regardless if their child was over 13 months on topics such as Talking Circle, Self-Care, Positive Indian Parenting, Healthy Minds/Bodies, etc. ▪ The wraparound model helped clients receive assistance with services they requested such as support for chemical use recovery, mental health therapy, housing and food, and domestic violence advocacy ▪ Clients received culturally appropriate supportive care coordination and case management to achieve their wellness care plan goals. ▪ Implementing cultural activities and having elders share their knowledge on traditional parenting methods and strategies in the

Grantee/EHDI Program	Description	Target Groups	Potential Cost Savings	Evaluation Findings
				<p>weekly Parenting classes and Women’s Circle groups led to an increased attendance among the women as they wanted to learn more about their culture and values (the 4 elders on staff are highly respected and recognized in the community and called upon to do ceremonies or to present at events/workshops)</p> <ul style="list-style-type: none"> ▪ The cultural crafts activities helped the women receive support from one another - they were able to share experiences and gain a sense of accomplishments as they create crafts for their children such as dreamcatchers and moccasins <p>Other outputs and outcomes being tracked for future reporting (data not yet available):</p> <ul style="list-style-type: none"> ▪ 70% of all families with newborns initiate breastfeeding and 50% breastfeed through 6 months ▪ All WKWP participants receive information on breastfeeding and are encouraged to breastfeed ▪ 70% of the women who developed a care plan achieve at least 1 goal per quarter ▪ 75% of participants in the prenatal and parenting classes improve their parenting knowledge

Grantee/EHDI Program	Description	Target Groups	Potential Cost Savings	Evaluation Findings
Leech Lake Band of Ojibwe/Family Spirit	<p>FSP provides assistance and education to pregnant women from 28 weeks gestation until the 3rd year of the child’s life. Participants receive information about pregnancy, fetal development, lifestyle issues and related concerns, as well as parental support. It collaborates with tribal, local, state and national organizations interested in advancing and promoting a healthy pregnancy outcome, a healthy child, and a healthy family. Health Educators receive high quality professional education opportunities so they can support and prepare pregnant women for childbirth and creating a healthy family.</p>	<p>Leech Lake Band of Ojibwe members at the Leech Lake Reservation encompassing Beltrami, Cass, Hubbard, and Itasca counties</p>	<p>Cost savings would come from the prevention of babies born with Neonatal Abstinence Syndrome (NAS) and infant deaths. The LLBO ranks second in Minnesota in terms of highest drug use and loss of babies before or shortly after birth. Estimates are that out of 7 pregnant women, 4 will have babies born with NAS, 1 will have an infant death before or shortly after birth, and 2 will have healthy live births.</p>	<ul style="list-style-type: none"> ▪ All women are aware of ongoing program activities (e.g., prenatal/parenting classes and Mothers Circle) ▪ Conducted community outreach events to meet new participants and maintain current participants ▪ Conducted outreach with partners on and off the LLBO reservation to gain a holistic approach to case-finding and providing services to high-risk families who may not be readily accessible ▪ FSP Health Educators successfully completed certification trainings to improve services: Community Health Worker (CHW), Community Outreach Perinatal Educator, Ojibwe Birthing and Cultural Practices (a 2-year class) <p>Other outputs and outcomes being tracked for future reporting (data not yet available):</p> <ul style="list-style-type: none"> ▪ Comprehensive screenings for child development (ASQ and ASQSE) and for maternal depression (CES-D) are conducted ▪ Policies and Procedures Manual is completed (Manual will ensure that the program is implemented consistently by all staff members, will serve as reference when questions arise about how to handle certain situations with clients, and to broaden

Grantee/EHDI Program	Description	Target Groups	Potential Cost Savings	Evaluation Findings
				<p>LLBO's evaluative capabilities by providing a consistent approach to services, data collection and analysis that will assist staff in providing culturally relevant care that retain fidelity to the FSP model)</p> <ul style="list-style-type: none"> ▪ Risk factors contributing to SIDS/SUIDS and promoting safe sleep are addressed ▪ School readiness beginning in early childhood is promoted ▪ Promotional materials, initiatives and advertising through local media outlets are promoted ▪ Attendance in outreach efforts increase ▪ High school graduation rates among participants increase ▪ Substance use from pregnancy throughout the family life cycle decreases ▪ Pregnancy outcomes through increased access to medical prenatal care improve
NorthPoint Health and Wellness Center/Healthy Families	<p>NorthPoint works with previously identified high risk pregnant women through the post-partum period up until the baby's first year of life. NorthPoint estimates that over 60 percent of pregnant women that present for care at their clinic score high in two to</p>	<p>Pregnant women and their families, mainly African American but also serve American Indian and Hispanic/Latino, in the Near Northside of Minneapolis</p>	<p>A study funded by the National Institutes of Health and published in the 2003 Journal of Obstetrics and Gynecology found that health care systems delivering prenatal care using the Centering Pregnancy model reduced the cost of prenatal care provided to each patient by</p>	<ul style="list-style-type: none"> ▪ Enrolled 74 women (vs. target of 74% of 100 or 74 women) ▪ Served 208 individuals: 74 mothers, their 74 babies, and other 60 children (siblings/other children of participating mothers) ▪ Conducted 37 parenting and education classes ▪ 54 of the 74 women or 73% attended at least one of 37 parenting and education classes (separate from individual counseling or education sessions) (vs. target of 60% of

Grantee/EHDI Program	Description	Target Groups	Potential Cost Savings	Evaluation Findings
	<p>three risk areas during prenatal assessment. A reassessment at post-partum, a period when they are at increased risk for psychosocial risk factors, determines whether the risk factors have been resolved during pregnancy, and if there are old unresolved and new risk factors that require intervention. Women participating in the program receive intensive care coordination, psychiatric diagnostic assessments, parenting education, ongoing therapy support, and connection to local resources in collaboration with community partners up until the baby's first year.</p>		<p>about \$2,000, and each preterm birth prevented saved about \$53,000 in medical expenses. Cost savings for this program will come from: (1) Management of co-existing mental health or chronic disease within the ambulatory care setting, thus keeping patients out of the hospital. (2) Policy opportunities to support the transformation of all primary care sites serving vulnerable patients to medical homes and to create financial incentives to promote and sustain them. (3) Providing an array of basic health services to patients, thus reducing cost and duplication of services, (4) utilization of NorthPoint Gap services for uninsured adults, thus avoiding serious health consequences due to lack of preventive care or delayed care, and (5) preventing child out-of-</p>	<p>the women attend at least 1 support group or class)</p> <ul style="list-style-type: none"> ▪ Provided direct health and preventative care to all 74 participants including medical, dental, and behavioral health appointments and consultation ▪ Documented 2,812 touch points or instances of care with all program participants representing 678 appointments in the clinic (medical, dental, behavioral health, social worker) and care coordination, with a participant receiving an average of 38 touch points ▪ Program staff met 11 times: the core team responsible for developing and refining operations, goals, terms for partnership, work plans, etc. met 6 times, and the other 5 meetings were evaluation or budget related ▪ Cultivated internal and external partnerships: 14 community partners and their resources were engaged, and NorthPoint's internal departments served as referral and resource partners <p>Other outputs and outcomes being tracked for future reporting (data not yet available):</p>

Grantee/EHDI Program	Description	Target Groups	Potential Cost Savings	Evaluation Findings
			home placement and associated county court and legal fees for mothers at risk of Child Protection Services involvement.	<ul style="list-style-type: none"> ▪ Number and diversity of community resources available to women before, during, and after pregnancy ▪ Number of community partners engaged in supporting the women and families served ▪ Participants' self-reported awareness of available community resources for families ▪ Participants' self-reported knowledge of healthy and safe parenting practices ▪ Participants' self-reported access to post-natal care due to extended care coordination and additional supports, parenting support, infant safety practices, and community resources

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