

**1.0 Executive Summary:** The LUNA Health Council has set out to positively impact the inequality that exists around health care by creating a comprehensive strategic plan to address the issues that exist. This plan recognizes the importance of collaboration between individuals, organizations, State, County, and City agencies that will make possible improved health outcomes for the community of Luna County.

Southern New Mexico confronts a different need of health and health care requirements compared to the rest of the State. Access to quality health care is limited by the fact that providers are unwilling to operate in communities that exhibit poor health behaviors while having little or no health insurance.

The LUNA Health Council is a community-based council that meets monthly to develop programs that lessen the impact of health inequality on the community. The council is working on several health disparities but has chosen two priorities as the primary focus of this Health Improvement Plan. Teen pregnancy and diabetes are the most prominent disparities that have shown to have many correlated health consequences on the community. Statistically the children of teen parents are more likely to have low education levels, are more likely to stay in the cycle of poverty and are more likely to have poor access to health care all while making poor health decisions due to a basic lack of health education. A rural Hispanic and elderly population that live within high levels of poverty are one of the highest risk groups to develop diabetes and other potentially fatal diseases.

**2.0 Introduction:** The Community Health Improvement Plan (CHI-Plan) was created with the intention of improving the health & well-being of Luna County. The plan provides the general direction the Health Council will be focusing on for the next four years.

**Community Description:** The southern border of Luna County lies along the US-Mexico International Border. The Village of Columbus, located at the US Port of Entry, is 3 miles from its Mexican counterpart of Puerto Palomas. The schools in Luna County enroll 5,862 students with about 400 of the students having dual citizenship - being born in the United States but residing in Mexico. The County's population fluctuates seasonally to accommodate the harvesting season. The County also has a large population of retired residents that reside in the area during the winter months; both groups have unique health care needs. The lure to come to the United States has brought many residents from the interior regions of Mexico and South America. Some of our health issues can be attributed to the mix of cultural values combined with the acculturation process. For example, in many parts of Mexico girls marry and become mothers at an early age. In Luna County this tradition of becoming mothers at an early age continues, without the societal support of marriage.

The relative lack of private insurance among the County's population places pressure on the public health system. The demand for public service over private is higher than the rest of the country due to the basic composition of the rural Southwest. With the county so close to the Mexican border, the lives of the residents in both countries are intertwined. Economic opportunity is shared with the two countries with farming and ranching still binding the two nations together by their dependence on resources. Over the years, the children of these two cultures created a bicultural and bilingual society. The related aspect of contemporary border culture can be seen in the families and the length of time their families have lived in this area. This can be seen with the local celebrations. From traditional events such as Quinceañeras to

the annual Duck Races, a mix of old time tradition and Anglo influence can be seen in most public interactions.

**Planning Process:** The Luna Health Council is a comprehensive community work group whose membership is comprised of community providers and consumers with the set purpose of developing strategies to lessen the inequality of health care and services that exist in our community. This council developed a strategic four-year plan as well as an annual work plan to help guide and focus the council's actions and activities. The Health Councils roster is approved by the County Commissioners each year to assure that membership is an accurate interpretation of the local community. The council met in regular sessions to determine and prioritize the health disparities that exist in our area as well as recognizing the capacity that the council felt it could put forth to lessen the impact of each disparity. The council used feedback from area providers as well as statistics from State, Federal and non-profit agencies to assist and guide the process. The priorities were voted on by the council with the intent purpose of developing the plan as described in this plan.

**3.0 Vision Statement:** The LUNA Health Council defines "Health" as an individual's state of wellness within their community. It is this inter-relationship of physical and mental health together with quality of life indicators that make us whole. Good health should not be a goal for living but rather the foundation for life. Health is a concept that should emphasize social and personal resources as well as physical capacities.

**3.1 A Healthy Community:** A Healthy Community is where people come together to make their community better for themselves and others. A Healthy Community creates ongoing dialogue; generates leadership everywhere; shapes its future; embraces diversity; knows itself; connects people and resources; and fosters a sense of community.

**4.0 Community Health Assessment:** Luna County is faced with multiple health issues including caring for a population that is 51% or more uninsured. Many undocumented people utilize the local hospital for medical care, with no means to pay for health services. The County has been designated a Health Professional Shortage Area as well as a Medically Underserved Area. Luna County is a Health Status Disparity Area for racial and ethnic minorities. Among the many health concerns for the county, 9.6% or 1,810 adults in Luna County have diabetes. It is estimated that the average medical cost to treat a person with diabetes in New Mexico is about \$13,243 a year. The County has one of the highest teen pregnancy rates in the state. More than 47% of Luna County children live in poverty. The County struggles with high rates of unemployment, due to the large number of agricultural employment and off seasons. Our unemployment rate during no harvest season runs 30% and higher. We have many of the associated problems that come with poverty such as a high dropout rate, a high teen pregnancy rate, a substance abuse problem in the community, and untreated chronic illnesses.

Luna County is faced with several major health issues including but not limited to, behavioral health, diabetes, teen pregnancy, substance abuse and a lack of both health care providers and personnel. Most of our problems are attributed to poverty. Luna County has high rates of generational poverty as well as a high annual unemployment rate. There are serious health & financial consequences

associated with being uninsured leaving the providers uncompensated for the treatment they provide. This limits the growth of our provider network to the point that even the insured population has difficulty getting proper medical attention. The lack of preventative health care, usually sought when the person has insurance, is ignored until minor treatable illnesses become major medical emergencies.

**Ranking of health issues or problems:**

- Luna County's population growth is attributed to immigration and retirement. Both of these groups pose an increased demand for health services.
- Luna County's proportion of people below the federal poverty level is 45 % higher than the national average; the proportion of children below the poverty level is 38 % higher than the national average; and the proportion of people below 200 % of the poverty level is 37 % higher than the national average. The proportion of uninsured non-elderly people in New Mexico is almost 70 % higher than the corresponding national figure.
- The overall education level in the County is the lowest in the State making it hard to overcome the racial, economical, and social barriers that are needed if one wants to overcoming poverty.
- Luna County has the highest rate of persons seeking indigent care for hospital treatment.
- The County has been declared a Health Professional shortage area, Medically Underserved area as well as a Health status disparity area by the Center for Disease Control.
- Over half of our residents are uninsured with 53% of our children being on Medicaid.
- Luna County has higher cancer rates, diabetes death rates, heart disease and commutable disease rates in the State of New Mexico.
- Luna County has the highest teen pregnancy rate in the State. This includes a low level of prenatal care, low birth rates as compared to the State.
- Domestic Violence and Dating Violence prevalence
- As part of our Health Professional shortage, many of our behavioral health needs are left unmet. Our residents with behavioral health issues have unmet treatment needs, and this leads to spiraling teen pregnancy, substance abuse rates, and other health problems.

**5.0 Priority Areas:** Because the Luna Health Council works with such a variety of disparities, the council has selected two priorities as our focus. We determined that teen pregnancy and diabetes contribute too many other disparities in our County. Example: Babies born to unwed teen mothers have increased risk of behavioral health issues that could lead to substance abuse. These babies statistically either become teen parents themselves or spend time in prison. As we know, teen parenthood creates a pattern of generational poverty. We will be involved in supporting programs that are dealing with other health issues, but will focus on teen pregnancy and diabetes. The LUNA Health Council will re-evaluate our progress and priorities consistently.

**5.1 Priority 01 - Teen Pregnancy** – Luna County's teen pregnancy rates rank as the highest in New Mexico. During the design of the problem analysis, The Health Council realized that the community is anxious to address this issue of teen pregnancy, but recognizes that resources are limited. In addition, despite past and existing programs, due to cultural and socioeconomic factors Luna County has not seen a significant decrease in the teen pregnancy rates. The Luna Health Council has become a

unifying entity to deal with our high teen pregnancy rates. The council is currently administering a four-year Teen Outreach Program grant at our high school and intermediate schools. The council is supporting the Deming Public Schools Administration and School Board members related to updating their curriculum to an abstinence plus model. We are building on existing programs, and looking for new and innovative ways to address our teen pregnancy problem here in Luna County.

Until recently, the national teen pregnancy rates have been decreasing. The latest data though shows that teen pregnancy is on the rise again. In Luna County, we have the highest rate in New Mexico.

**5.2 Community Impact:** Teen pregnancy has far-reaching impacts on our community. The younger the mother the least likely she is to receive adequate prenatal care which in turn can contribute to higher risk of infant mortality. The top three leading causes of infant death in New Mexico were disorders related to short gestation (preterm delivery) and low birth weight, congenital malformations, and Sudden Infant Death Syndrome. 1

First year Medicaid costs of prenatal care for teenage births are estimated at \$8,072 with a total lifetime cost exceeding \$115,000. 2

Almost seven in ten Latina teen mothers (69%) drop out of high school, and children of teen parents are more likely to live in poverty and start school at a disadvantage, continuing the cycle of poverty. 3

### **5.3 Community Impact Continued:**

The children of teen mothers are more likely to be born prematurely and at low birth weight compared to children of older mothers which raises the probability of infant death, blindness, deafness, chronic respiratory problems, mental retardation, mental illness, cerebral palsy, dyslexia, and hyperactivity. 4

The children of teen parents also suffer higher rates of abuse and neglect (twice as likely) than would occur if their mothers had delayed childbearing. 5

The sons of teen mothers are two times more likely to end up in prison than the sons of mothers aged 20-21. The daughters of young teen mothers are three times more likely to become teen mothers themselves when compared to mothers who had a child at age 20-21. 6

Children of teen mothers do worse in school than those born to older parents. They are 50 percent more likely to repeat a grade, are less likely to complete high school than the children of older mothers, and have lower performance on standardized tests. 6, 7

Decreasing the rate of teen pregnancy in Luna County would not only significantly improve the lives of both teen parents but would also improve the social and physical lives of the children.

1. NMDOH, Vital Records

2. The Economic Cost of Teenage Childbearing and Parenting in New Mexico: New Estimates. NMDH Santa Fe, NM, 2006.)

3. Manlove, J. (1998). The Risk of School-Age Pregnancy Journal of Research on Adolescence,

4. Wolfe, B., & Perozek, M. , Teen children's health and health care use, in Kids having kids: Economic and Social Costs of Teen Pregnancy, R. Maynard, Editor. 1997, The Urban Institute Press: Washington, DC.

5. Terry-Humen, E., Manlove, J., & Moore, K., *Playing catch-up: How the children of teen mothers fare.* 2005, National Campaign to Prevent Teen Pregnancy: Washington, DC.
6. Hoffman, S.D., *By the Numbers: The Public Costs of Adolescent Childbearing.* 2006, The National Campaign to Prevent Teen Pregnancy Washington, DC.
7. Haveman, R.H., Wolfe, B., & Peterson, E., *Children of early childbearers as young adults,* in *Kids having kids: Economic costs and social costs of teen pregnancy,* R. Maynard, Editor. 1997, The Urban Institute Press: Washington, DC.

**5.4 Current Action and Investment:** The LUNA Health Council is implementing a multiyear grant to provide a Teen Outreach Program at all Deming Public Schools .The TOP’s curriculum is based on the principles of positive youth development that is designed to meet the needs of adolescents during the transitional period of becoming adults. The program combines guided activities plus community service learning to promote positive youth development.

The LUNA Health Council operates a Teen Pregnancy Prevention Community Action Team (TPCAT) to develop community action plans that educate parents, youth, and community members about the consequences of teen pregnancy in our region. The TPCAT holds community workshops and gives presentations to local groups that are concerned with or are working on pregnancy prevention.

**5.5 Relationship with State Priorities:** The LUNA Health Council has partnered with the New Mexico Teen Pregnancy Coalition and the Department of Family Planning to develop community wide educational materials specific to Luna County and its border regions.

**5.6 Priority 02 Diabetes:** The diabetic rate in Luna County is conservatively estimated at thirteen percent. Diabetes, like teen pregnancy, can contribute to a high number of health problems such as heart disease, stroke, high blood pressure, blindness, amputations, and poor oral health. Poorly controlled diabetes before conception and during the first trimester of pregnancy can cause major birth defects in 5 to 10 percent of pregnancies and spontaneous abortions in 15 to 20 percent of pregnancies. Poorly controlled diabetes during the second and third trimesters of pregnancy can result in excessively large babies, posing a risk to the mother and the child. Diabetes Life – Diabetes related health indicators 2009

By addressing the contributing factors of diabetes, the LUNA Health Council could impact a broad range of health concerns in our community. The Councils Diabetes Community Action Team (DCAT) is the organizing entity among the limited services available in Luna County. Noting that the County’s diabetes resources are extremely limited, the DCAT is working to make the most of available services, resources, and labor. The need for a Certified Diabetes Educator to live and work in Luna County has been recognized. The Health Council is developing a plan to develop a “home grown” educator in the area to professionally utilize the educational resources currently available with the anticipation of obtaining additional funding that may not have been available prior to having certified educator available.

Luna County has the largest foreign-born populations of all border communities (twenty percent). This faction of the community may not qualify for Medicaid with the exception of emergency medical care. The cost of diabetic self-screening (glucometer, test strips, lancets etc.) can impact or exceed a person’s available income. This unfortunately can lead most people to stop monitoring their blood sugar altogether, greatly increasing a person’s diabetes associated health risks.

The DCAT has partnered with the NM Department of Health and the University of New Mexico to develop controlled processes to assist other rural communities in developing community based diabetes prevention strategies.

**5.6 Impact:** Diabetic complications have serious implications for our community. Luna County does not have an institutionalized broad based prevention center that assists people in making healthy decisions. Often because of access and cost factors, the poor do not have the availability or basic knowledge of obtaining and preparing fresh fruits and vegetables. They sometimes do not even have the facilities to cook in their homes. Poverty and poor diet are linked together leading to higher diabetes rates increasing the expense of community health care, these linkages contribute to a perpetual cycle of poverty.

**5.7 Current actions:** The Luna County Cooperative Extension Office is a major player in addressing the problem of diabetes. They currently are running a Keep Moving, Keep Healthy Program as well as the “Kitchen Creations” diabetes cooking class. LUNA Health Council is planning to collaborate with the Luna County Cooperative Extension Office and other community partners to implement a children’s nutrition program at various public parks during the summer. Mimbres Memorial Hospital (MMH) staff has expressed a willingness to become involved in diabetes prevention and intervention. The CEO of MMH sees that prevention and early intervention can provide a cost savings to MMH in fewer diabetes related uncompensated ER visits. Collaborative efforts with MMH are in the planning stages.

**5.8 Relationship to State Priorities:** The LUNA Health Council is partnered with the Department of Health’s Office of Health Promotion & Community Health Improvement as well as the DOH’s Diabetes Prevention & Control Program and the University of New Mexico to create and implement a community based strategic plan to lessen the impact of Diabetes in our County. The goals of this collaboration are to:

1. Make the expertise and resources of the DOH Diabetes Prevention and Control Program available to community health councils in developing, implementing, and evaluating community-wide strategies to address the problem of diabetes.
2. Work with two health councils to develop and pilot way to evaluate the outcomes of work related to diabetes, using the Community Health Improvement Logic Model as a framework or point of reference.
3. Develop a model that other DOH programs can emulate to provide technical assistance to community health councils.

The Health Council’s Diabetes Community Action Team will facilitate the core function of this collaborative by annually conducting a community assessment to gage the prevalence of diabetes among the residents of Luna County. Evidence based practices will be developed as a means of addressing the needs of the diabetic community while identifying new partnerships with local, State and national entities.

**5.9 Supplementary Priorities:** The LUNA Health Council has recognized other priorities that exist in its community that are not covered by this plan. The Council identifies and works with these priorities at

its monthly meetings. Subgroups exist within the community that focuses on these priorities with Health Council representation positioned within each group. These priorities and the actions that the council has chosen to address these issues can be found in the documentation kept on file at the Health Council Coordinators office.

Supplementary priorities are identified by the Council are listed below:

- Access to Care
- Substance Abuse
- Behavioral Health
- Cancer Awareness
- Domestic & Dating Violence
- Community Emergency Preparedness
- School Based Health

**6.0 Community Action Plan:** The CHI plan for Luna County is a community action plan to create positive change in the community's health. Good health and the quality of life can only be achieved by the when a community comes together to identify and reach common goals.

The LUNA Health Council strives to unite health providers, government officials and entities, residents, schools, faith institutions and business to create an action plan to create a better quality of life in Luna County. The Health Council is dedicated to making changes for the community charting a course towards a healthy future by identifying health issues, securing resources to address them and developing plans to take action.

Health Priority 01 - Teen Pregnancy Goal 01

Goal 01	Objectives	Resources	Outcomes
<ul style="list-style-type: none"><li>• Reduction in Luna County's Teen Pregnancy Rate</li></ul>	<ul style="list-style-type: none"><li>• Implement the TOP's in Luna County Schools for 4 Years</li><li>• Increase Funding to Implement additional Local TOP programs</li><li>• Pool local resources to Increase Prenatal Health Outcomes (over baseline)</li></ul>	<ul style="list-style-type: none"><li>• Healthy Start</li><li>• Ben Archer Health Center</li><li>• Luna County Public Health</li><li>• Deming Health Center</li><li>• Deming Public Schools</li><li>• Mimbres Memorial Hospital</li></ul>	<ul style="list-style-type: none"><li>• 200 Teens to Complete TOP's by 2013</li><li>• Have additional TOP's operating in County by 2013</li><li>• Prescreen all pregnant Teens receiving care in Luna County for Substance Abuse by 2013</li><li>• Include HC Membership on Healthy Start Consortium by 2012</li></ul>

Overview:

- The Health Council is currently operating one TOP's program in Luna County covering roughly 43 teens per year with a goal of increasing the amount of teens by either increasing funding by obtaining other grant opportunities and/or increasing capacity for the existing program.
- The prenatal substance abuse screening tool will be used to attain data to allow the Council to use evidence-based records to assess the correlation of substance abuse and teen pregnancy.
- The Health Council will collaborate with the Luna County Healthy Start program to address teen pregnancy prevention.

- Health Priority 01 - Teen Pregnancy Goal 02

Goal 02	Objectives	Resources	Outcomes
<ul style="list-style-type: none"> <li>• Increase the graduation rates of Teen Outreach Program participants</li> </ul>	<ul style="list-style-type: none"> <li>• Work with DPS and community to Build on the service-learning component of TOP's</li> <li>• Try and make TOP a offered class at DPS</li> </ul>	<ul style="list-style-type: none"> <li>• Ben Archer Health Center</li> <li>• Luna County Public Health</li> <li>• Deming Health Center</li> <li>• Deming Public Schools</li> <li>• Mimbres Memorial Hospital</li> <li>• Local Community</li> </ul>	<ul style="list-style-type: none"> <li>• Increase Graduation Rates of TOP's Participants by 95%</li> </ul>

Overview:

Service learning is a method of teaching, learning and reflecting that combines academic classroom curriculum with meaningful service to the community. Several nation studies and surveys have shown service learning programs have a direct impact on lowering school dropout rates <sup>1</sup>. The Health Council is operating with the opinion that service learning programs that combines mentoring between teen and the community may possibly lessen the overall school dropout rates in Luna County.

Health Priority - Diabetes Goal 01

## Goal 01

- Increase Diabetes Outreach & Education Programs in Luna County

### Objectives

- Raise Awareness Related to Diabetes in the Community
- Increase Youth Based Nutrition Educational Programs in the Community
- Increase Access & Awareness of local walking Venues
- Increase access to diabetes education for Community Health Workers
- Develop Healthy Meals Plan for Local Restaurants to Implement

### Resources

- Luna County NMSU Extensions Office
- Ben Archer Health Center
- Luna County Public Health
- Deming Health Center
- Deming Public Schools
- Mimbres Memorial Hospital
- Local Community
- Safe Routes to School Committee (Local)
- Luna County Government
- Mimbres Valley Learning Center
- Deming & Columbus Senior Centers

### Outcomes

\* Local Media Outlets

- Increase Community Awareness about Diabetes with Systematic News Articles in Local Newspaper / Radio in Luna County (Annually 2010-13)
- Increase Youth Nutrition knowledge by implementing Program for DPS SL Program by 2010
- Increase participation with City, County, Village, and DPS administration on implementing and organized safe walking venue program by 2013
- 40% of all local Restaurants will be including Heart Healthy Items in their Menus Monthly by 2013

