Little Colorado Medical Center Community Health Needs Assessment 2017

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Executive Summary

Introduction

Little Colorado Medical Center (LCMC) is a 25-bed critical access hospital (CAH) in Winslow, Arizona. The hospital serves the health needs of a culturally and geographically diverse patient population. LCMC is committed to increasing access to high-quality health care. LCMC prioritized the delivery of efficient and effective care to reduce costs. As a result, LCMC worked with community partners on the community health needs assessment (CHNA) to identify and strategize around critical health needs. This process allowed LCMC to respond to community priorities such as preventing or reducing drug abuse, diabetes and poor nutrition.

Overview

Table 1. Community Involvement Activities

2017 Community Involvement
161 Community Health Surveys
58 individuals reached through interviews & focus groups
10 community meetings attended

The 2017 CHNA is the second assessment since the Patient Protection and Affordable Care Act (ACA) of 2010, which required hospitals to conduct CHNAs every three years. The first LCMC community assessment in 2014 provided the foundation for the 2017 assessment. CHNA guidelines require diverse community participation to identify health priorities and develop strategic implementation plans. The assessment incorporates quantitative data supplemented with qualitative data to capture the voices and input from the community through surveys, interviews and focus groups.

The goals of the 2017 CHNA were to:
1) Identify the health needs, assets and forces of change in the primary service area
2) Engage community members through the process
3) Gauge the community's progress on addressing the 2014 CHNA priorities
4) Determine 2017 priorities and implementation strategy

Key Findings

- The most frequently mentioned health issues are alcohol and drug abuse, domestic violence, senior health issues, diabetes, obesity, asthma, Alzheimer's, and poor nutrition.
- There is a major health provider shortage in the Winslow area for both medical and mental health providers. This leads to long wait times for people seeking care. Providers who are recruited from outside the community usually only stay one or two years before moving on. It is difficult to retain health care providers who are in touch with the needs of the community.

- There are insufficient community resources to meet population needs – especially in terms of housing, shelters, drug/alcohol abuse treatment facilities, home health, child nutrition/physical activity programs, and senior services.
- Poverty and unemployment are cited as the underlying factors that make the population served by LCMC so vulnerable.
- Navajo face additional barriers to accessing health services including transportation, teamwork and communication between the Indian Health Service (IHS) and other community facilities.

Priority Solutions

- Foster better communication between health care providers and available local resources. Provider-patient communication helps to uncover a holistic picture of what is going on with a particular patient or family. If providers are more aware of available services, they can make more referrals or at least put their patients in touch with potential resources.
- Increase collaboration with local, state and national behavioral health providers and organizations to become better patient advocates and improve patient outcomes.
- Identify and plan to provide resources for seniors to reduce social isolation, assist in procuring/cooking healthy food, obtaining affordable prescriptions, getting to and from medical appointments, and educating individuals about eligibility for health insurance coverage, health providers and services.
- Increase community awareness about personal care and prevention.
- Create a nurse scholarship program to increase the number of local providers.

Community Health Needs Assessment

I. Assessment Process

CHNA guidelines require diverse community participation with the goal of identifying health priorities and developing strategic implementation plans. LCMC conducted its first CHNA in 2014, an intensive process with community advisory committee input and primary data collection. The 2014 effort informed LCMC's 2017 assessment. Primary data, key findings and community priorities are updated from 2014 to determine goals met and the areas requiring improvement and intervention in 2017-18.

The 2017 CHNA emphasized community input. Community engagement is critical to LCMC's continuing success as the area's leading health care provider. The 2017 CHNA engaged new and existing community partners and committee members through interviews, focus groups, town meetings and community coalitions. Enthusiastic participants volunteered diverse perspectives through focused input. The focus groups, town gatherings and committee meetings were well attended. Considerable effort was made to re-engage 2014 participants and recruit new community partners. Community voices included local government, police, emergency medical services, fire department, schools, volunteer organizations and social service agencies.

Primary data collection consisted of the administration of the Community Health Survey, focus groups and interviews, and a review of available public health and hospital data. See Table 2 describing the community engagement and data collection periods.

Table 2. 2017 CHNA Timetable Activity	
Windshield survey of the Winslow and Navajo communities Interviews with mental and behavioral health providers Convene mental and behavioral health focus group	March 2016
Convened Assessment Meeting 1	May 2016
Re-engaged assessment committee members and recruited new members	May-July 2016
City Council Meetings	May-July 2016
Community Health Survey distributed Focus Group and interviews Community, volunteer organizations, and IHS Engagement Winslow Coalition for Strong Families	June-July 2016
Convened Assessment Meeting 2 Community Health Survey Analyzed Focus Group and Interview Data Analyzed Community Advisory Committee Meeting	July 2016
Public Health Data Updated	January 2017
Implementation Strategy Development	April 2017
LCMC Board of Trustees Reviews & Approves CHNA	May 2017

The 2017 assessment employed a strong community participatory approach, consistent with the ACA's guiding principles. Community meetings were convened with the support of local community coalitions and community partners. These meetings reviewed the 2014 CHNA process, and progress, and provided extensive input on the methods for the 2017 CHNA. For example, meeting participants helped determine the Community Health Survey design, distribution plan and the groups and populations for focus group participation.

Community Health Survey data, interviews and focus groups results were presented and discussed at the Community Advisory Committee meeting. Participants identified priorities, discussed how or if unmet needs would be addressed in the strategic plan, identified resources needed, and recommended strategies for future interventions[1].

1. See Appendix A for Community Advisory Committee Participants & Key Findings

II. Methodology

1. Community Advisory Committee Participation and Contribution
   Input from the 2014 committee and the 2017 committee guided the assessment process. The committee has been instrumental in 1) identifying and prioritizing community health issues; 2) identifying community assets to address health issues; 3) including local, state and national policy changes that affect community health; and 4) suggesting implementation strategies. The committee provided unique points-of-view and supplemented existing data with their interpretations.

2. Community Health Survey
   The anonymous survey assessed community perceptions of quality of life, health problems in the community, community assets and demographic information. The survey was distributed in person at community events. A total of 194 individuals responded to the survey. After vetting the responses, 83% were usable, yielding 161 surveys.

3. Focus Groups
   Four focus groups, each with a specific health topic, were conducted. The four topics were: 1) mental and behavioral health; 2) senior health; 3) emergency care; and 4) adolescent health. The lead assessment investigator facilitated the focus groups. Thirty-two community members participated in he focus groups. Each session was hosted by the hospital and lasted one hour.

4. Public Health Data
   Public health data were gathered from the U.S. Census, Claritas, Arizona Department of Health Services, CDC and the University of Arizona Center for Rural Health.

5. LCMC Patient Data
   Aggregate patient data was pulled using hospital diagnosis codes. Each report was separated by year starting in 2013 and ending in 2016. Once community health priorities were identified from other data sources, data were reviewed to determine the prevalence of these health issues within LCMC's patient population. The Arizona Critical Access Hospital Bypass Report on the Little Colorado Medical Center 2011-2015 provided zip code specific information using inpatient discharge data. The bypass report data determined LCMC's service area and was analyzed to better understand the needs of patients who live in LCMC's service area.

III. Limitations

The 2017 LCMC CHNA sought to obtain diverse community participation. Efforts were made to ensure broad distribution of the Community Health Survey so that all groups in the community were represented. Despite these efforts, the majority of survey respondents were white males and did not fully represent the racial, ethnic and socio-economic diversity of Winslow, the LCMC service area and population. However, there was a sufficient sample within each community to allow for analysis by sub-groups.

Focus groups were conducted to bring about more nuanced and exhaustive discussion on community health issues from diverse perspectives. It would have been desirable to bring in more persons of Native American descent, or a more focused perspective on Native American issues. This was partially achieved via one-on-one interviews with Native American healthcare providers. There was also a push to get more participants into focus groups either by having more groups or making the groups slightly larger. Time, distance and conflicting schedules were major impediments to the process. Individual interviews helped to overcome this limitation.

Only quantitative data that had a 95% confidence interval was used in this assessment. Some specific data points had to be excluded because whole years were missing from the dataset or unreliable figures were present. Hospital level data helped to guide the assessment, but there were issues with reliability. Between the 2014 assessment and this current assessment, LCMC has used three different medical record systems. Diagnosis codes in the record systems has changed each year. ICD-10 codes and the Arizona Critical Access Hospital Bypass Report 2011-2015 were used to supplement hospital level data.

Demographic Characteristics of the Little Colorado Medical Center Service Area

The purpose of this section is to present demographic data on LCMC's primary service area (PSA). County, state and national data are also included. These comparative data sets help identify PSA changes over time. LCMC is located in Navajo County, Arizona and has nine of the 14 LCMC PSA zip codes and 56% of the population that visited LCMC facilities. Therefore, Navajo County was used for county level data comparison.

LCMC's PSA has a population of 67,755. At 7.7 people per square mile, the population density in the PSA is low. There are few towns -Winslow and Holbrook- close enough to LCMC that help to concentrate the population. The low population density stretches the resources of LCMC and other health care providers in the region. Exacerbating this issue is the fact that the population has been in decline since 2010. Overall, the PSA has lost two percent of its total population over a 6-year period.

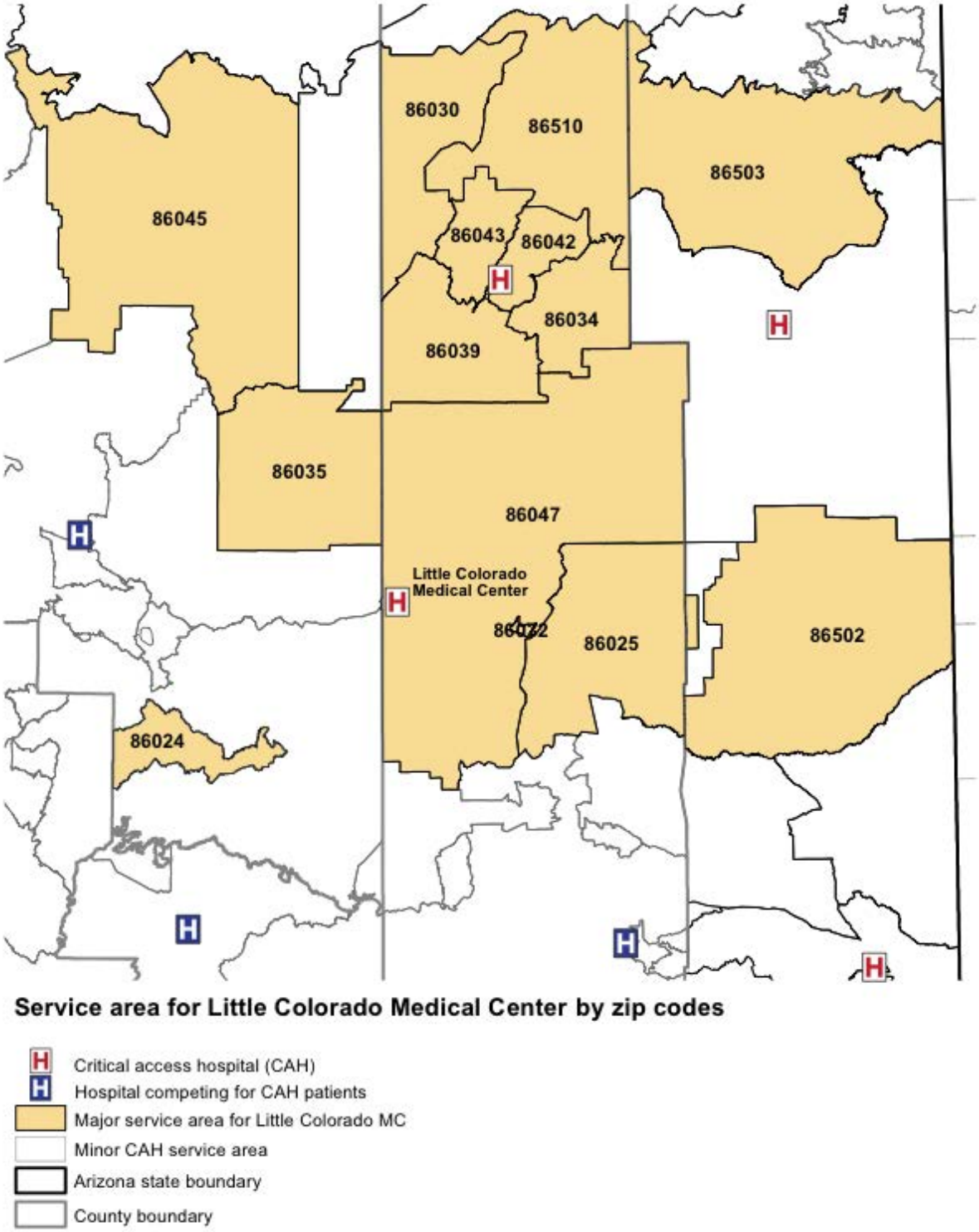
I. Service Area

Using hospital discharge data, 90% of LCMC's patients come from an area comprising of three counties, 14 zip codes and 8,743 square miles of land surface area (see yellow highlighted region in Exhibit 1 for LCMC's primary service area). LCMC is responsible for providing health care in a region that is the size of New Jersey (8,729 mi^2). This places extreme stress on the local health system as measured by delays for routine primary care appointments, long emergency response times, long driving distances to health care providers and services, and barriers to appropriate follow-up care after LCMC hospitalization or ED visits.

LCMC is in the rural town of Winslow, Arizona. Winslow is in Navajo County, but the town is close enough to the county border that patients from Coconino County will utilize LCMC's services. One zip code in Apache County rounds out the three-county LCMC service area. The surrounding geographic region, makes up the secondary service area.

Interstate 40 runs east and west along the northern edge of Winslow. The interstate draws patients to LCMC from the general geographic vicinity and also those traveling across Arizona. The highway is the tertiary LCMC service region.

Exhibit 1: Little Colorado Medical Center Primary and Secondary Service Area Map



Source: Arizona Critical Access Hospital Bypass Report 2011-2015

II. Age Distribution[2]

At a median age of 32 years, the age distribution within the LCMC PSA skews younger than either the county (35 years) or state (36 years). Part of this is due to higher American Indian and Hispanic birth rates in the region. Younger populations have different health needs than their older counterparts. Unintentional injury is the leading cause of death in those 44 years and younger. Alcohol abuse and poor nutrition contribute to a higher chronic disease rate –specifically liver disease and diabetes–disproportionately affecting the young in the LCMC PSA.

Since 2010 the LCMC PSA and the county have been trending older, which means higher use of medical services due to higher rates of chronic disease and co-morbidities. If proactive measures are not taken, the rising demand from an aging population may overwhelm the system's supply and ability to provide needed health services. In response to the changing demographics, demand for health services, and voiced community concerns, LCMC prioritizes senior health.

There is a 50/50 split of males and females in the LCMC PSA. In terms of age distribution, two noticeable trends are present. There are more males represented at younger ages, and females live longer than males[3]. To better serve the health needs LCMC's PSA population, demographic and other data obtained in the 2017 LCMC CHNA can be used to inform strategic planning and implementation.

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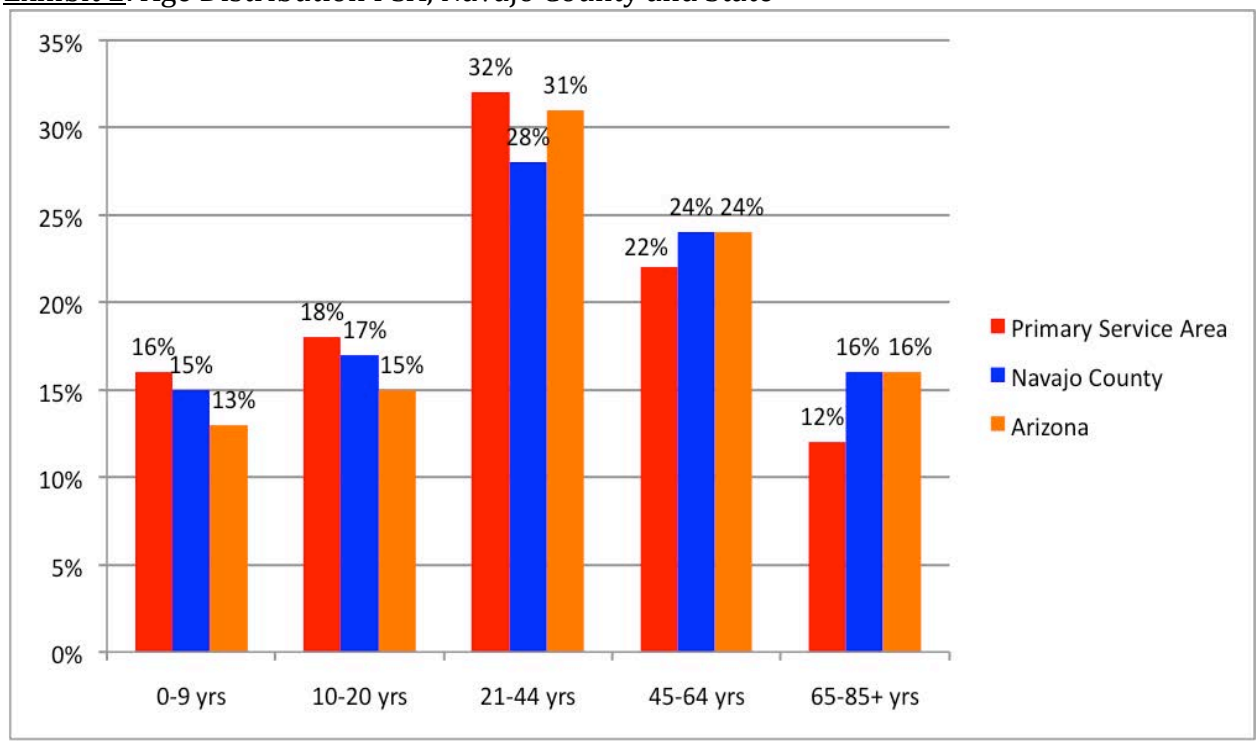
2 See Exhibit 2 for age distribution graph.

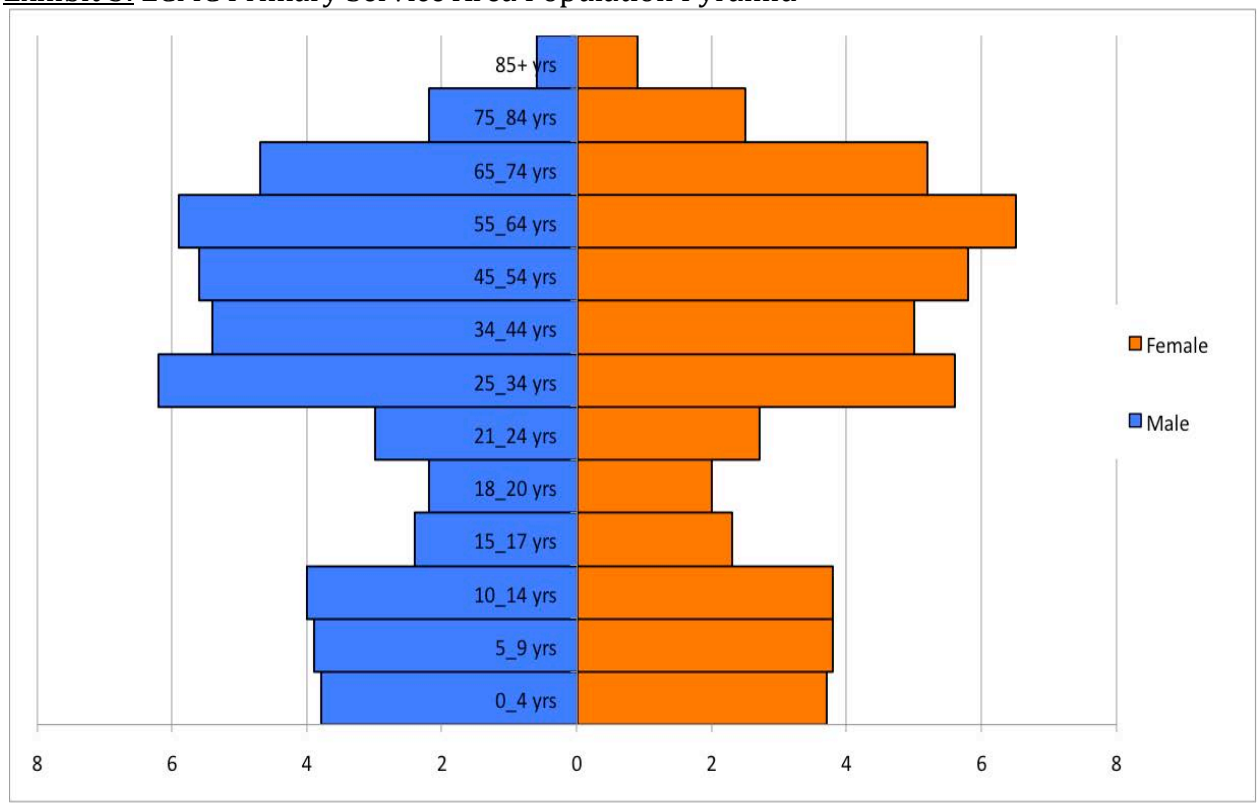
3 See Exhibit 3 for age pyramid

Exhibit 2: Age Distribution PSA, Navajo County and State



Source: Claritas, 2016

Exhibit 3: LCMC Primary Service Area Population Pyramid



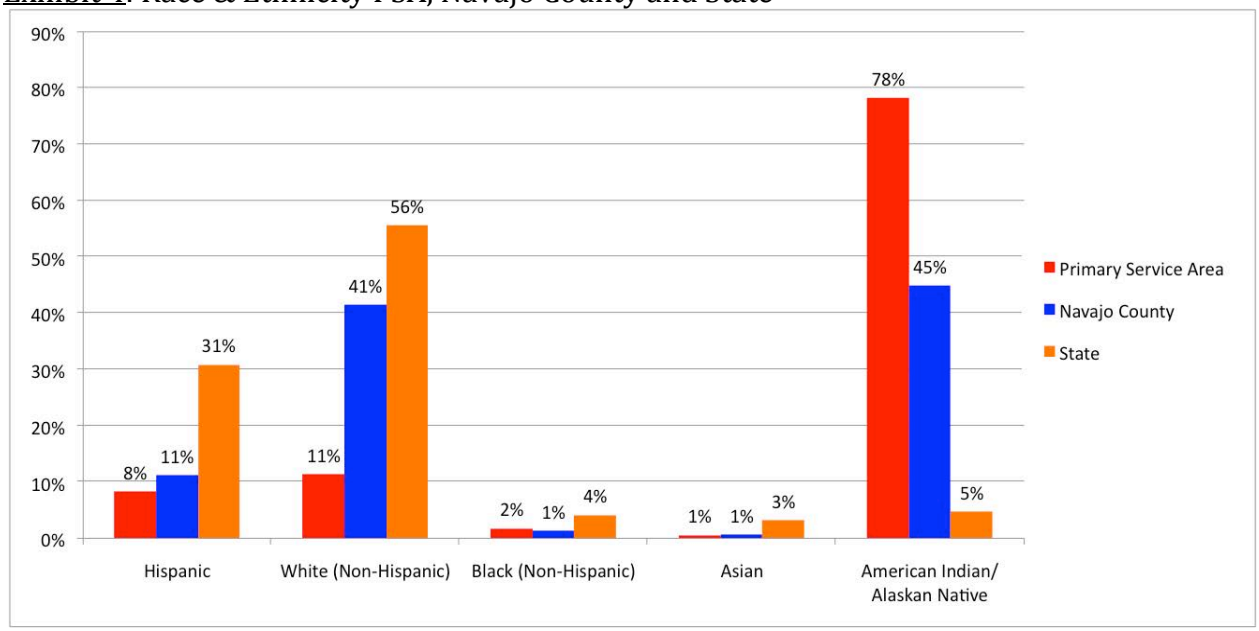
Source: Claritas, 2016

III. Race & Ethnicity

The largest groups represented at the PSA and county level are American Indians (see Exhibit 4 below). The Hopi and Navajo Nation Indian reservations are located in the LCMC PSA. Two-thirds of Navajo County's land area is federally designated Indian reservation. Outside of delivering effective and high quality health care, LCMC is also responsible for delivering culturally and linguistically appropriate services (CLAS). Building on-going relationships with American Indian communities is paramount to successful care delivery. LCMC's social services staff has built a strong relationship with Winslow Indian Health Care Center (WIHCC). This bridge helps to reduce delays in care, connect persons with culturally appropriate care and assist in developing a continuum of care plan.

Thirty-nine percent of Navajo County citizens over the age of 18 speak a language other than English. Thirty-four percent of the population speaks an American Indian language. One-quarter of American Indians are estimated to not speak English well. LCMC employs CNAs who are able to translate in Spanish, Navajo or Hopi. Video interpretation machines are available to patients as well.

Exhibit 4: Race & Ethnicity PSA, Navajo County and State

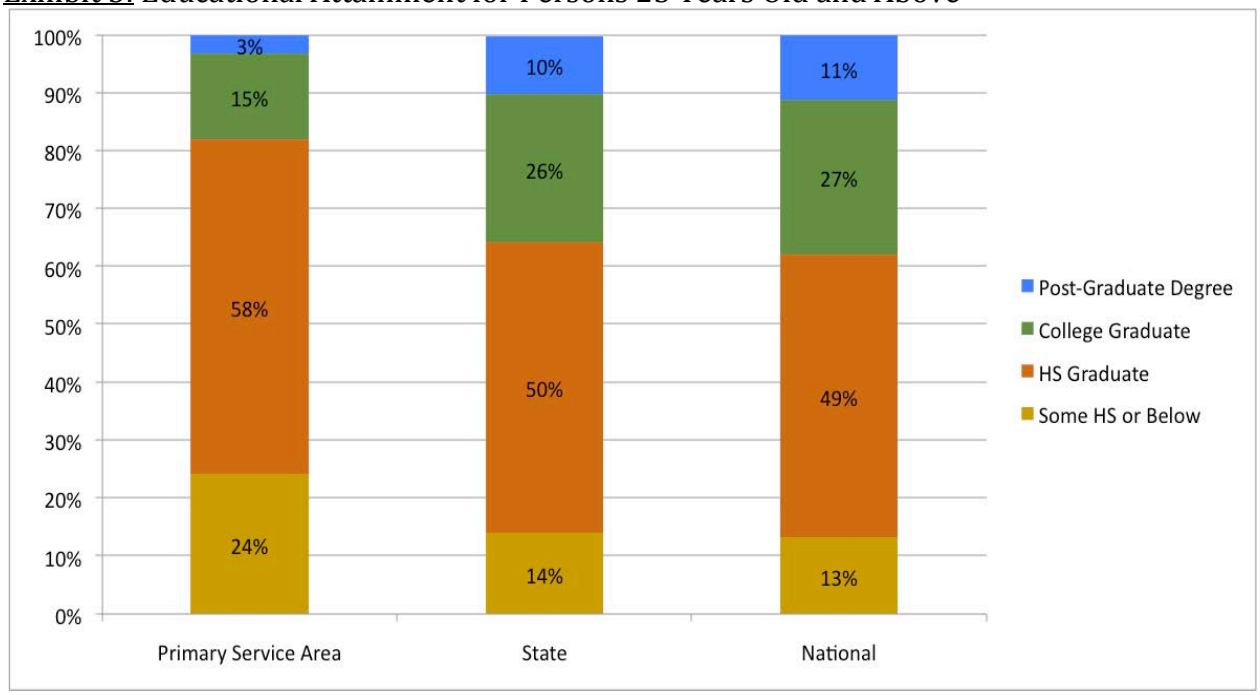


Source: Claritas, 2016

IV: Education

This indicator is relevant because low levels of education are often linked to poverty and poor health. Higher education attainment is correlated with better health outcomes, lower mortality rates and post-secondary education levels[4]. Below are the educational levels for the PSA, Arizona and the United States.

Exhibit 5: Educational Attainment for Persons 25 Years Old and Above



Source: PSA and State data, Claritas, 2016. National data, U.S. Census Bureau, American Community Survey, 2015

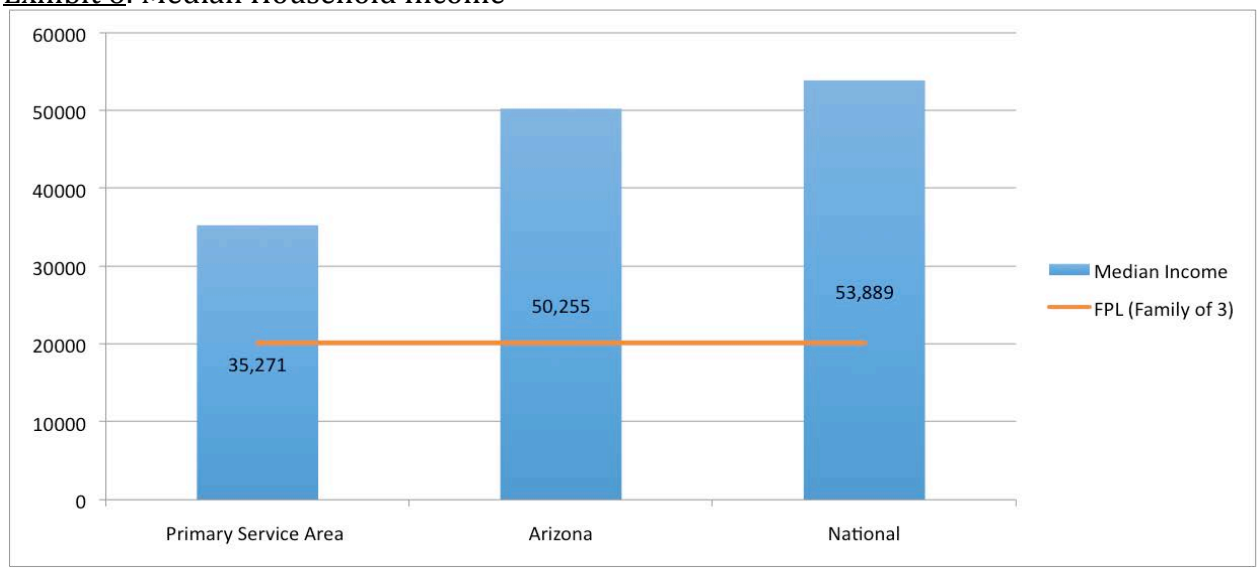
A higher level of education achievement is correlated with improved health literacy. Health literacy informs the patient's navigation of the health care system and comprehension of health care information, which both lead to better health outcomes[4]. In LCMC's PSA, lower-than-average education attainment means health promoters, health marketers and other health care providers must work to put complex health care instructions into user-friendly terms. The hospital made health pamphlets readily available to help patients understand, plan and manage their care. LCMC's social services department became an impromptu hotline for patients requesting assistance on what area services are available to them. Some area agencies help people enroll into federal, state and tribal health benefit plans. Further development of CLAS health translations is needed. The implementation of telemedicine in the area could expand health promotion and education services.

4. Zimmerman, Emily B., Woolf, Steven H. and Haley, Amber. (September 2015). Understanding the Relationship Between Education and Health: A Review of the Evidence and an Examination of Community Perspectives. *Population Health: Behavioral and Social Science Insights*. Retrieved from https://www.ahrq.gov/professionals/education/curriculum-tools/population-health/zimmerman.html.

V. Income & Poverty

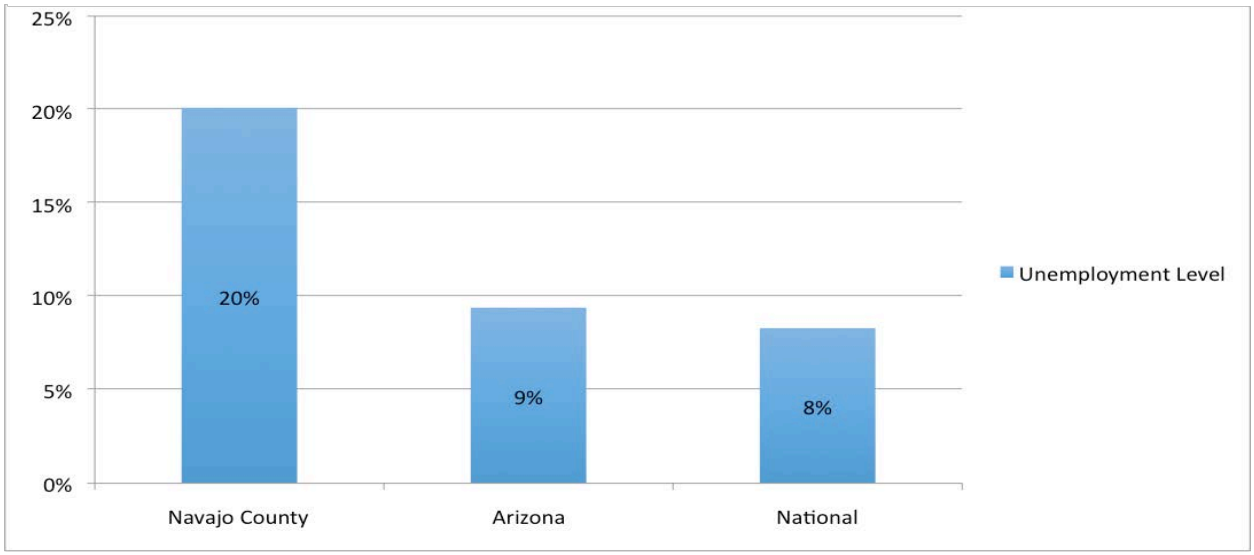
These indicators are relevant because poverty creates barriers to access including health services, healthy foods, and other necessities that contribute to poor health status. Thirty-eight percent of families in the PSA live below the federal poverty level. Below are graphs showing PSA, Arizona and United States median income and unemployment rates.

Exhibit 6: Median Household Income



Source: Claritas, 2016. National data, U.S. Census Bureau, American Community Survey, 2015

Exhibit 7: Percentage Unemployed in Navajo County, Arizona and National



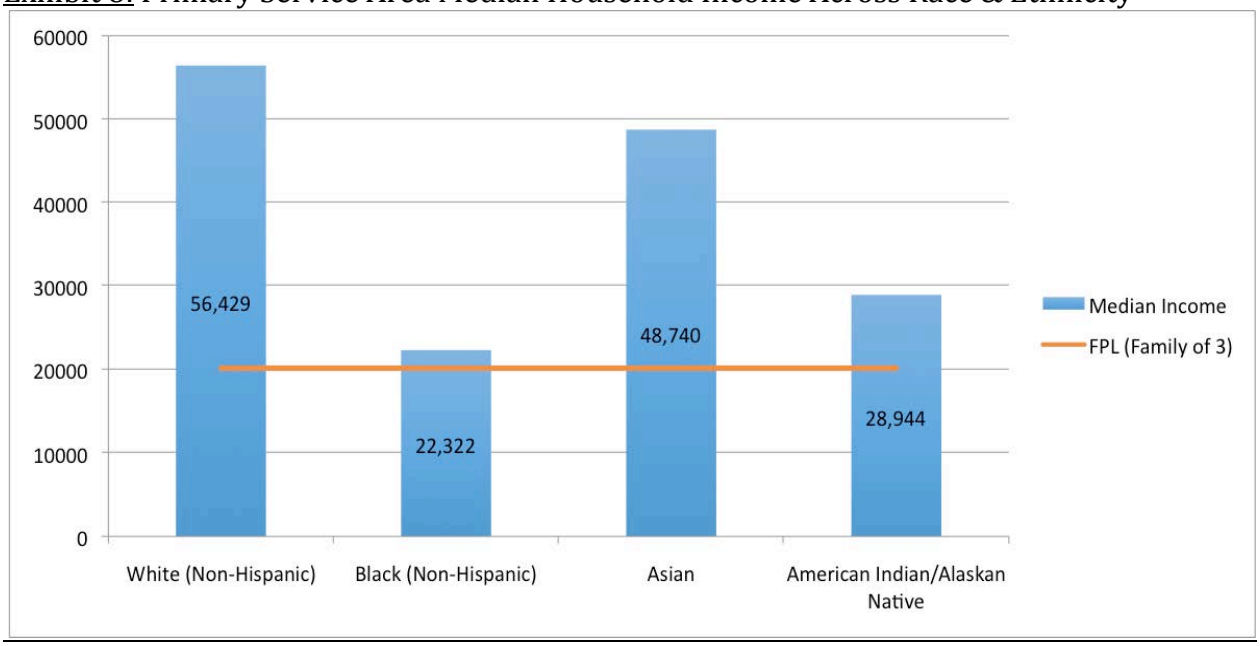
Source: Claritas, 2016. National data, U.S. Census Bureau, American Community Survey, 2015

Navajo County's unemployment rate is twice the national average. Unemployment contributes to unstable social conditions and poor health outcomes. The effects of poverty are exacerbated by the region's rural location. Travel costs are higher for those living on reservations in Arizona's rural and frontier lands. This drives up consumer prices for everyday goods like food. Federal or state assistance from programs like Supplemental Nutrition Assistance Program (SNAP) may reduce hunger, but do not always lead to healthier eating. Fresh items tend to be more expensive, less available and have shorter shelf lives. The Winslow Council on Aging (WCA) provides food bank donations to area families.

Housing and passenger vehicles are essential items that come with large price tags. Chronic housing shortages have driven up area prices. Qualified families are able to rent using vouchers, but available units are scarce. Some transportation services are available, but limited. Non-emergent transportation services are available on the reservations for tribal members only. The WCA has non-emergent transportation available upon request.

Poverty rates are not equally distributed across all racial and ethnic groups. Below are median incomes for different racial and ethnic groups in the PSA.

Exhibit 8: Primary Service Area Median Household Income Across Race & Ethnicity



Source: Claritas, 2016

American Indians, especially those on the reservation, have less access to economic opportunity than their white counterparts. More American Indians work in seasonal or incidental work than other racial or ethnic groups. This makes them particularly vulnerable to economic uncertainty. High rates of poverty lead to social disruption and poor health outcomes.

VI. The Uninsured

Poverty affects health insurance coverage. Navajo County has an 18 percent uninsured rate, which is twice the national average[5]. Uninsured persons are less likely to use preventive care, seek follow-up care, or delay seeking care. People who delay their health care enter the system when they are sicker. These more complicated cases drive up the time and cost of health care delivery in the emergency department. Benefit outreach is a continuous effort taken on by the community. Health promoters use LCMC's emergency room as a convenient place to determine coverage eligibility and help the uninsured enroll in Medicaid, Marketplace or other coverage options.

5. Cohen, Robin A., Martinez, Michael E., Zammitti, Emily P. (September 2016). Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, January-March 2016. *National Health Interview Survey Early Release Program*. Retrieved from https://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201609.pdf.

Community Health Priorities

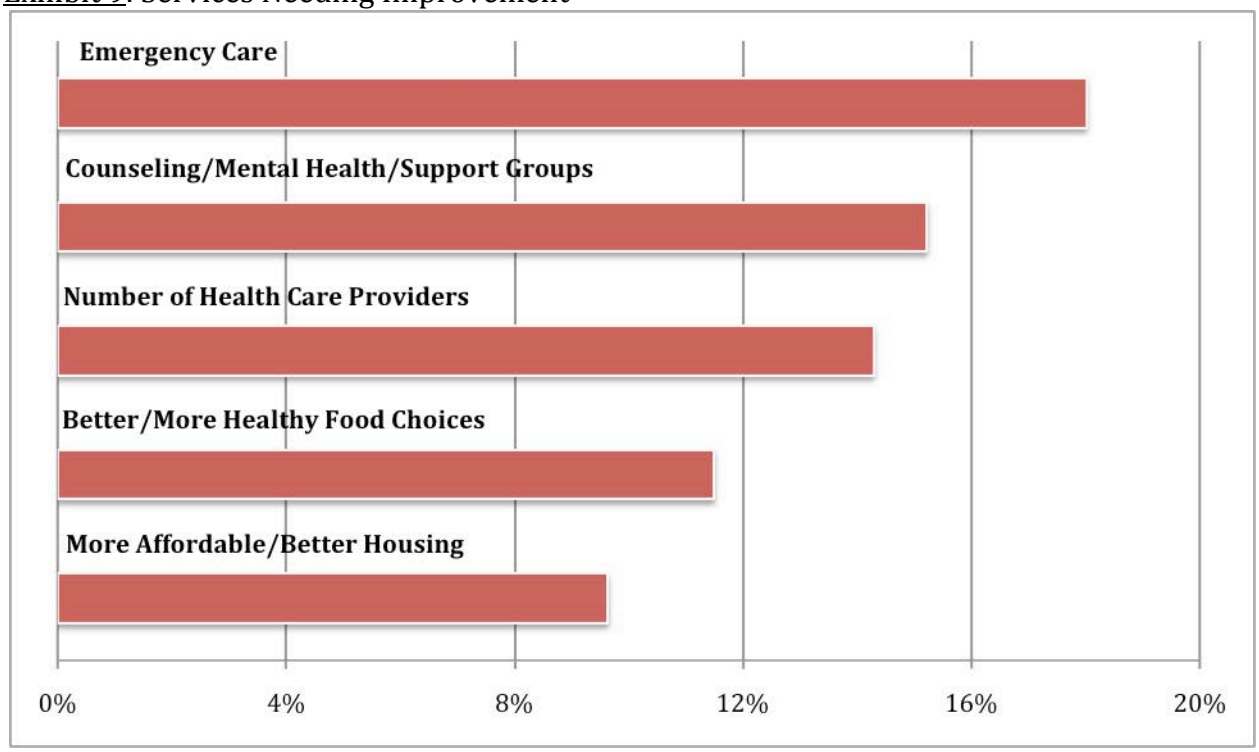
I. Characteristics of a Healthy Community

Primary Data Sources: Community Health Survey, Focus Groups, Interviews, Community Advisory Committee

Similar to the findings in the 2014 assessment, residents identified well-paying jobs, affordable housing, access to health care and community support for vulnerable populations as top characteristics that make a healthy community. Residents contributing to the 2017 assessment expanded this list to include access to healthy foods, more health specialists, transportation, and recreation options and affordable childcare. These social determinants were factors identified as contributing to a stressful community environment. Community stakeholders have a vision for the future that shapes their goals. Many spoke about continued efforts to remove urban blight to attract jobs and new residents. Recent increases in park space and the rehabilitation of the local movie theater provide positive environments for local youth. Residents identified LCMC as an indispensable partner going forward.

Exhibit 9 illustrates responses to the Community Health Survey on what LCMC services require improvement.

Exhibit 9: Services Needing Improvement



N = 161
Source: Community Health Survey, 2016

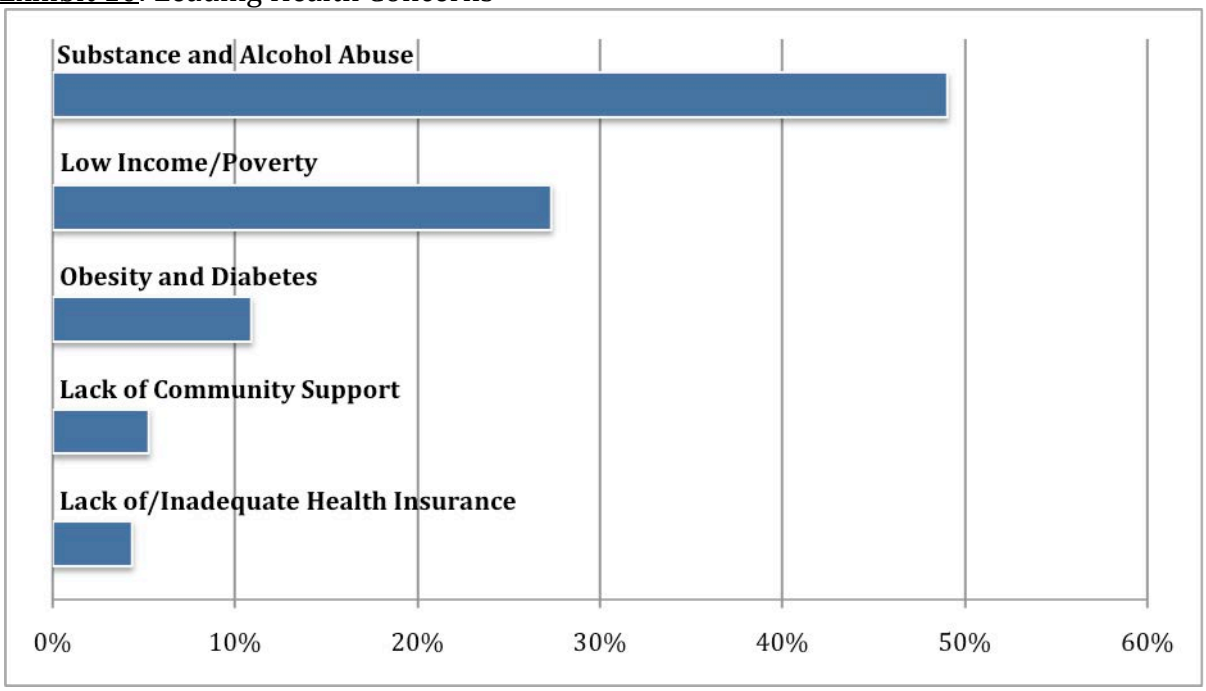
II. Criteria for Identifying Community Priorities

Primary and updated secondary data were used to determine progress from the 2014 assessment and identify emerging unaddressed health needs.

Priorities were based on 1) community need; 2) potential for impact; 3) community interest, will and readiness; and 4) resources.

III. Community Defined Priorities

Exhibit 10: Leading Health Concerns



N= 161
Source: Community Health Survey, 2016

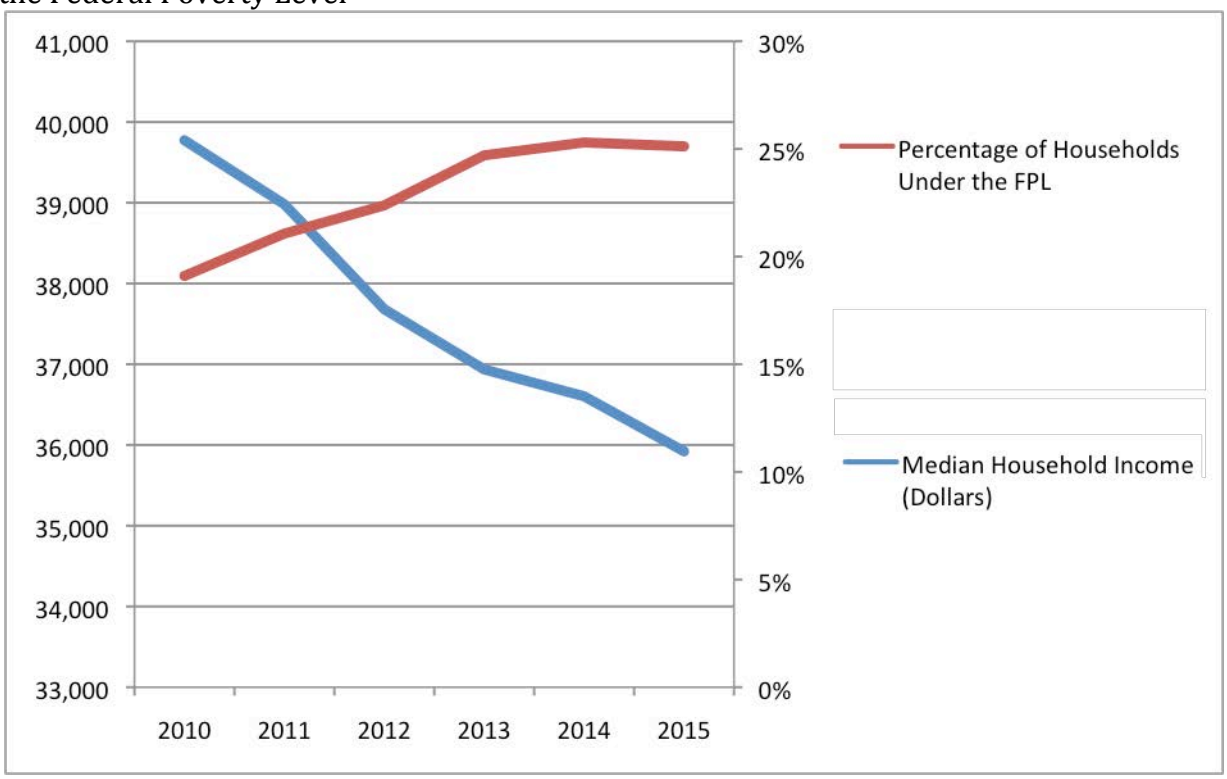
The 2017 Community Health Survey had 49 percent of respondents identifying substance and alcohol abuse as the top issue of concern. Twenty-seven percent of respondents identified low income and poverty as the second most important issue of concern (it ranked fifth in 2014). Obesity and diabetes round out the survey, accounting for just over 10 percent of respondents. Obesity, diabetes, and provider shortages appear on the list of highest community priorities in 2017 where they were previously absent in the 2014 assessment.

Mental and senior health remain high priorities for the community. Mental health is interconnected with the other health issues and priorities discussed in this assessment. A major social determinant of health felt by every member of the community is economic insecurity. Four percent of respondents listed homelessness as a health concern. Other social determinants of health such as housing, transportation and food insecurity inform much of the discussion below. The mentally ill and seniors are particularly vulnerable populations.

A. Low Income and Poverty

The above section "Demographic Characteristics of the Little Colorado Medical Center Service Area" provides a general overview of the income and poverty levels in the PSA. Exhibit 11 shows a six-year trend in income and federal poverty levels in Navajo county.

Exhibit 11: Navajo County Median Household Income and Percentage of Households under the Federal Poverty Level



Source: U.S. Census Bureau, American Community Survey, 2010-2015.

Over a sex-year period, Navajo County experienced lower incomes and increasing poverty. Low income and poverty are the top priorities and sources of anxiety and stress for community members. According to behavioral health professionals and social workers interviewed for this assessment, this stress leads to adverse social behaviors and poor health outcomes.

Domestic violence is one of the adverse social behaviors discussed in interviews and focus groups. LCMC's emergency department handles the medical needs of domestic violence victims. LCMC's social services connect victims with local and state resources to prevent further abuse. Shelter space for victims of domestic violence is extremely limited in LCMC's PSA such that victims must access services outside of the immediate service area. It is an imperfect solution to a complicated problem.

LCMC's PSA lacks affordable childcare options. Parents are hindered from seeking new jobs when daycare options are not available. Retaining consistent work hours is difficult when parents rely on other community members as a primary childcare option. Children growing up in poverty have worse education attainment, diminished future income, and poor health outcomes. These factors contribute to a growing cycle of poverty.

Depressed incomes discourage housing developers, and contribute to a growing housing crisis. The City of Winslow is pushing to build new rental units. There is not enough subsidized housing to meet demand for those that qualify. The long waitlist for housing exposes the most vulnerable residents. Four percent of Community Health Survey respondents cited homelessness as their number one concern. The homeless suffer from a number of behavioral and physical health issues. The service area does not have a local shelter to house the homeless population. Rendering emergency care is the main interaction LCMC has with the homeless population. This makes LCMC an ad hoc shelter.

Poverty is an underlying cause of other issues discussed in greater detail below, including: substance abuse, alcohol abuse, obesity and diabetes.

B. Mental and Behavioral Health

Over 15% of Community Health Survey respondents listed counseling and mental health support as a service area that requires the most improvement. Those interviewed for this assessment and those participating in the mental and behavioral health focus group agree that behavioral and mental health issues are a driver of low income and poverty and a co-factor in many of the health priorities discussed in this assessment. These patients are more likely to suffer from co-morbidities, which make it more difficult to satisfy their health care needs. Nationally, people with mental and behavioral health issues live a decade less than the population as a whole[6].

Social stigma prevents patients from seeking help. Families and peer groups are often ill equipped emotionally and financially to provide support for behavioral health patients. Caring for this population falls on LCMC and local agencies with limited funds and personnel. For many behavioral health patients, their primary entry point into the medical system is through LCMC's emergency department. LCMC's social services department connects mental and behavioral health patients with the appropriate agency or provider. Frustrating LCMC and other area providers is the cyclical nature of caring for this patient population. Providers describe a sense of fatigue as they see patients enter and re-enter the system with little positive progress made in their condition.

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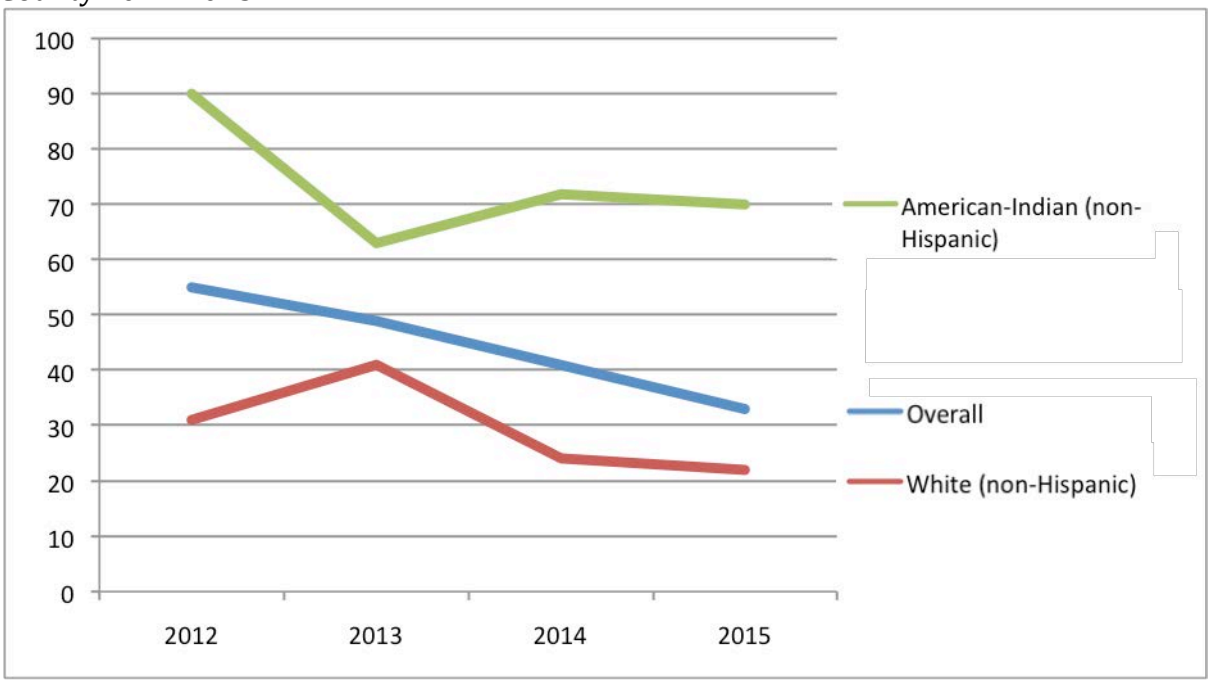
6. Insel, Thomas. (2015) Post by Former NIMH Director Thomas Insel: Mortality and Mental Health. Retrieved from: https://www.nimh.nih.gov/about/directors/thomas-insel/blog/2015/mortality-and-mental-disorders.shtml.

Exhibit 12 shows mental and behavioral health related mortalities in Navajo county. Since 2012, the overall mortality rate has declined, but significant health disparities exist between American Indian and white communities.

Exhibit 12: Age-Adjusted Mental & Behavioral Induced Mortality Rate per 100,000, Navajo County 2012-2015



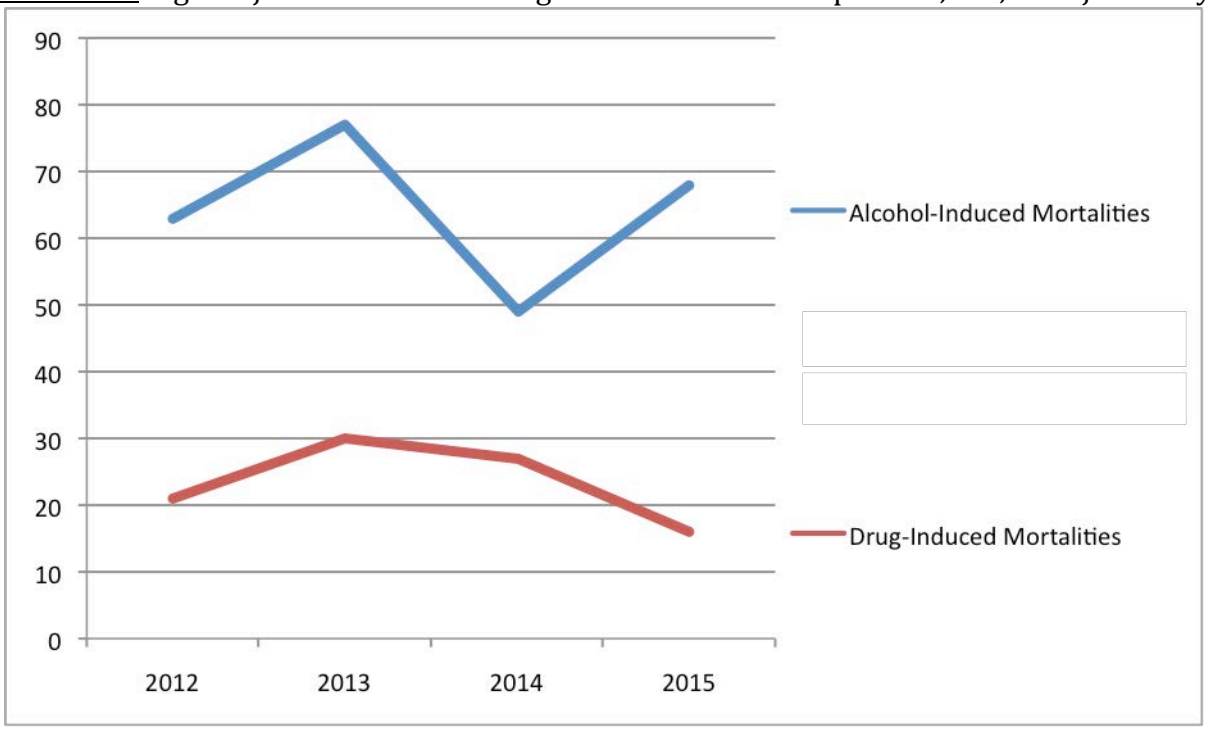
Source: CDC Wonder ICD-10 codes, 2012-2015

C. Drug and Alcohol Abuse

Forty-nine percent of respondents in the Community Health Survey identified alcohol or substance abuse as a leading health concern. EMR records from LCMC indicate high rates of admittance for both alcohol and drug related medical emergencies. In recent years, Arizona's policymakers have empowered the state public health system in an ongoing battle against opioid abuse. These policies reduced opioid mortality (see Exhibit 13) in Arizona and in Navajo County. Heroin contributes to drug-related medical emergencies in LCMC's PSA; and methamphetamine remains an intractable foe according to assessment participants.

Alcohol-related emergencies and deaths far exceed all other drug-related emergencies and deaths over the same time period. Where there have been positive gains in reducing drug-related incidents, alcohol-related incidents have been on the rise since their nadir in 2014 (see Exhibit 13). Economic insecurity, lack of housing and poor community support contribute to higher rates of alcohol and drug abuse.

Exhibit 13: Age-Adjusted Alcohol & Drug Induced Mortalities per 100,000, Navajo County



Source: CDC Wonder ICD-10 codes, 2012-2015

Drugs and alcohol abuse contribute to chronic liver, lung, kidney and heart disease. Abuse of this nature also contributes to acute medical episodes such as motor vehicle accidents. LCMC is situated near Interstate I-40 and State Routes 87 and 99. Those driving in the PSA must travel far to reach their destination. Since the reservations ban the sale of alcohol, people drive to Winslow to purchase liquor. This creates dangerous driving conditions on the roadways as intoxicated people are driving long-distances, increasing the likelihood of an incident.

Those under the influence of alcohol, drugs and other substances can make health care delivery dangerous. First responders and LCMC staff remarked on situations where their lives were threatened by patients under the influence of such substances. With limited bed-space in the hospital, managing crowded lobbies with highly volatile, impaired patients has been an area of concern for hospital staff and community members.

Community members note that substance abusers have been getting younger in recent years. One concern is that the chronic diseases usually seen in older patients are starting to be seen in younger patients. The collateral effects of this trend are many. Young people suffering from chronic disease will have to live with a reduced quality of life over a longer period of time. The economic opportunities for people with disabilities are diminished. The earlier a person is diagnosed with a chronic disease the higher their lifetime medical costs. In aggregate these medical costs drive up the costs for the entire medical system.

D. Senior Health Care

Senior care continues to be a major public health initiative in the LCMC PSA. In 2016, LCMC added an estimated ten thousand seniors into its health system. Many seniors in the PSA are socially isolated. In such a large geographic region it can be a challenge to push services to these isolated patients. Some seniors ignore or delay care for serious physical and mental health issues. Loss of mobility contributes to acute and chronic medical episodes. Emergency responders find that they are often called to a home of a fall victim. Those suffering from mobility issues descend into a vicious cycle where they experience a physical trauma, require rehabilitation but are isolated from the clinic and then suffer another physical trauma.

Mental health is major issue as well. Cognitive decline and ignorance of its symptoms places seniors at risk of further harm. Serious medical episodes have resulted from seniors mismanaging their medications due to memory issues.

Funding is a major barrier in health care delivery in rural and frontier areas. Funding shortages limit provider ability to reach seniors. Seniors experience financial restraints limiting their access to care. Many seniors rely on family caretakers. Family caretakers experience high levels of stress that can lead to burnout or abuse.

Nutrition options are limited due to personal finances. Local agencies deliver food to seniors through programs like Meals on Wheels. Donations from local businesses to area religious and non-profit organizations serve as stopgaps in fighting hunger. Free or reduced price meals round out the services available to seniors requiring assistance.

E. Obesity and Diabetes

Community Health Survey respondents marked obesity and diabetes as their top concern amongst chronic conditions. These conditions decrease life expectancy and drive up personal medical costs. From 2010 to 2013 the prevalence of obesity has remained relatively stable at 32 to 31 percent respectively[7]. Incidence of diabetes has decreased from 12.5 per 1000 in 2011 to 10.6 per 1000 in 2013[8].

Economic inequality is a driver of obesity and diabetes. Limited budgets drive demand for longer lasting canned, processed and "junk" foods. Particularly vulnerable are children in the service area. During the academic year school-aged children have access to their school's lunch program; but during evenings, over the weekends and during school breaks nutrition can suffer. Over the summer, Winslow's Unified School District provides lunch to qualifying students, covering some of the nutrition gap.

Rural environmental and structural factors contribute more to sedentary lifestyle than an active one. Many roads are not conducive to safe cycling or running. The lone gym in Winslow costs $45-a-month, which is a steep price for residents on a fixed or low income. There are park spaces for physical activities in Winslow, but their usefulness decreases during the cold winter months.

Out on the reservations, the options for healthy foods and structured physical activity become fewer or non-existent. The federal Special Supplemental Nutrition Program for Women Infants, and Children (WIC) provides grants to states for food, health referrals, and nutrition education for low-income pregnant, breastfeeding and non-breastfeeding post partum women and to infants and children to age five at nutritional risk. The Winslow Indian Health Care Center (WIHCC) is a Tribal 638 program along I-40 in Winslow. WIHCC administrates nutrition programs, which serve isolated communities on the reservation.

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7. Centers for Disease Control. (2017). Arizona Obesity Prevalence (Data file). Retrieved from https://www.cdc.gov/diabetes/data/countydata/countydataindicators.html.

8. Centers for Disease Control. (2017). Diagnosed Diabetes Incidence (Data file). Retrieved from https://www.cdc.gov/diabetes/data/countydata/countydataindicators.html.

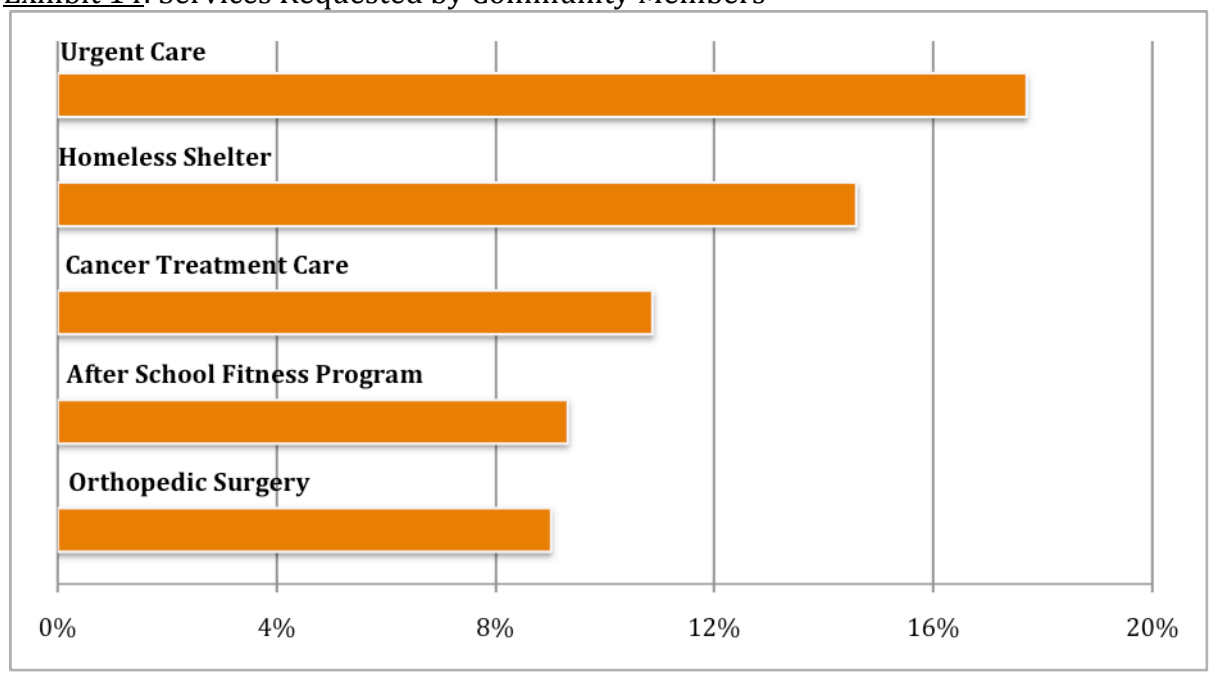
F. Provider Shortage

LCMC, like other rural providers, has difficulty recruiting and retaining mid and upper-level providers. Even when recruitment is successful, long-term retention is low. One of LCMC's long-term clinicians recently retired, exacerbating the provider shortage. When LCMC loses a key provider, patients seek services where they can find them. This increases the workload on the remaining providers, increases their stress, which can lead to burnout and subsequent departure from the community, reduction in work hours, or retirement. Higher workloads on individual providers means less access to care for individual patients and longer wait times for routine, urgent and emergency services. Delay in care was a major complaint in the community. For patients who could afford it, they bypassed LCMC in favor of Flagstaff Medical Center. Patients unable to access timely primary and preventive care may turn to the emergency department, or delay necessary care to the point of requiring preventable hospital admissions or emergency department visits.

Discontinuity in staffing also leads to inconsistent care. A physician or nurse who knows the patient and his or her history is a better manager of patient care than someone who is new to the situation. Patients complained of having to develop new relationships with new providers, which is a hurdle in the intimate setting of medicine.

LCMC collaborates with community partners in their ongoing mission to deliver comprehensive healthcare in the community. However, participants in this assessment acknowledge that there are gaps in care and unmet health needs. Below is a chart summarizing the services that were requested the most by those surveyed in the community. Urgent care leads amongst all services listed in the survey.

Exhibit 14: Services Requested by Community Members



N= 161
Source: Community Health Survey, 2016

Conclusion

LCMC's 2017 Community Health Needs Assessment (CHNA) identifies ongoing, pressing and unmet health needs, data that can guide and inform a concerted strategic planning and implementation plan through 2020. Since LCMC's 2014 assessment, some issues improved, yet some parameters grew worse.

Positive progress includes lower incidence of diabetes and drug-induced mortality. The City of Winslow emphasizes revitalization of its downtown area, creating parks to promote physical activity, removing blight, and pushing economic investment. Local agencies are partnering or increasing services to address unmet community needs identified in 2014.

Poverty contributes to the community's higher or stagnant rates of alcohol related deaths, domestic violence, and obesity. The community struggles to recruit and retain enough health providers, at a time when its aging population increases health service demand.

There is a pressing need for primary and preventive care. Utilization of LCMC's emergency department (ED) is inappropriately high. Health workforce shortages and ready access to community based health services serving the enormous geographic region isolates individuals and small communities from the health facilities, services and providers they need. LCMC grapples with strategies to increase access to healthcare, reduce the inefficient and costly hospital and ED services for medical problems better managed at home, and assure a sufficient number of well-trained and distributed primary care providers.

Much work remains for the Winslow community, the LCMC service area and population. This is a rich opportunity for any public health practitioners wishing to make a difference. Administrators, local providers, stakeholders, and community members are committed to designing and implementing new public health services and outreach programs. Informing the public about healthcare is a key takeaway from conversations with practitioners. The Winslow Unified School System is open to direct engagement with students on healthy lifestyle choices. Positive professional engagement helps students identify worthwhile health professional career paths. Area healthcare providers want to develop and maintain coalitions that increase local collaboration, and inform the public about key public health issues. LCMC is always looking for new ways to engage with the public.

Appendix

Community Advisory Committee

Members

	William Macdonald, UA Graduate Student wmacdonald@email.arizona.edu	Darcey McKee, Navajo County Public Health, Program Manager darcey.mckee@navajocountyaz.gov
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	Dr. Greg Hackler, Hackler Chiropractic Center, Private Practitioner, D.C. chirogreg1979@yahoo.com	Randall Rath, Winslow Council on Aging, President mrgrodey@gmail.com
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	Berry Larson, AZ Dept. of Corrections, Warden blarson@azcorrections.gov	Kimberly Yazzie, WIHCC, Health Promotion Disease Prevention Manager Kimberly.yazzie@wihcc.org

Priority	**Summary/Comments**
Health Issues in the Community	Issues: • Low income community • Alcoholism and drug abuse • Have a large senior population • Diabetes - high prevalence rate of 9.9% in a service area that covers 16,000 patients • Kidney disease rates, cardiovascular problems, amputees (particularly in young due to alcohol and drug abuse) • Transient population (many of which have homes) • Domestic violence Senior Specific Issues: • Senior Center has an issue with getting seniors to understand or know about existing programs • Current methods (i.e. The Scoop, radio, water bills) are insufficient – and they come at a cost that the Senior Center may not be able to cover • Many seniors live alone – isolated • Idea of leaving home scares them - but once they use the services are more likely to repeat use Alcohol Stabilization: • Many have diabetes, but cannot afford, do not take or do not have their medication • Chronic recidivism • Many do not have health insurance Prison Population: • Assault • Drug abuse (heroin, synthetic marijuana) • Drug importation throughout the Winslow community
Health Care Needs	General Needs: • Quality care on a rapid basis • Access to mental health services • Access to nephrology • Increase capacity for dialysis in Winslow • Affordable housing. Or if people qualify for reduced rent, getting them past the waiting list • Daycare. Particularly needed for people looking for a job Senior Specific Needs: • Getting seniors to programs

	• Communicating to the community programs that are available to seniors American Indian Needs: • Transportation • Access to grocery stores • Communication (on the reservation the most reliable form is mail delivery) Urgent Care • LCMC's ED cares for patients that might be more appropriately managed in the home, primary care, or urgent care settings. Having urgent care capacity could allow the ED to focus on higher level and quality emergency services • Without adequate home, primary care and urgent care capacity, patients may delay their care, resulting in more serious illness, preventable ED visits and hospital admissions • Local doctors are squeezing more patients in to provide urgent care. Contributes to health provider burnout (which increases provider shortage) • Need more providers to fill the clinic space available and meet community health services demand
Current Methods for dealing with Issues and Needs	Seniors • Randy has gone door-to-door (about 20 so far) to speak with families • Through LCMC social services – giving out papers to select people. Now expanding to everyone who comes through LCMC • Reaching out to houses of worship Substance Abuse • Community Bridges, Inc. has a 6 week suboxone program with intensive outpatient classes. Available through Arizona's Medicaid Program (AHCCCS) and private insurance Insurance • CBI will go through an AHCCCS application with the patient if they are not insured • Transport people back to their homes

	Housing • There is programming that provides lower rent housing to persons that qualify • Alice's Place assists people with the process Patient communication (referrals and information) • LCMC's social services department takes calls, listens to the patient and acts as an information and referral resource. Is steadily becoming a more popular service as people become aware of it and more reliant on it.
Community Assets	Senior programs through the Senior Center • Nutritional educational programs • Access to nutritional foods (Food bank, congregate meals, meals on wheels) • Exercise center (although it is currently shutdown due to a ceiling collapse) • Transportation (for grocery shopping, physician appointments, to Flagstaff [only for medical, with a fee]). Have a bus, free of charge for those 50 and older. A fee attached to those persons under 50. Pick up radius of 30 miles. Coalitions and community groups • Ministerial meeting where all the ministers and priests come together. Contact Linda at the rectory to ask for details. Includes Winslow and Holbrook • Strong Families Coalition. Bring together all key people who provide services in the area. So those providers have a list of where to refer their patients. At the Health Department 2nd Wednesday of the month, 12-1pm. Darcey McKee, Navajo County – diabetes self-management class, chronic disease management, chronic pain management • 6 weeks, 2 hours per session, 6 sessions • Offered anywhere in Navajo County Community Bridges • 24 hour availability • Alcohol stabilization clinic with transportation services that go out in the community to pick up patients Patient Centered Medical Home & Care • Provided by WIHCC, North Country and ChangePoint Integrated Health

	• Direct and indirect care is addressed from a team of providers that work with the patient in clinical and community settings
Forthcoming or Proposed Solutions	Community Bridges • Move to a patient centered home with diabetes, hypertension programs • Reduce preventable LCMC hospital and ED visits through home or clinic services • Proactively approach tribal leadership about establishing programs and facilities on the reservation. Community resource guide for providers • Assist with patient referrals. • Provide patients with helpful information Telemedicine in the ED • Expand locally available services through telemedicine Community Provider Coalition • Convene meetings similar to the focus groups and advisory Committee on a quarterly basis • Where providers can come together and discuss how providers can collaborate, what they do now, what they need, educate the community and each other • Focus on the healthcare of the community • Create a space where providers can benefit each other and pool resources • Have LCMC host the coalition (e.g. in their board room) • Rose Oplinger of ChangePoint Integrated Health has brought up a similar idea

Abbreviation guide:

CBI – Community Bridges, Inc.

ED = Emergency Department

LCMC = Little Colorado Medical Center

WIHCC = Winslow Indian Health Care Center