



2019

Artesia General Hospital Community Health Needs Assessment

- Eddy County, New Mexico-

*Paper copies of this document may be obtained at: Artesia General Hospital
702 N 13th St, Artesia, NM 88210 or by phone (575)748-3333 or via the hospital website
<https://artesiageneral.com/>*

Photo Credit: Brantley Lake State Park; newmexico.org

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Perspective / Overview

Creating a culture of health in the community



Action Cycle Source: the Robert Wood Johnson Foundation's County Health Rankings website: <http://www.Countyhealthrankings.org/roadmaps/action-center>

The Action Cycle shows how to create healthy communities. The rankings later in the document assist in understanding what makes a healthy community.

The Community Health Needs Assessment (CHNA) uses systematic, comprehensive data collection and analysis to define priorities for health improvement, creates a collaborative community environment to engage stakeholders, and an open and transparent process to listen and truly understand the health needs of Eddy County, New Mexico.

2019 Community Health Needs Assessment

This document is a hospital facility-specific Community Health Needs Assessment (CHNA) for Artesia General Hospital.

Artesia General Hospital as the sponsors of the assessment, engaged national leaders in community health needs assessments to assist in the project. Stratasan, a healthcare analytics and facilitation company based out of Nashville, Tennessee, provided the analysis of community health data and the community surveys.

- ✔ Starting on July 1, 2019, this report is made widely available to the community via Artesia General Hospital's website <https://artesiageneral.com/> and paper copies are available free of charge at Artesia General Hospital, 702 N. 13th St., Artesia, NM 88210 or by phone 575-748-3333.
- ✔ Artesia General Hospital's board of directors approved this assessment on July 1, 2019.

PROJECT GOALS

- ① To continue a formal and comprehensive community health assessment process which allows for the identification and prioritization of significant health needs of the community to assist with resource allocation, informed decision-making and collective action that will improve health.
- ② To continue a collaborative partnership between all stakeholders in the community by seeking input from persons who represent the broad interests of the community.
- ③ To support the existing infrastructure and utilize resources available in the community to instigate health improvement in the community.

“ We initiated the Community Health Needs Assessment with the goal to assess the health and needs of the community. This process is an affirmation of what we’ve been doing to improve health and has jumpstarted our next implementation plan,” said Richard Gibson, CEO Artesia General Hospital.

The information gathered both from public health data and from community stakeholders provided the insight the community needed to set priorities for significant health issues and will be used by the community to inform and support our implementation plans,” added Julie Meabon Gibson, Executive Director of Business Development, Artesia General Hospital. ”

Community

Input and Collaboration

Data Collection and Timeline

In April 2019, Artesia General Hospital began a Community Health Needs Assessment for Eddy County, and sought input from persons who represent the broad interests of the community using several methods:

- Information gathering, using secondary public health sources, occurred in March 2019.
- Online community surveys were conducted for Eddy County, NM from May 9, 2019 – June 14th, 2019. 190 surveys were completed.



Photo Credit: Roselawn Elementary School



Photo Credit: Artesia General Hospital Facebook

Information Gaps

While this assessment was quite comprehensive, it cannot measure all possible aspects of health in the community, nor can it adequately represent all possible populations of interest. It must be recognized that these information gaps might in some ways limit the ability to assess all the community's health needs.

This CHNA process focused on identifying and defining significant health needs, issues, and concerns of Eddy County. The three-month process centered on gathering and analyzing data as well as receiving input from persons who represented the broad interests of the community to provide direction for the community and hospital to create a plan to improve the health of the communities.

Community Engagement and Transparency

We are pleased to share the results of the Community Health Needs Assessment with the rest of the community in hopes of attracting more advocates and volunteers to improve the health of Eddy County. The following pages highlight key findings of the assessment. We hope you will take the time to review the health needs of our community as the findings impact each and every citizen in one way or another; and join in the improvement efforts.

Artesia General Hospital distributed the survey to receive input from medically underserved, low-income and minority populations. 25% of the survey respondents were Hispanic, 6% were insured by Medicaid 1% were uninsured.

Community Selected for Assessment

Eddy County was the primary focus of the CHNA due to the service area of Artesia General Hospital. Used as the study area, Eddy County provided 79% of inpatient discharges. The community includes medically underserved, low-income and minority populations who live in the geographic areas from which Artesia General Hospital draws their patients. All patients were used to determine the service area without regard to insurance coverage or eligibility for financial assistance under Artesia General Hospital's Financial Assistance Policy.

Artesia General Hospital Study Area - 2018



Source: Artesia General Hospital 2018

Key Findings

Community Health Assessment

Results

Based on the secondary data and the survey, the following significant health issues were prioritized. The remainder of the document outlines the process and data.

1. Mental health
2. Access to care
3. Chronic diseases

Process and Methods

Both primary and secondary data sources were used in the CHNA.

Primary methods included:

- Community survey- 190 completed surveys

Secondary methods included:

- Public health data – death statistics, County Health Rankings, cancer incidence
- Demographics and socioeconomic – population, poverty, uninsured, unemployment
- Psychographics – behavior measured by spending and media preferences



Photo Credit: Artesia Bulldogs; abqjournal.com

Demographics of the Community 2018-2023

Description of the Community Served

The table below shows the demographic summary of Eddy County compared to New Mexico and the U.S.

	Eddy County	New Mexico	USA
Population	59,220	2,147,526	330,088,686
Median Age	38.8	37.8	38.3
Median Household Income	\$51,108	\$47,457	\$58,100
Annual Pop. Growth (2018-2023)	0.90%	0.43%	0.83%
Household Population	22,475	819,008	124,110,001
Dominant Tapestry	Diners & Miners (10C)	Down the Road (10D)	Green Acres (6A)
Businesses	2,070	73,128	11,539,737
Employees	26,150	906,243	151,173,763
Medical Care Index*	92	83	100
Average Medical Expenditures	\$1,795	\$1,619	\$1,950
Total Medical Expenditures	\$40.3 M	\$1.3 B	\$242.0 B
Racial and Ethnic Make-up			
White	74%	66%	70%
Black	2%	2%	13%
American Indian	2%	10%	1%
Asian/Pacific Islander	1%	2%	6%
Other	18%	16%	7%
Mixed Race	4%	4%	3%
Hispanic Origin	50%	50%	18%

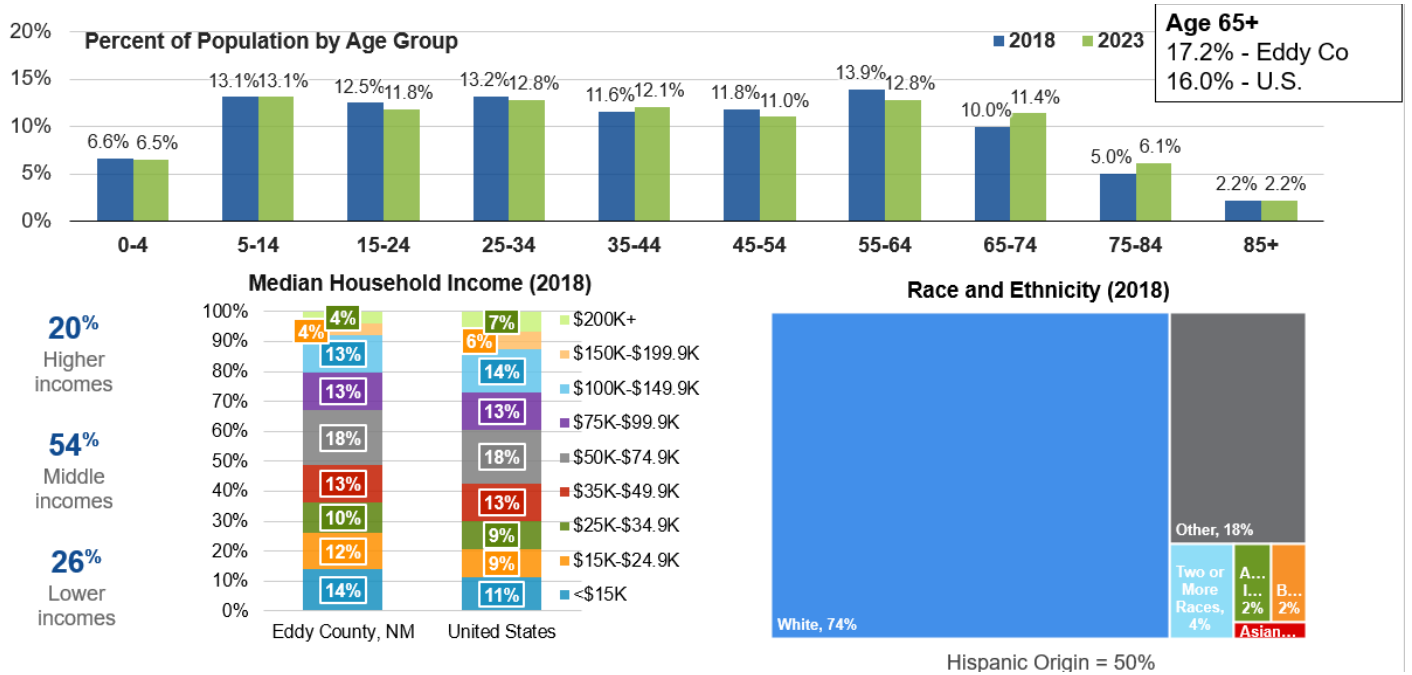
*The Medical Care Index is household-based, and represents the amount spent out of pocket for medical services relative to a national index of 100.

The median is the value at the midpoint of a frequency. There is an equal probability of falling above or below the median.



Demographics, cont.

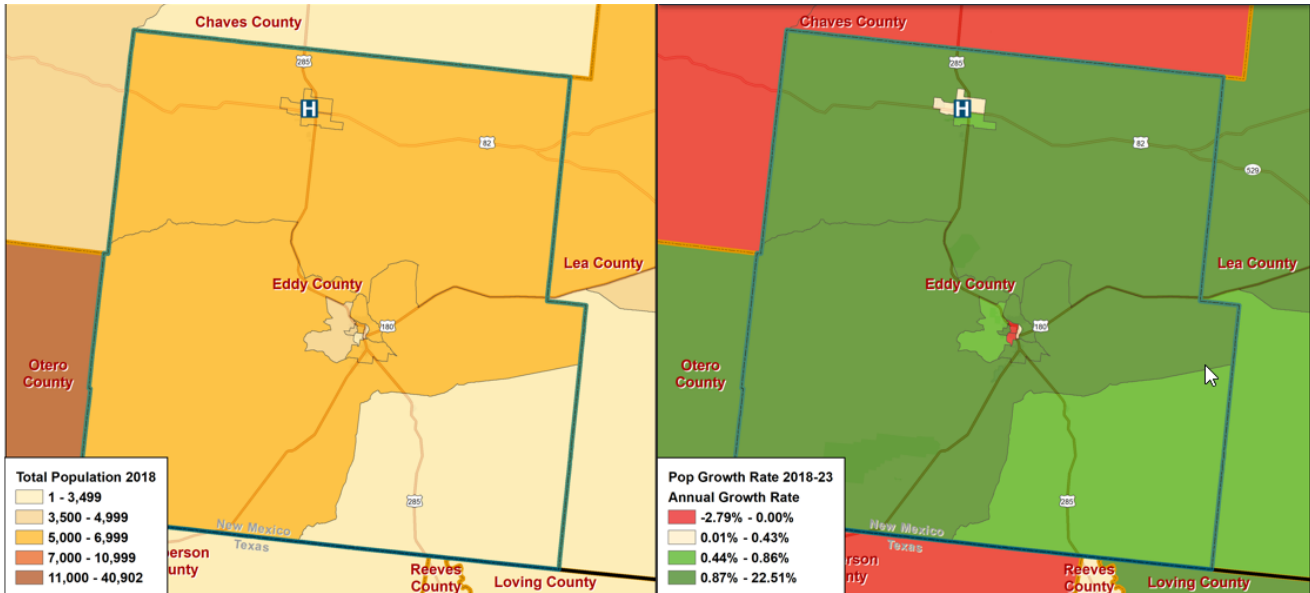
Eddy County



Source: ESRI

- The population of Eddy County is projected to increase from 2018 to 2023 (0.9% per year). New Mexico is projected to increase 0.43% per year. The U.S. is projected to increase 0.83% per year.
- Eddy County had a higher median age (38.8 median age) than NM 37.8 and the U.S. 38.3. Eddy County percentage of the population 65 and over was 17.2%, higher than the US population 65 and over at 16%.
- Eddy County's median household income was \$51,108, higher than NM (\$47,457), but lower than the U.S. (\$58,100). The rate of poverty in Eddy County was 16.9% which was lower than NM (19%), but higher than the U.S. (13.4%).
- The household income distribution of Eddy County was 20% higher income (over \$100,000), 54% middle income and 26% lower income (under \$25,000).
- The medical care index measures how much the populations spent out-of-pocket on medical care services. The U.S. index was 100. Eddy County was 92, indicating 8% less spent out of pocket than the average U.S. household on medical care (doctor's office visits, prescriptions, hospital visits).
- The racial and ethnic make-up of Eddy County was 74% White, 50% Hispanic Origin, 18% other, 4% mixed race, 2% Black, 2% American Indian, and 1% Asian/Pacific Islander. (These percentages total to over 100% because Hispanic is an ethnicity, not a race.)

2018 Population by Census Tract and Change (2018-2023)



Source: ESRI

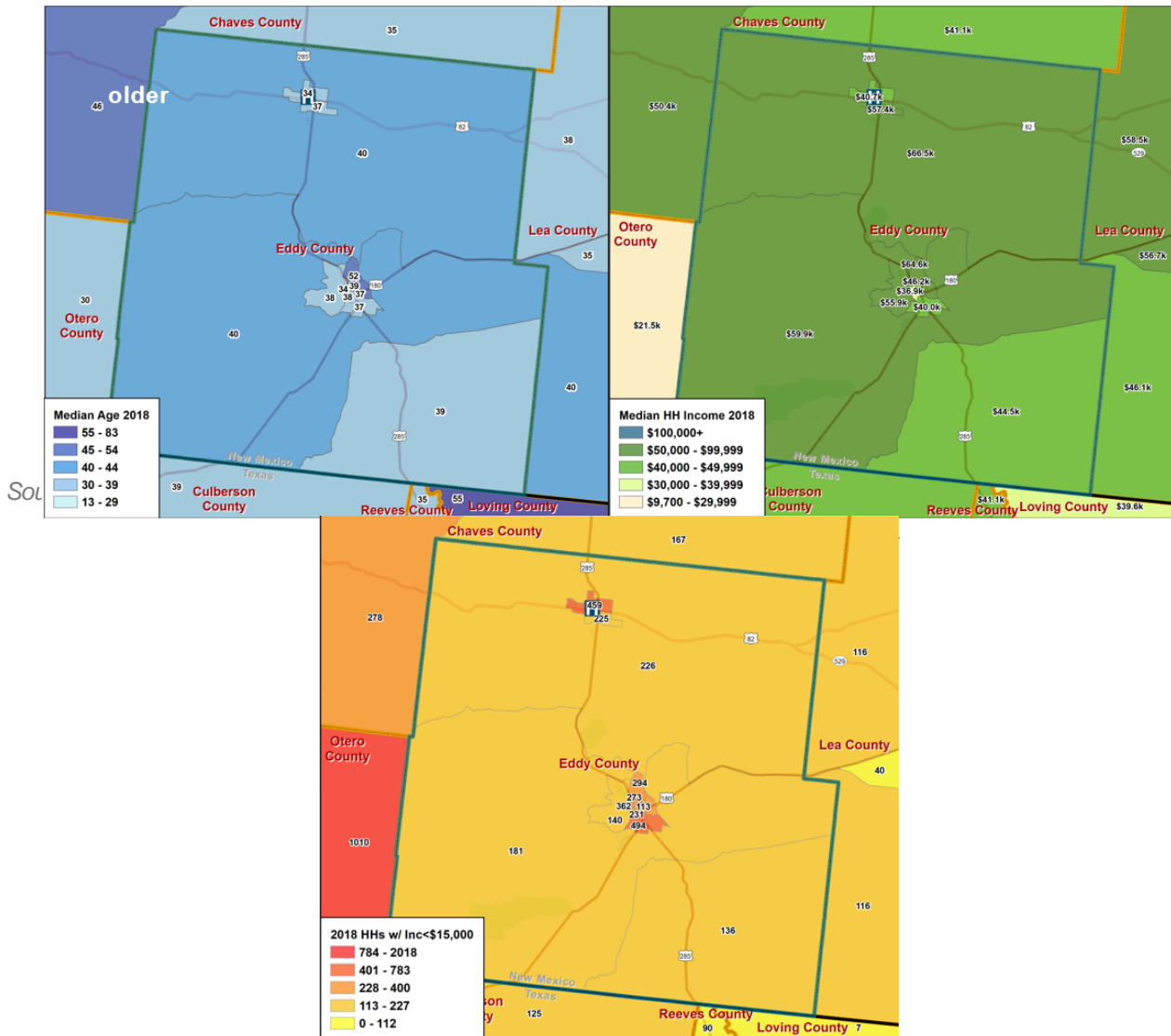
Red is population decline
Yellow is positive up to the NM growth rate
Green is greater than the NM growth rate
Dark Green is twice the NM growth rate

Census tracts generally have a population size between 1,200 and 8,000 people, with an optimum size of 4,000 people.

Most census tracts in the county had between 5,000 to 6,999 population. The tract in the southeast corner had 1-3,499 population, more rural. There was a tract west of Carlsbad that had 3,500 to 4,999 population.

Eddy County's population was projected to increase from 2018 to 2023, 0.9% per year. All the census tracts in Eddy County were projected to increase expect for two tracts in Carlsbad. The census tract surrounding Artesia General Hospital is expected to grow up to the NM growth rate.

2018 Median Age & Income



These maps depict median age and median income by census tract. Looking at age and income by census tract is helpful to demonstrate all areas of a county are not the same. The health needs may be very different in the census tract the hospital is located in with a median age of 34 and a census tract in Carlsbad with a median age of 52.

Looking at median household income by census tract also gives insight into health status. The lower income areas may require more assistance than the higher income tracts. The lower income census tracts are in the center of the county with \$36.9K median household incomes, in the southeastern corner of the county (\$44.5K), and the census tract Artesia General Hospital is in (\$40.7K).

The lower map is the number of households making less than \$15,000 per year. Again further attempting to identify those areas within the county that may have lower health status. The census tract the hospital is in had 459 households making less than \$15K per year.

Demographics, cont.

Additionally, Eddy County's 2019 January preliminary unemployment was 3.5% compared to 5.1% for New Mexico and 3.8% for the U.S., which is a large decline in unemployment since 2014. These figures do not include those who have ceased looking for work and dropped out of the workforce. However, indications are these people have begun to reenter the workforce.

Business Profile

52.4% percent of employees in Eddy County were employed in:

- Health care and social assistance (12.3%)
- Retail trade (12.0%)
- Public administration (10.7%)
- Construction (8.8%)
- Educational services (8.6%)

Source: ESRI Other Services: Establishments in this sector are primarily engaged in activities, such as equipment and machinery repairing, promoting or administering religious activities, grantmaking, advocacy, and providing dry-cleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services.

Retail jobs offer health insurance at a lower rate than healthcare, public administration and educational services. Eddy County gains 2,678 net commuters per day commuting into the county for work, 818 commuting out of the county and 3,496 commuting into the county.

Source: US Census Bureau, American Community Survey (2009-2013)

It is beneficial to contact people in groups to improve health. There are three primary places people gather during the week, work, church and school. These are three excellent places to reach people to create a culture of health.



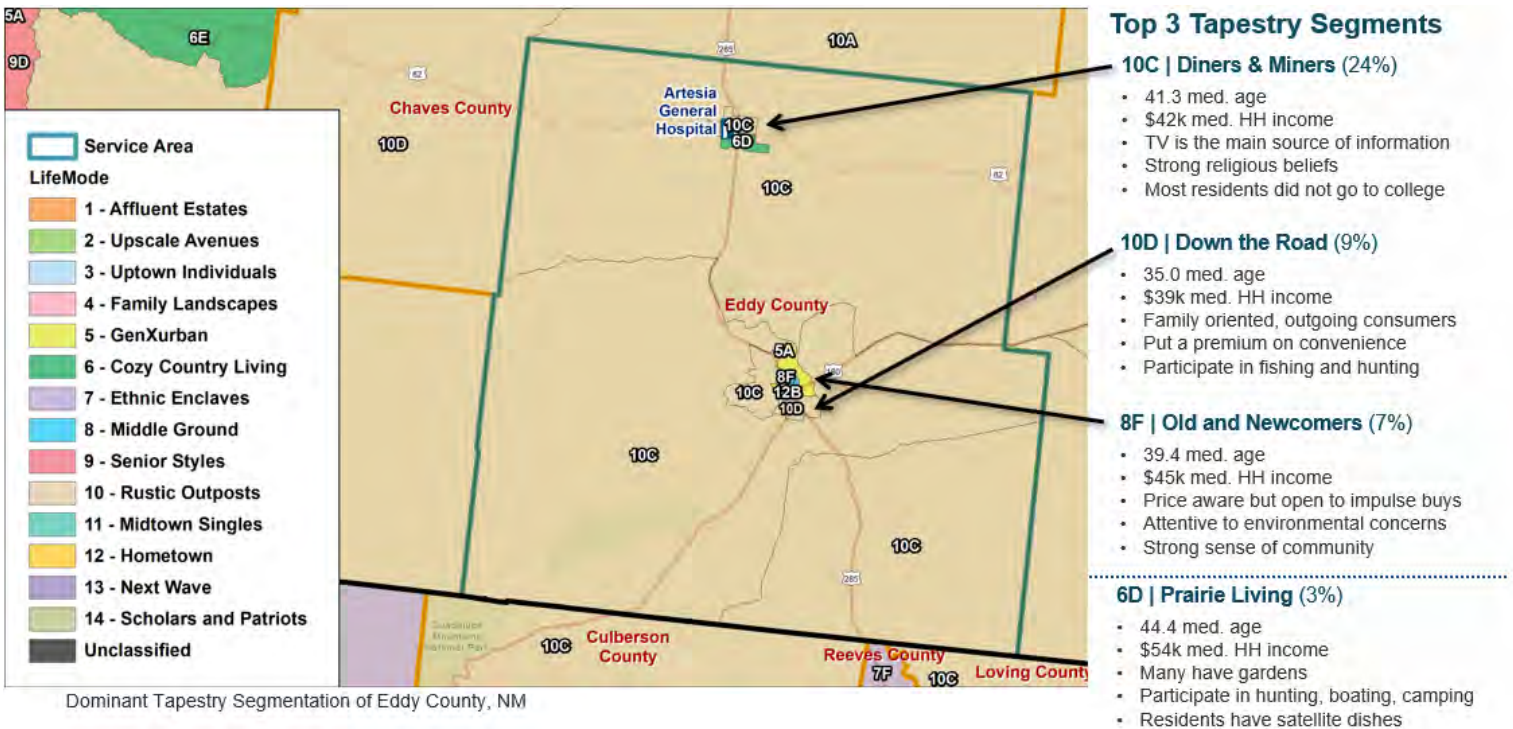
Photo Credit: Artesia Fire Department; artesianews.com

Tapestry Segmentation

Demographics are population, age, sex, race. Psychographics are adding behavior data in the form of spending habits and survey data on top of demographics. 40% of Eddy County were included in three Tapestry Segments. The map below is color coded by LifeMode, which are groupings of Tapestry Segments that behave similarly.

The dominant Tapestry Segments in Eddy county were Diners & Miners (24%), Down the Road (9%), and Old and Newcomers (7%). The map below demonstrates the dominant Tapestry Segment by census tract. 3% of the county is in the Prairie Living Segment. The tract south of Artesia General Hospital Prairie Living is dominant.

There is a very brief description of the segments on the right of the map. There is much more information on Tapestry Segments, at <http://doc.arcgis.com/en/esri-demographics/data/tapestry-segmentation.htm>. Studying the Tapestry Segments in the study area helps determine health habits and communication preferences of residents enabling more effective communication and implementation of solutions to improve health.



Source: ESRI

Tapestry Segmentation, cont.



LifeMode Group: Rustic Outposts
Diners & Miners

10C

Households: 810,000
Average Household Size: 2.54
Median Age: 41.3
Median Household Income: \$42,100

WHO ARE WE?

Close to one in five employed residents work in mining, oil and gas extraction, or quarrying industries. *Diners and Miners* is a very rural, primarily Southern market. Married-couple families reside in over half of the households, with a quarter of households that live in mobile homes. This socially conservative group earns a living working with their hands. In addition to mining, construction and agriculture are common industries for employment. They take pride in the appearance of their homes and their vehicles. Budget-minded residents enjoy home cooking, but nothing too fancy. This is a gregarious group that values time spent with friends.

OUR NEIGHBORHOOD

- Rural living; homes are sparsely located throughout the countryside.
- These families have roots in their communities and do not move often; over three-quarters of all households are owner occupied.
- Over half of owned homes are worth less than \$100,000.
- Married-couple families make up over half the households.
- A quarter of all housing units are mobile homes; the rest are primarily single-family dwellings.
- High-vacancy rate—nearly one in six housing units is vacant.

SOCIOECONOMIC TRAITS

- They hold strong to religious beliefs.
- Most residents did not go to college.
- They are slow to adopt technology; “if it’s not broke, don’t fix it,” mentality.
- TV is the main source of information, news, and entertainment.
- They make purchases for today because tomorrow is uncertain.
- They are happy to go to work whenever the opportunity presents itself.
- Budgeted vacations are taken within the US, not abroad.



LifeMode Group: Rustic Outposts
Down the Road

10D

Households: 1,406,700
Average Household Size: 2.76
Median Age: 35.0
Median Household Income: \$38,700

WHO ARE WE?

Down the Road is a mix of low-density, semirural neighborhoods in large metropolitan areas; half are located in the South, with the rest chiefly in the West and Midwest. Almost half of householders live in mobile homes; more than two-fifths live in single-family homes. These are younger, diverse communities, with the highest proportion of American Indians of any segment. These family-oriented consumers value their traditions. Workers are in service, retail trade, manufacturing, and construction industries, with higher proportions in agriculture and mining, compared to the US. This market has higher unemployment, much lower median household income and home value, and more than a fifth of households with income below poverty level.

OUR NEIGHBORHOOD

- Nearly two-thirds of households are owned.
- Family market, primarily married couples or single-parent households (Index 145).
- Close to half of all households live in mobile homes (Index 780).
- Four-fifths of households were built in 1970 or later.
- About 32% of homes are valued under \$50,000 (over 4 times the US percentage).

SOCIOECONOMIC TRAITS

- Education completed: 36% with a high school diploma only, 41% with some college education or a degree.
- Unemployment rate is 7.8%, higher than the US rate.
- Labor force participation rate is 59.0%, slightly lower than the US.
- Family-oriented, outgoing consumers; they place importance on preserving time-honored customs.
- They put a premium on convenience rather than health and nutrition.

Tapestry Segmentation, cont.



LifeMode Group: Middle Ground

Old and Newcomers

8F

Households: 2,859,200

Average Household Size: 2.12

Median Age: 39.4

Median Household Income: \$44,900

WHO ARE WE?

This market features singles' lifestyles, on a budget. The focus is more on convenience than consumerism, economy over acquisition. *Old and Newcomers* is composed of neighborhoods in transition, populated by renters who are just beginning their careers or retiring. Some are still in college; some are taking adult education classes. They support charity causes and are environmentally conscious. Age is not always obvious from their choices.

OUR NEIGHBORHOOD

- Metropolitan city dwellers.
- Predominantly single households (Index 148), with a mix of married couples (no children); average household size lower at 2.12.
- 55% renter occupied; average rent, \$880, (Index 85).
- 45% of housing units are single-family dwellings; 45% are multiunit buildings in older neighborhoods, built before 1980.
- Average vacancy rate at 11%.

SOCIOECONOMIC TRAITS

- Unemployment is lower at 5.1% (Index 93), with an average labor force participation rate of 62.6%, despite the increasing number of retired workers.
- 32% of households are currently receiving Social Security.
- 31% have a college degree (Index 99), 33% have some college education, 9% are still enrolled in college (Index 121).
- Consumers are price aware and coupon clippers, but open to impulse buys.
- They are attentive to environmental concerns.
- They are more comfortable with the latest technology than buying a car.



LifeMode Group: Cozy Country Living

Prairie Living

6D

Households: 1,323,200

Average Household Size: 2.51

Median Age: 44.4

Median Household Income: \$54,300

WHO ARE WE?

Prairie Living is Tapestry Segmentation's most rural market, comprising about 1.2 percent of households, located mainly in the Midwest, with a predominance of self-employed farmers. These agricultural communities are not diverse, dominated by married-couple families that own single-family dwellings and many vehicles. Median household income is similar to the US, and labor force participation is slightly higher. Faith is important to this hardworking market. When they find time to relax, they favor outdoor activities.

OUR NEIGHBORHOOD

- About four-fifths of households are owner occupied.
- Dominant household type is married-couples with no children.
- Most are single-family homes (87%) built before 1980; a higher proportion were built before 1940 (Index 218).
- Higher percentage of vacant housing units is at 16.5% (Index 146).
- Most households own 2 or 3 vehicles; this is the highest ranked market for owning 4 or more vehicles.

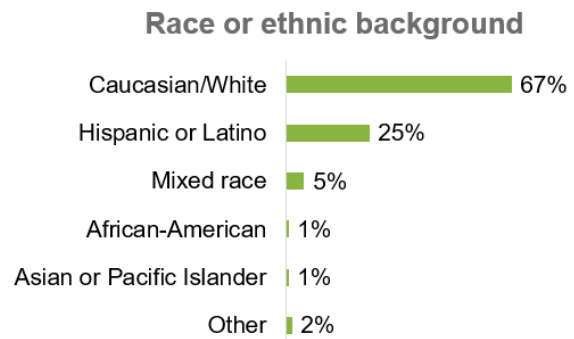
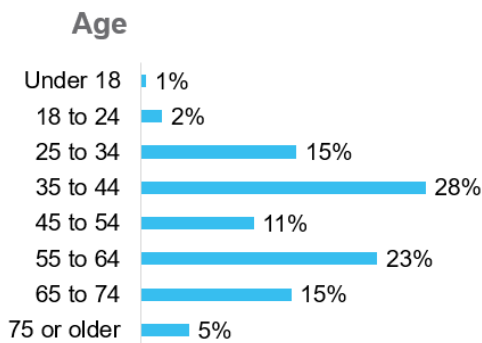
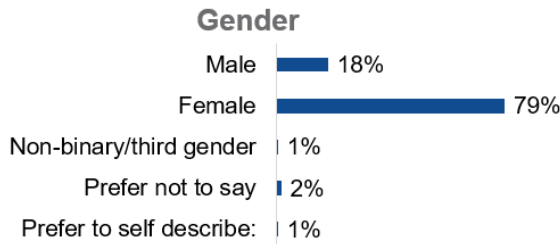
SOCIOECONOMIC TRAITS

- More than half have completed some college education or hold a degree.
- At 2.9%, the unemployment rate is almost less than half the US rate.
- Labor force participation rate slightly higher at 65%.
- Wage and salary income for 72% of households plus self-employment income for 23% (Index 217).
- Faith and religion are important to these residents.
- Tend to buy things when they need them, rather than when they want them or to be trendy.
- Somewhat resistant to new technology.
- Creatures of habit when purchasing food items.

Survey Process

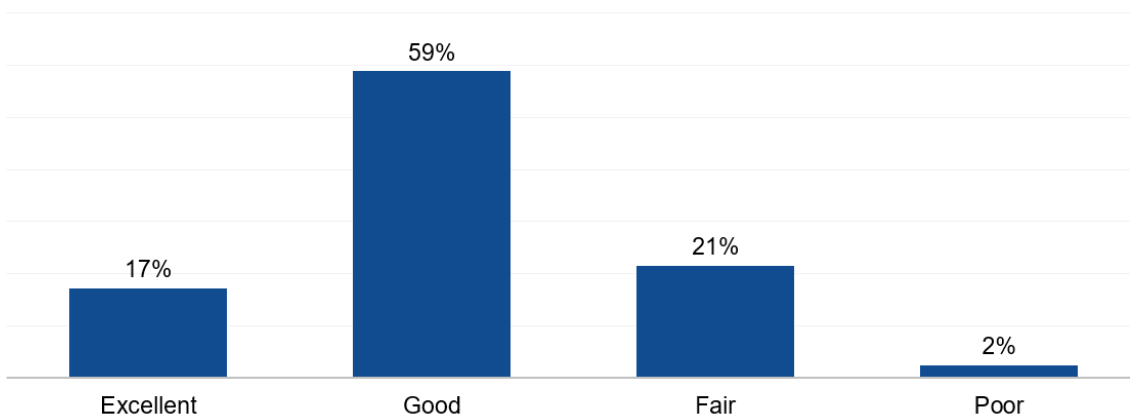
Stratason and Artesia General Hospital conducted online community surveys via SurveyMonkey for Eddy County, NM. The surveys were conducted from May 9, 2019 – June 14th, 2019 and 190 surveys were completed.

Survey Demographics



Health Status

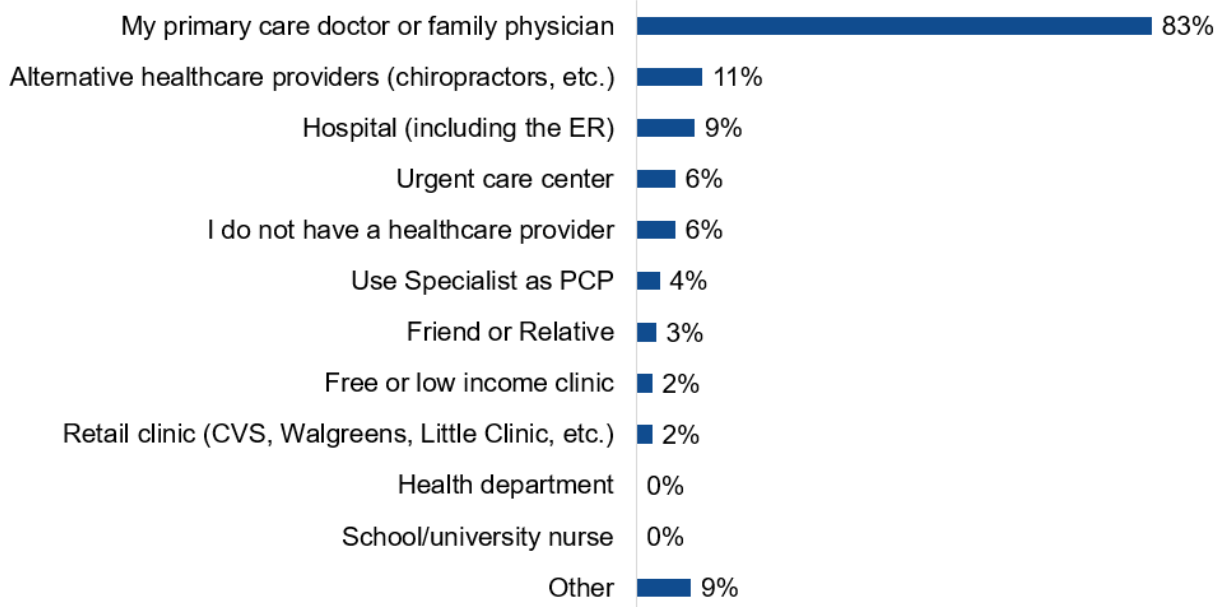
Generally, how would you describe your health?



23% believe their health is fair or poor and 76% believe their health is excellent or good.

Basic Healthcare Needs

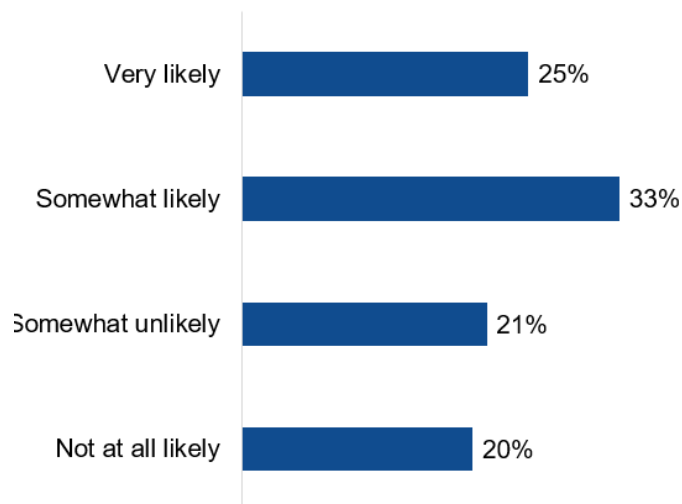
If you have one person or group you turn to for basic healthcare needs, where do you go most often?



83% of respondents turn to a primary care doctor or family physician for basic healthcare needs. 11% turn to alternative healthcare providers and 9% turn to the hospital.

Virtual Physician Care

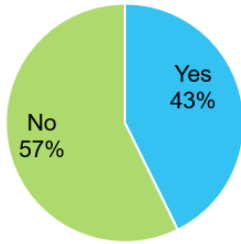
How likely are you to utilize virtual physician care such as through the computer or your smart phone?



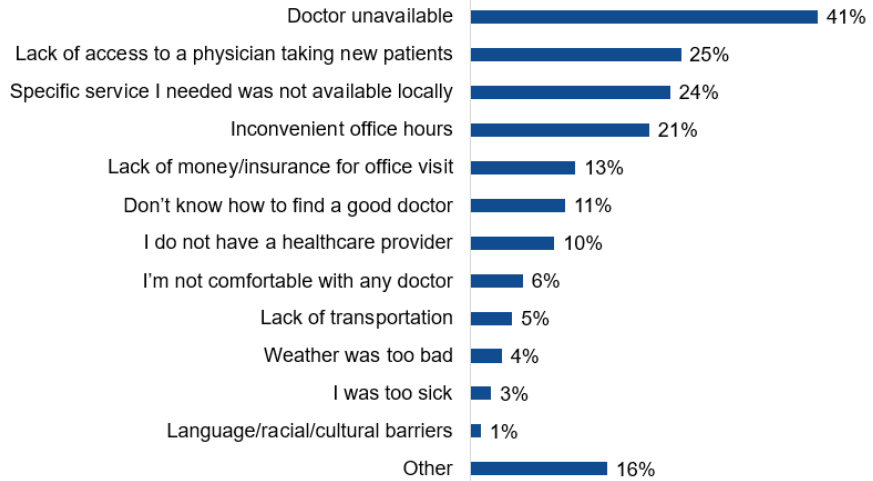
33% of respondents indicated they are somewhat likely, and 25% are very likely to utilize virtual physician care.

Physician Access

Was there a time in the past 12 months when you needed to see a **doctor** but could not?



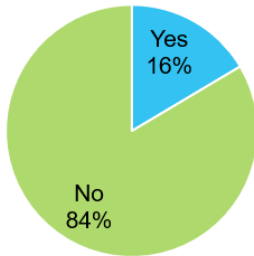
What are some of the reasons why you could not?



43% indicated there was a time in the last 12 months when they needed to see a doctor but could not. The primary reasons were the doctor was unavailable, lack of access to a physician taking new patients, and a specific service was not available locally. This percentage is very high compared to other markets.

Mental Health Access

Was there a time in the past 12 months when you needed to see a **mental health professional** but could not?



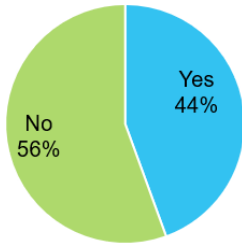
What are some of the reasons why you could not?



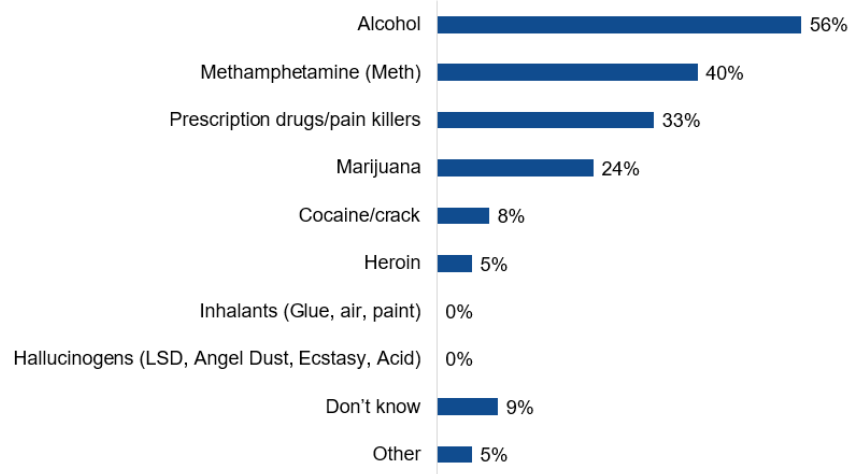
16% indicated there was a time in the last 12 months when they needed to see a mental health professional but could not. The primary reasons were lack of availability, don't know how to find a good mental health professional and lack of access to mental health professionals.

Substance Abuse & Addiction

Have you, a relative, or close friend experienced substance abuse or addiction?



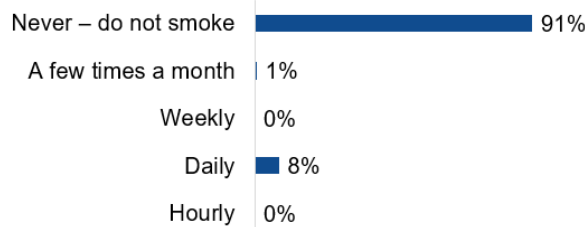
What substance was involved?



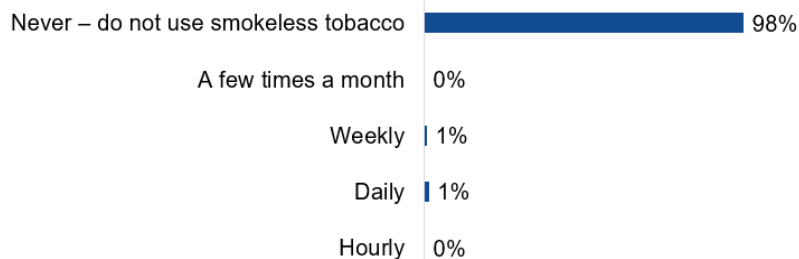
44% have experienced or have a relative or close friend who has experienced substance abuse or addiction. The primary substances involved were identified as alcohol followed by methamphetamine, and prescription drugs/pain killers.

Tobacco

How often do you smoke, if you do?



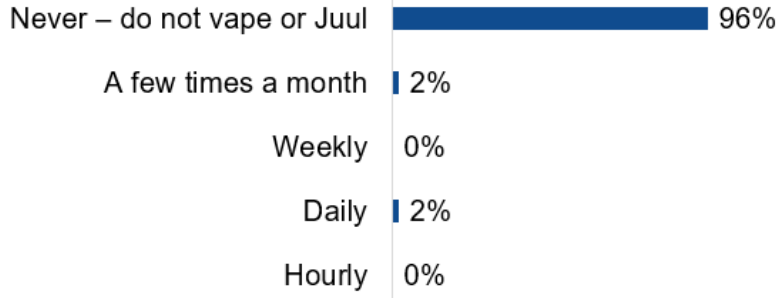
How often do you use smokeless tobacco, if you do?



91% of respondents do not smoke, and 8% smoke daily. 98% of respondents do not use smokeless tobacco, 1% use it weekly, and 1% use it daily.

E-cigarettes

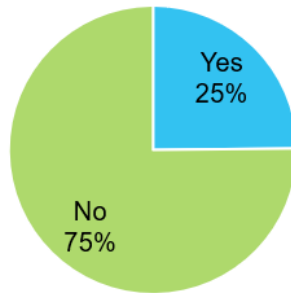
How often do you use e-cigarettes or vape, if you do



96% of respondents indicated they do not vape or Juul, 2% do a few times a month, and 2% smoke e-cigarettes or vape daily.

Medication Access

Was there a time in the past 12 months when you needed medications but could not obtain them?



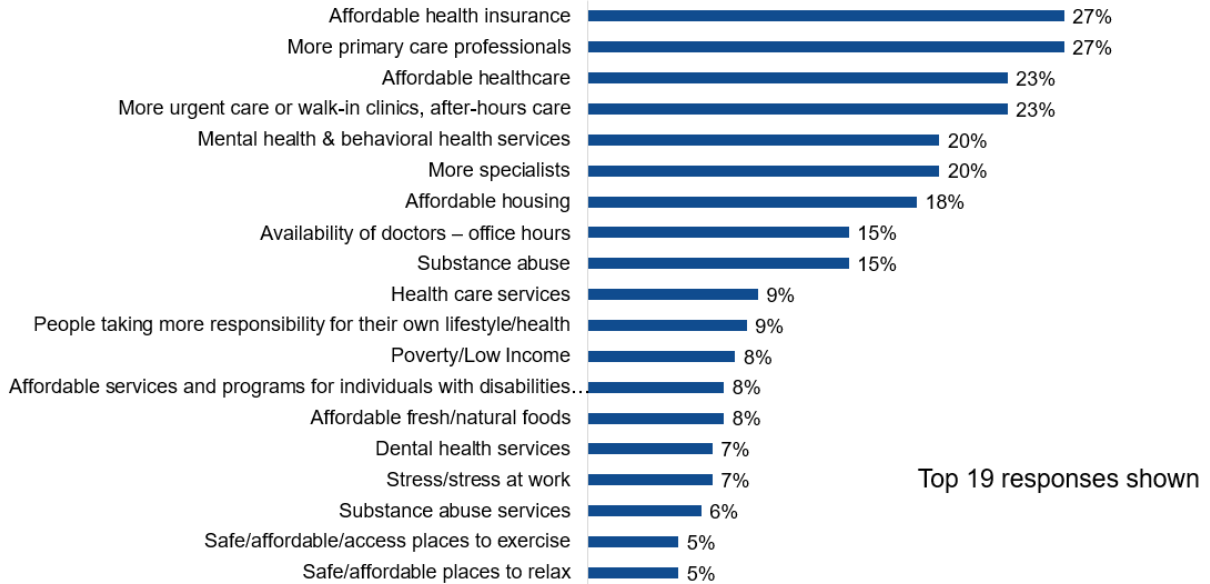
25% of respondents indicated there was a time in the past 12 months they needed medications but could not obtain them.



Photo Credit: Carlsbad Caverns National Park; mygrandcanyonpark.com

Health Issues

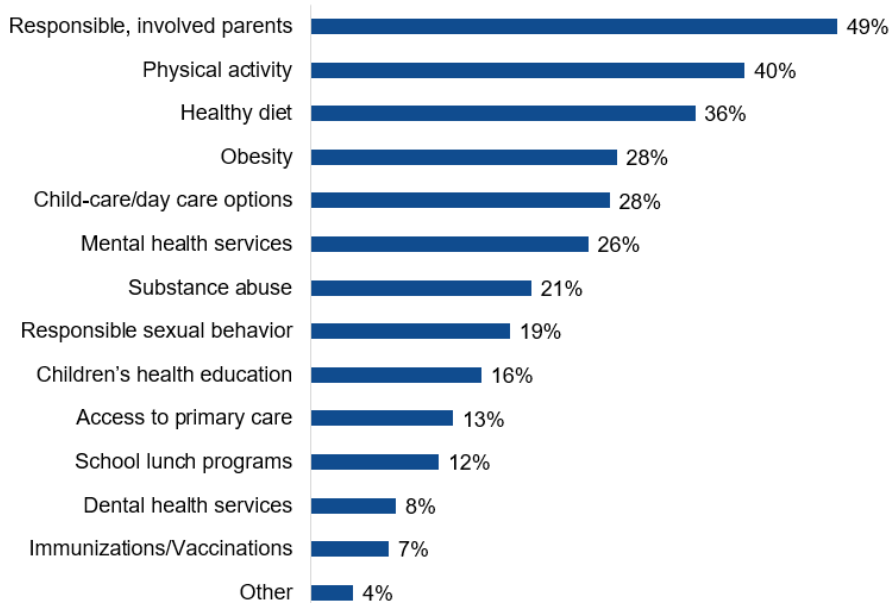
What are the top 3 health issues in your community that impact people's health?



Respondents indicated the top issues impacting people's health were affordable health insurance, more primary care professionals followed by affordable healthcare and more urgent care/walk-in clinics/after-hours care.

Children's Health

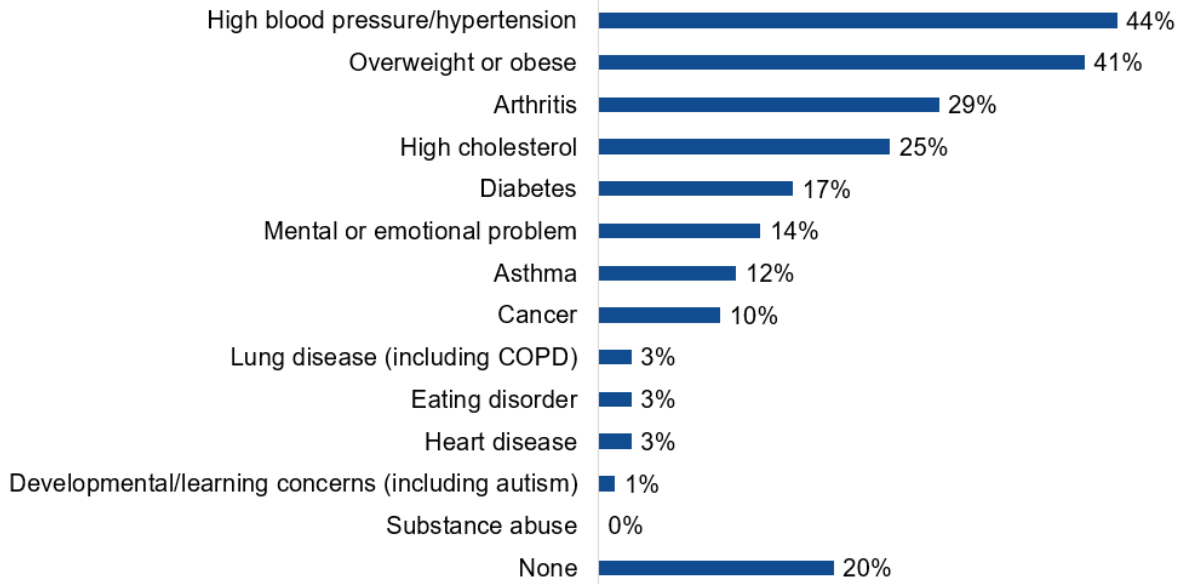
In your opinion, what are the top 3 health concerns for children in your community?



Respondents indicated their top health concerns for children in the community were responsible/involved parents followed by physical activity and healthy diet.

Health Conditions

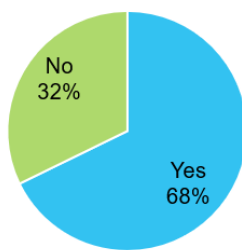
Have you ever been told by a doctor you have any of these conditions, diseases or challenges?



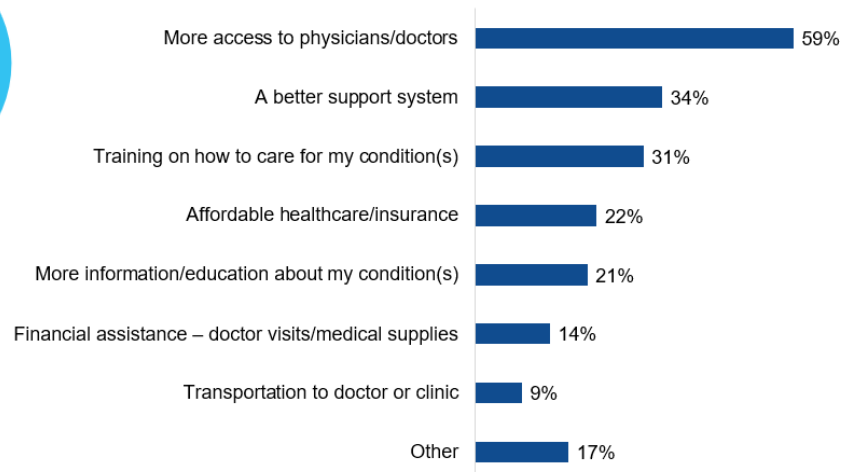
20% of those surveyed have no health conditions, diseases or challenges. 44% had high blood pressure/hypertension, 41% were overweight or obese, 29% had arthritis and 25% had high cholesterol.

Health Management

If yes, do you feel you have all that you need to manage your health condition(s)?



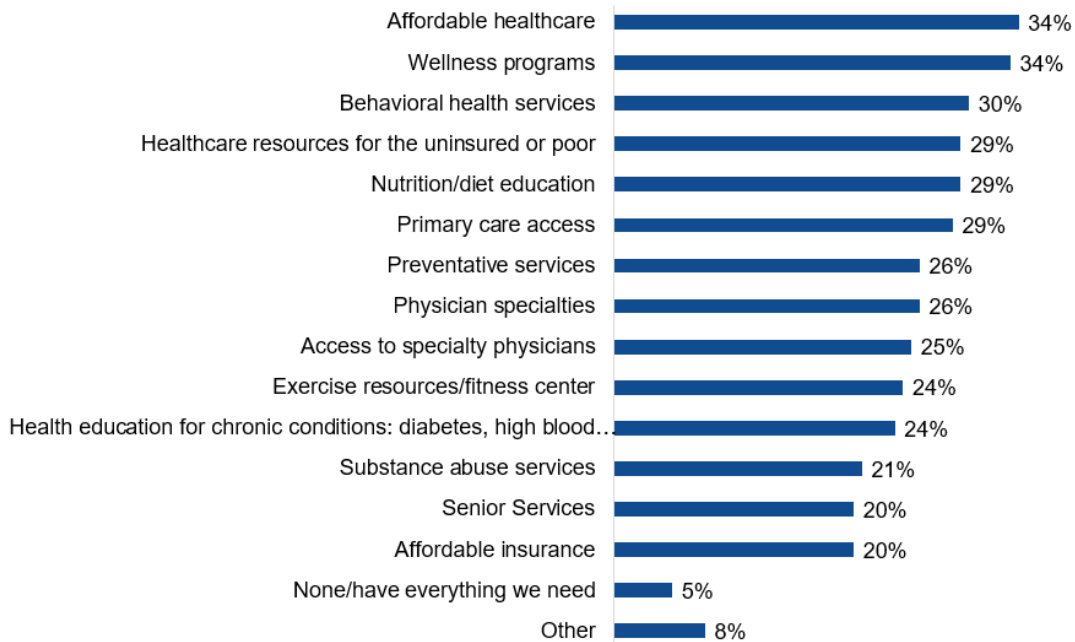
If no, what do you need in order to manage your health condition(s)? (Select all that apply)



32% do not feel they have all they need to manage their health conditions. They need more access to physicians/doctors, a better support system, and training on how to care for condition(s).

Improvements

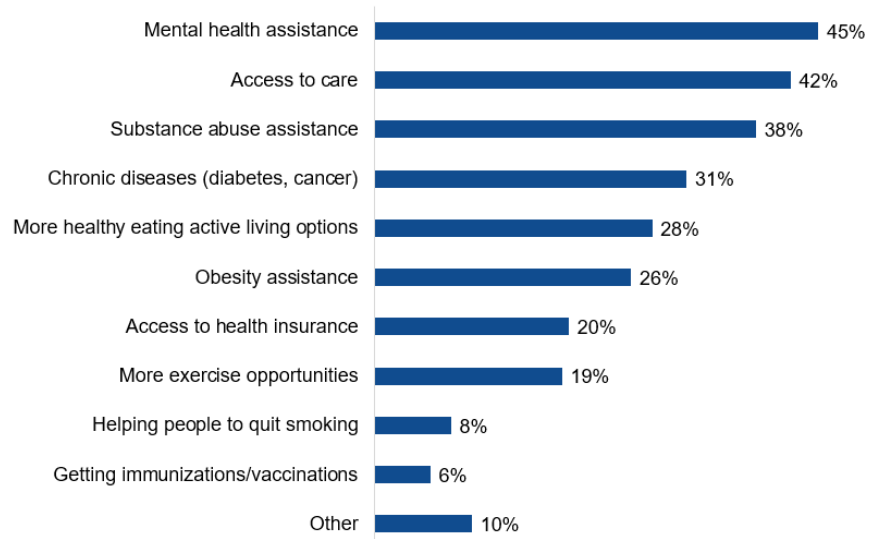
What healthcare, health education, or public health services or programs would you like to see offered in your community?



Respondents would like to see affordable healthcare, wellness programs, behavioral health services, healthcare resources for the uninsured or poor, nutrition/diet education, and primary care access

Health Needs

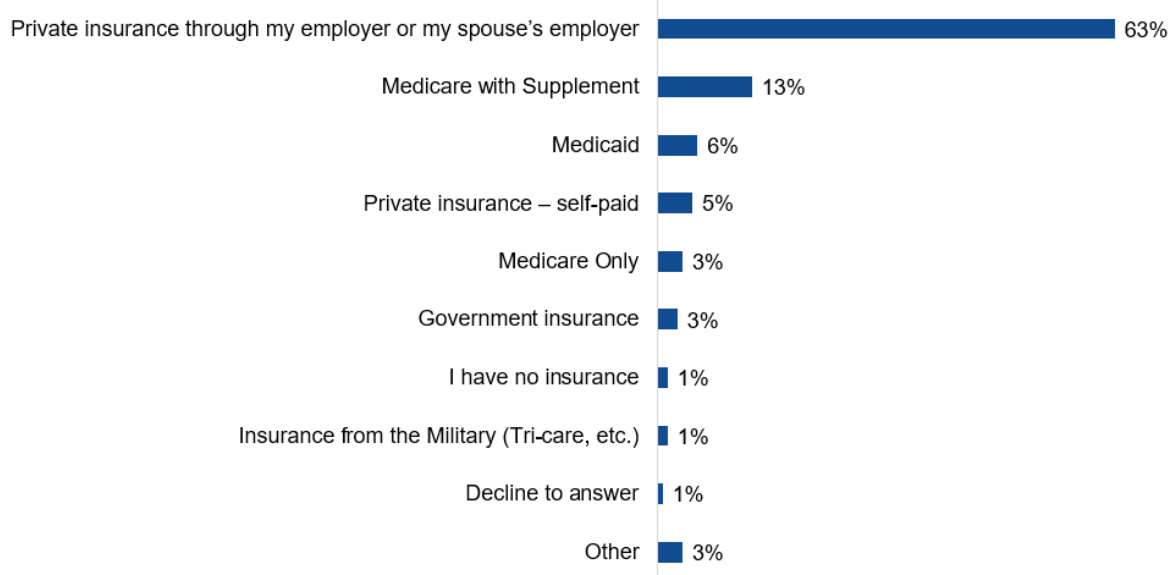
In your opinion, what are the top health needs in your community?



Respondents identified the top community health needs as mental health assistance, access to care, and substance abuse assistance.

Insurance

Which of the following best describes your health insurance situation?



63% of respondents had private insurance through their or their spouse's employer, 13% had Medicare with supplement, 6% had Medicaid, and 5% had private insurance.



Photo Credit: Carlsbad, NM
4th of July Parade;
currentargus.com

Health Status Data

Based on the 2019 County Health Rankings study performed by the Robert Wood Johnson Foundation and the University of Wisconsin², Eddy County ranked 11th healthiest County in New Mexico out of the 32 counties ranked (1= the healthiest; 32 = unhealthiest), 8th for health outcomes and 15th for health factors.

County Health Rankings suggest the areas to explore for improvement in Eddy County were: high adult smoking, high adult obesity, high physical inactivity, high excessive drinking, high teen birth rate, high population to primary care physicians rate, low mammography screening, high unemployment, high violent crime rate, high injury death rate, low percentage of high school graduation, low percentage of adults with some post-secondary education, high levels of air pollution, and high percentage of the workforce community alone to work. The areas of strength were identified as low uninsured percentage, high food environment index, low preventable hospital stays, and low income inequality.

When analyzing the health status data, local results were compared to New Mexico, the U.S. (where available), and the top 10% of counties in the U.S. (the 90th percentile). Where Eddy County's results were worse than NM and U.S., groups and individuals have an opportunity to act and improve these community measures. To become the healthiest community in New Mexico and eventually the Nation, Eddy County must close several lifestyle gaps. For additional perspective, New Mexico was ranked the 35th healthiest state out of the 50 states (Source: 2018 America's Health Rankings). New Mexico strengths were low cancer death rate, low levels of air pollution, and high rate of mental health providers. New Mexico challenges were high percentage of children in poverty, high violent crime rate, and low percentage of high school graduation.

Comparisons of Health Status

Information from County Health Rankings and America's Health Rankings was analyzed in the CHNA in addition to the previously reviewed information and other public health data. Other data analyzed is referenced in the bullets below, such as: causes of death, demographics, socioeconomics, consumer health spending, focus groups, and surveys. If a measure was better than New Mexico, it was identified as a strength, and where an indicator was worse than New Mexico, it was indicated an opportunity for improvement. To prevent strengths from becoming opportunities for improvement, it's important to continually focus on them.

Opportunities were denoted with red symbols, and strengths were denoted with green stars for easy interpretation. The years displayed on the County Health Rankings graphs show the year the data was released. The actual years of the data are contained in the source notes below the graphs.

² The Rankings are based on a model of population health that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work and play. Building on the work of America's Health Rankings, the University of Wisconsin Population Health Institute has used this model to rank the health of New Mexico counties every year since 2003.

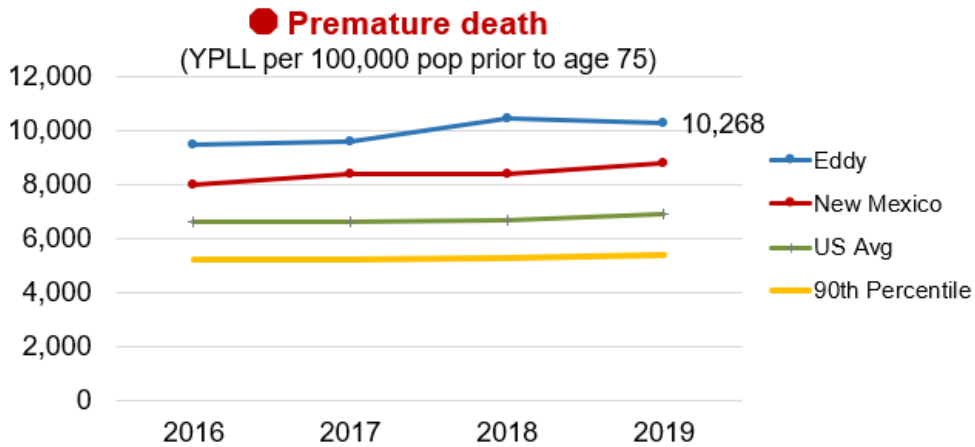
In most of the following graphs, Eddy County will be blue, New Mexico (NM) will be red, U.S. green and the 90th percentile of counties in the U.S. gold. * indicates a change in the BRFSS Survey calculations of results. 2016 forward cannot be compared to prior year results.

Health Outcomes (Length of Life and Quality of Life)

Health Outcomes are a combination of length of life and quality of life measures. Eddy County ranked 8th in Health Outcomes out of 32 New Mexico counties.

Length of Life

Length of life was measured by years of potential life lost per 100,000 population prior to age 75, lower is better. For example, if a 25-year-old is killed in an accident, that is 50 years of potential life lost prior to age 75. Eddy County ranked 21st in length of life in NM. Eddy County lost 10,268 years of potential life per 100,000 population which was higher than NM and the U.S.



Source: County Health Rankings; National Center for Health Statistics – Mortality File 2015-2017



Photo Credit: Artesia General Hospital Facebook

Leading Causes of Death per 100,000 Population

Cause of Death	Eddy County	New Mexico	US
Heart diseases	236.9	186.6	165.0
Cancer	182.5	173.4	152.5
Respiratory Diseases	61.4	54.7	49.4
Accidents (Unintentional Injuries)	68.4	69.9	40.4
Alzheimer's Disease	45.6	27.4	31.0
Cerebrovascular Diseases	38.6	42.0	37.6
Diabetes	36.8	32.2	21.5
Influenza and Pneumonia	N/A*	16.2	14.3
Suicide	***	23.5	14.0
Kidney Disease	***	15.8	13.0

Source(s): Wonder CDC.gov (2017) Age-adjusted rates per 100,000 population. Eddy County, NM, US data from 2017. *** denotes unreliable use rates. Rates that appear in red for a county denote a higher value compared to state data. Age Adjustment Uses 2000 Standard Population.

* Influenza not listed as leading cause of death for Eddy County

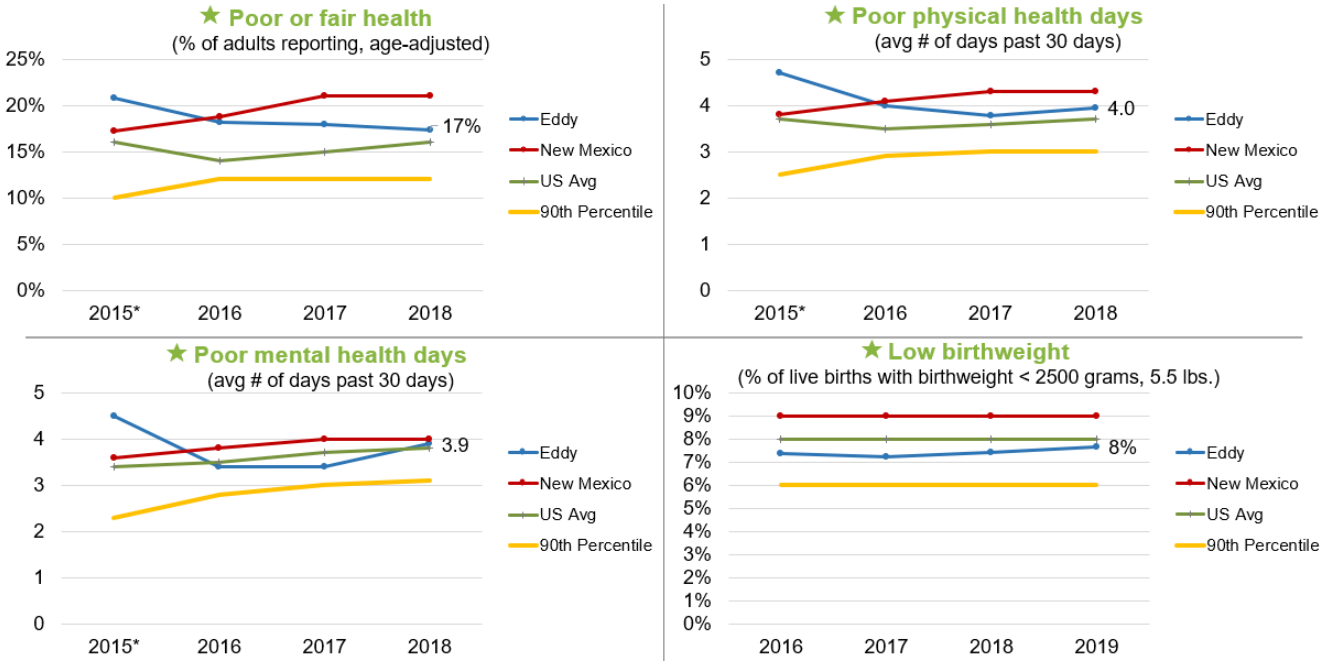
Red areas had death rates higher than NM. The leading causes of death in Eddy County were heart disease followed by cancer. Lagging as causes of death were accidents, respiratory diseases, Alzheimer's Diseases, cerebrovascular disease, and diabetes.



Photo Credit: carlsbadnewmexico.com

Quality of Life

Quality of life was measured by: % reporting fair or poor health, the average number of poor physical health days and poor mental health days in the past 30 days, and % of live births with birthweight less than 2500 grams, or 5.5 lbs. Eddy County ranked 2nd in New Mexico for quality of life.



Source: County Health Rankings; Behavioral Risk Factor Surveillance System (BRFSS) 2016 Source: County Health Rankings; National Center for Health Statistics – Natality files (2011-2017)

* Changes to the definition or methods of calculating the measure following 2015

Quality of Life STRENGTHS

- Eddy County had lower death rates for accidents and cerebrovascular diseases than NM.
- 17% of adults in Eddy County reported poor or fair health, lower than NM (21%), but higher than the U.S. (16%).
- Eddy County had an average of 4.0 poor physical health days in the past 30 days, lower than NM (4.3), but higher than the U.S. (3.7).
- Eddy County had an average of 3.9 poor mental health days in the past 30 days, lower than NM (4.0), but higher than the U.S. (3.8).

Quality of Life OPPORTUNITIES

- Eddy County had higher death rates for heart diseases, cancer, respiratory diseases, Alzheimer’s Disease, and diabetes.
- Eddy County had higher years of potential life lost prior to age 75 than NM and the U.S.

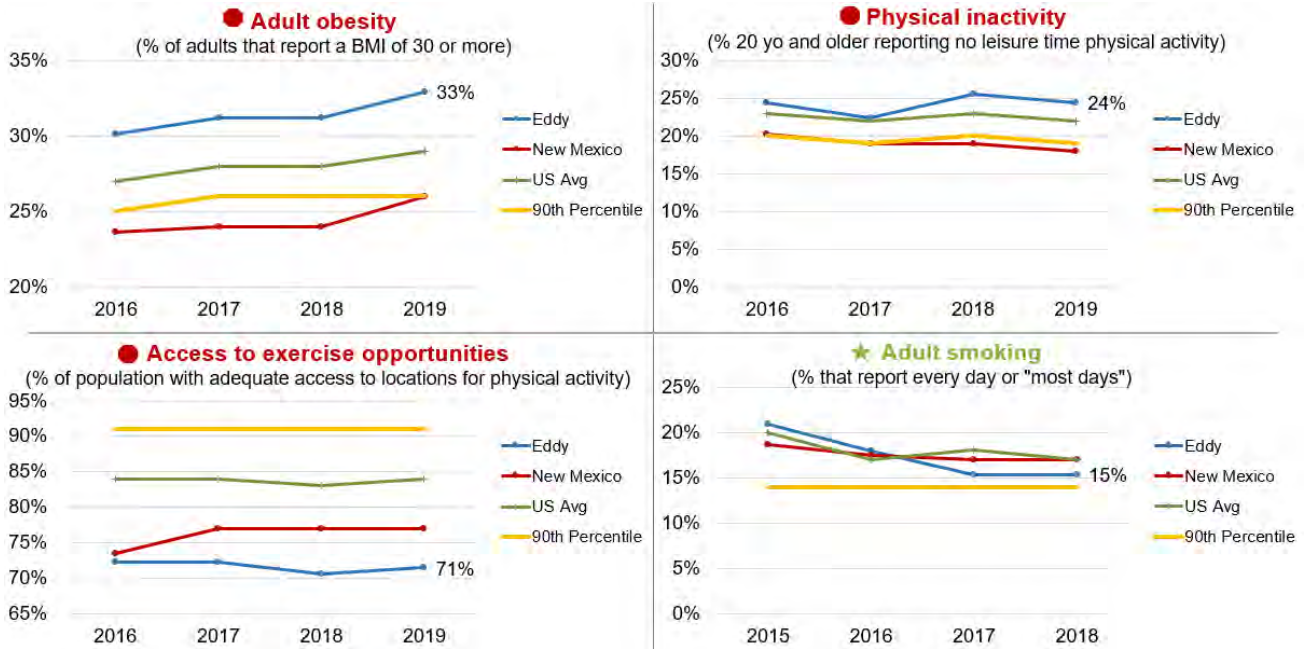


Health Factors or Determinants

Health factors or determinants rankings are comprised of measures related to health behaviors (30%), clinical care (20%), social & economic factors (40%), and physical environment (10%). Eddy County ranked 15th out of 32 New Mexico counties for health factors.

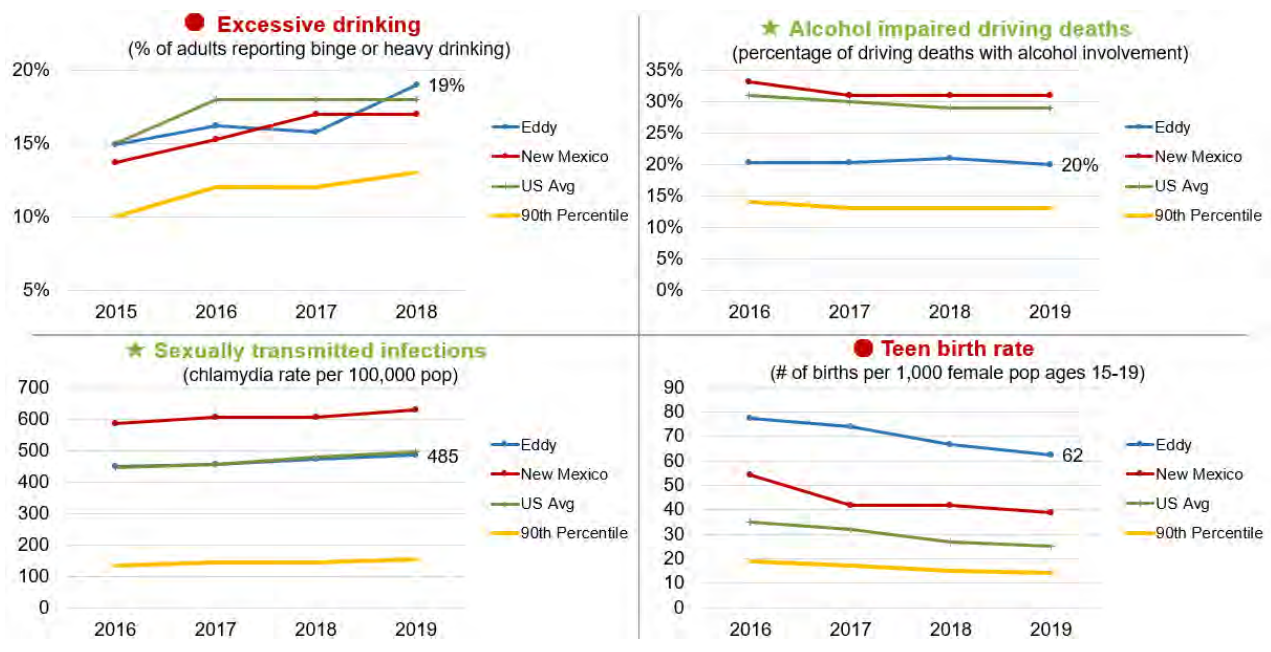
Health Behaviors

Health behaviors are made up of nine measures and account for 30% of the county rankings. Eddy County ranked 24th out of 32 counties in New Mexico.

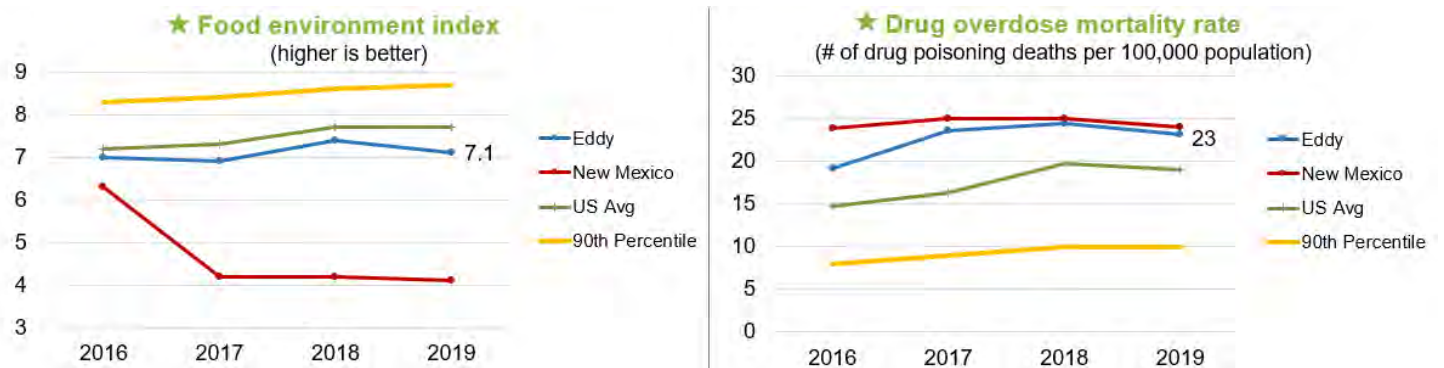


Source: Obesity, physical inactivity - County Health Rankings; CDC Diabetes Interactive Atlas based on responses to BRFSS and Census Bureau's population estimates program, 2015 Source: Access to exercise opportunities - County Health Rankings; ArcGIS Business Analyst, Delorme map data, Esri and U.S. Census Tigerline Files, 2010 and 2018. Measures the percentage of individuals in a County who live reasonably close to a location for physical activity, defined as parks or recreational facilities (local, state national parks, gyms, community centers, YMCAs, dance studios and pools based on SIC codes) Source: Smoking - County Health Rankings; Behavioral Risk Factor Surveillance System (BRFSS), 2016

Health Behaviors, Cont.



Source: Excessive drinking - County Health Rankings; Behavioral Risk Factor Surveillance System (BRFSS), 2016 Source: Alcohol-impaired driving deaths - County Health Rankings; Fatality Analysis Reporting System, 2013-2017 Source: STIs - County Health Rankings; National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2016 Source: Teen birth rate – County Health Rankings; National Center for Health Statistics – Natality files, 2011-2017



Source: Food environment: County Health Rankings; USDA Food Environment Atlas, Map the Meal Gap from Feeding America, 2015 & 2016; Drug overdose rate: CDC WONDER mortality data, 2015-2017

The food environment index is a comprised of % of the population with limited access to healthy foods and % of the population with food insecurity. Limited access to foods estimates the % of the population who are low income and do not live close to a grocery store. Food insecurity is the % of the population who did not have access to a reliable source of food during the past year.

Health Behaviors, Cont.

The Impact of E-Cigarettes on the Lung

Following excerpt taken from American Lung Association website, www.lung.org, “The Impact of E-Cigarettes on the Lung”

“In January 2018, the National Academies of Science, Engineering and Medicine¹ released a consensus study report that reviewed over 800 different studies. That report made clear: using e-cigarettes causes health risks. It concluded that e-cigarettes both contain and emit a number of potentially toxic substances. The Academies' report also states there is moderate evidence that youth who use e-cigarettes are at increased risk for cough and wheezing and an increase in asthma exacerbations. A study from the University of North Carolina found that the two primary ingredients found in e-cigarettes—propylene glycol and vegetable glycerin—are toxic to cells and that the more ingredients in an e-liquid, the greater the toxicity² E-cigarettes produce a number of dangerous chemicals including acetaldehyde, acrolein, and formaldehyde. These aldehydes can cause lung disease, as well as cardiovascular (heart) disease.³ E-cigarettes also contain acrolein, a herbicide primarily used to kill weeds. It can cause acute lung injury and COPD and may cause asthma and lung cancer.⁴”

1. NAM Report - <https://www.nap.edu/resource/24952/012318ecigaretteConclusionsbyEvidence.pdf>
2. Sassano MF, Davis ES, Keating JE, Zorn BT, Kochar TK, Wolfgang MC, et al. (2018) Evaluation of e-liquid toxicity using an open-source high-throughput screening assay. *PLoS Biol* 16(3): e2003904. <https://doi.org/10.1371/journal.pbio.2003904>
3. Ogunwale, Mumiye A et al. (2017) Aldehyde Detection in Electronic Cigarette Aerosols. *ACS omega* 2(3): 1207-1214. doi: 10.1021/acsomega.6b00489].
4. Bein K, Leikauf GD. (2011) Acrolein - a pulmonary hazard. *Mol Nutr Food Res* 55(9):1342-60. doi: 10.1002/mnfr.201100279.

Adverse Childhood Experiences (ACEs)

Abuse, neglect and household dysfunction have the effect of poor health behaviors as well as poor physical and mental health. The more ACEs a child has the higher risk they are for poor outcomes



Health Behaviors STRENGTHS

- Adult smoking was 15% in Eddy County, lower than NM and the U.S. both at 17%. However, given the dangers of smoking it should be lower.
 - Sexually transmitted infections measured by chlamydia rate per 100,000 population were lower in Eddy County (485) than NM (629), and the U.S. (497).
 - The food environment index was higher in Eddy County (7.1) than NM (4.1), but lower than the U.S. (7.7).
 - The number of drug poisoning deaths per 100,000 population were 23 in Eddy County, lower than NM at 24, but higher than the U.S. at 19.
-

Health Behaviors OPPORTUNITIES

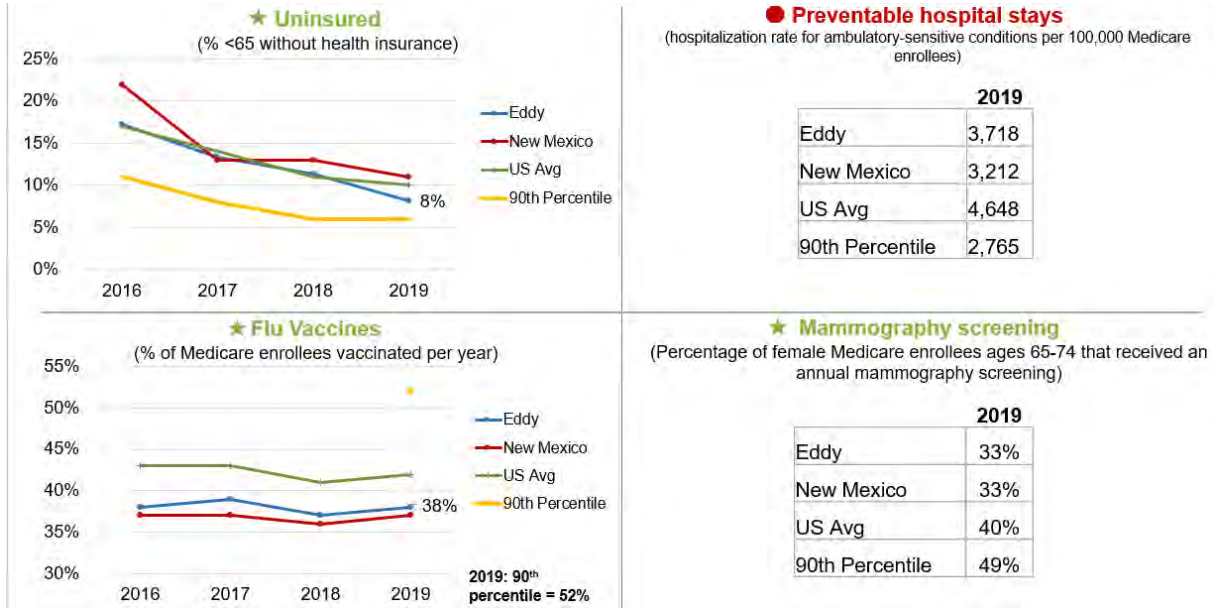
- Adult obesity in Eddy County at 33% was higher than NM (26%) and the U.S. (29%). Obesity in Eddy County, New Mexico and the U.S. continue to rise, putting people at increased risk of chronic diseases including: diabetes, kidney disease, joint problems, hypertension and heart disease. Obesity can cause complications in surgery and with anesthesia. It has been implicated in Alzheimer's and often leads to metabolic syndrome and type 2 diabetes.
 - Physical inactivity was higher in Eddy County at 24% than in NM at 18% and the U.S. at 22%.
 - Access to exercise opportunities in Eddy County was 71%, lower than NM at 77% and the U.S. at 84%.
 - 19% of Eddy County reported binge or heavy drinking, higher than NM (17%) and the U.S. (18%). Excessive drinking in Eddy County is trending upward.
 - The teen birth rate in Eddy County was 62 births per 1,000 female population ages 15-19, higher than NM at 39 births and the U.S. at 25 births. However, the trend has decreased since 2016.
-



Photo Credit: City of Carlsbad NM Government Facebook

Clinical Care

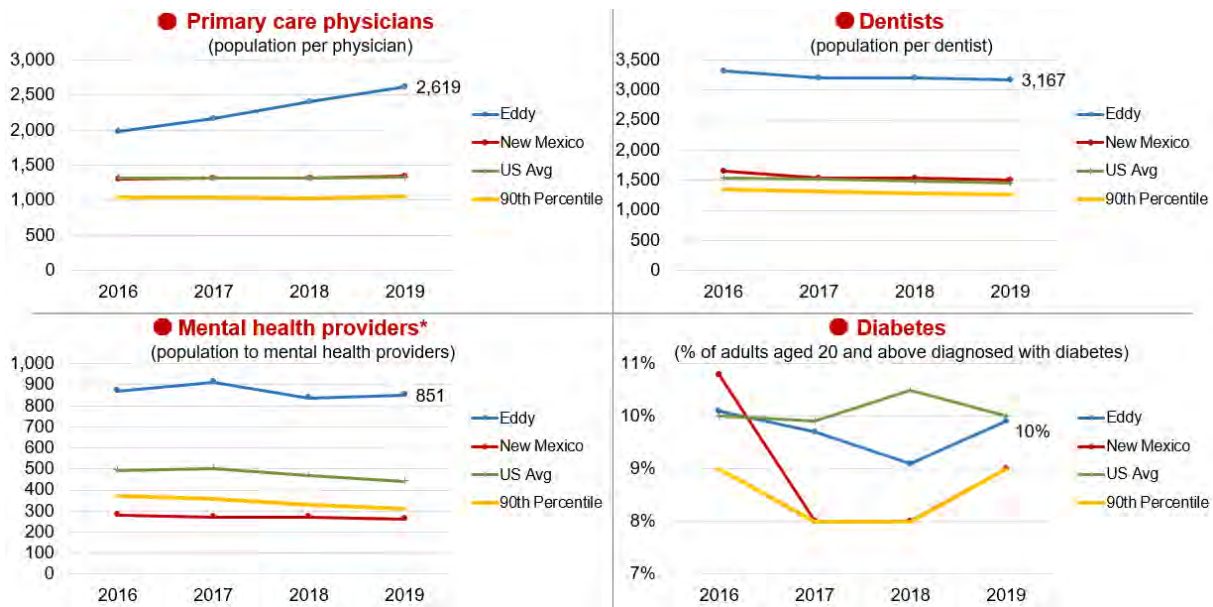
Clinical care ranking is made up of seven indicators, and account for 20% of the county rankings. Eddy County ranked 11th out of 32 New Mexico counties in clinical care.



Source: Uninsured - County Health Rankings; Small Area Health Insurance Estimates, 2016

Source: Preventable hospital stays, mammography screening – County Health Rankings, CMS Mapping Medicare Disparities Tool, 2016

Source: diabetic screening - County Health Rankings; Dartmouth Atlas of Health Care, Medicare claims data, 2016



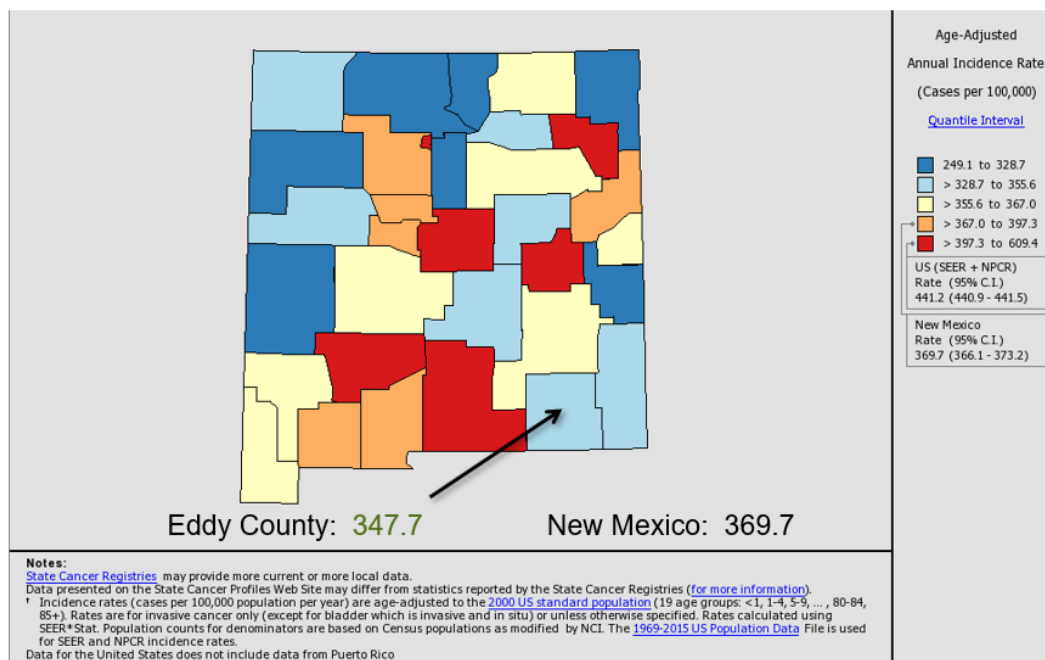
Source: Pop to PCP - County Health Rankings; Area Health Resource File/American Medical Association, 2016

Source: Pop to Dentists - County Health Rankings; Area Health Resource File/National Provider Identification file, 2017

Source: Pop to mental health provider (psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists and advanced practice nurses specializing in mental health) County Health Rankings; CMS, National Provider Identification, 2018

Clinical Care, cont.

Cancer Incidence Rates – NM Counties



Clinical Care STRENGTHS

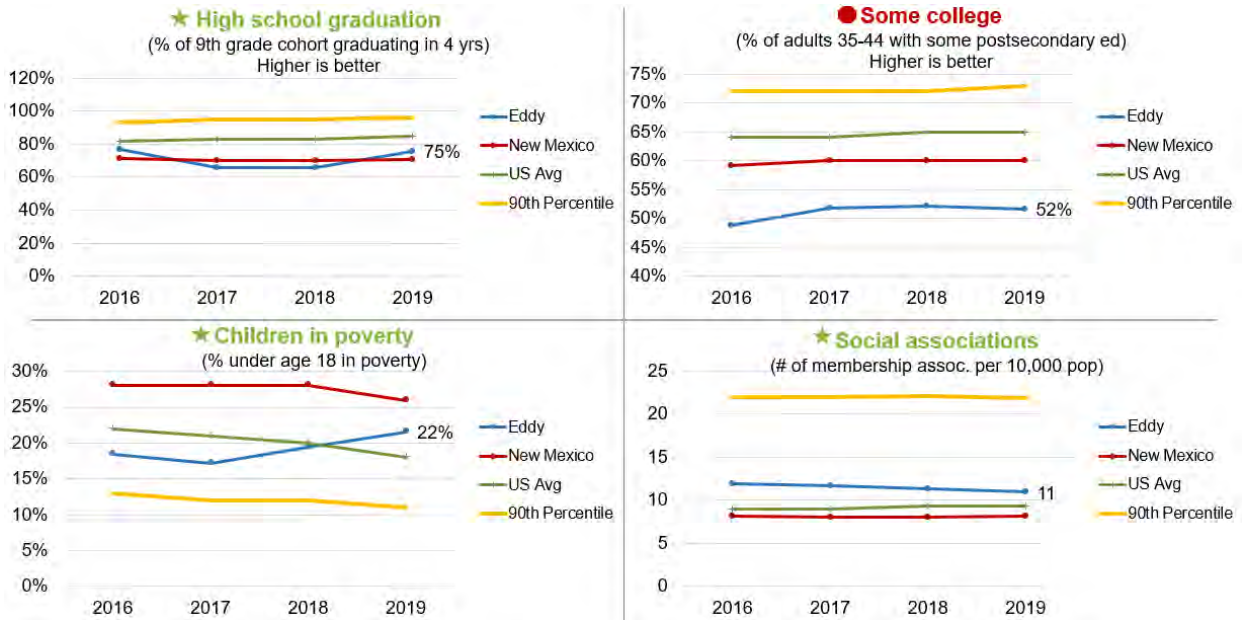
- The percent of population under sixty-five without health insurance was 8% in Eddy County, lower than NM (11%) and the U.S. (10%).
- The percent of Medicare enrollees with flu vaccines per year was higher in Eddy County at 38% than NM at 37%, but lower than the U.S. at 42%.
- Mammography screening was the same in Eddy County as NM at 33%.
- The cancer incidence rate in Eddy County was 347.7 per 100,000 cases, lower than NM at 369.7.

Clinical Care OPPORTUNITIES

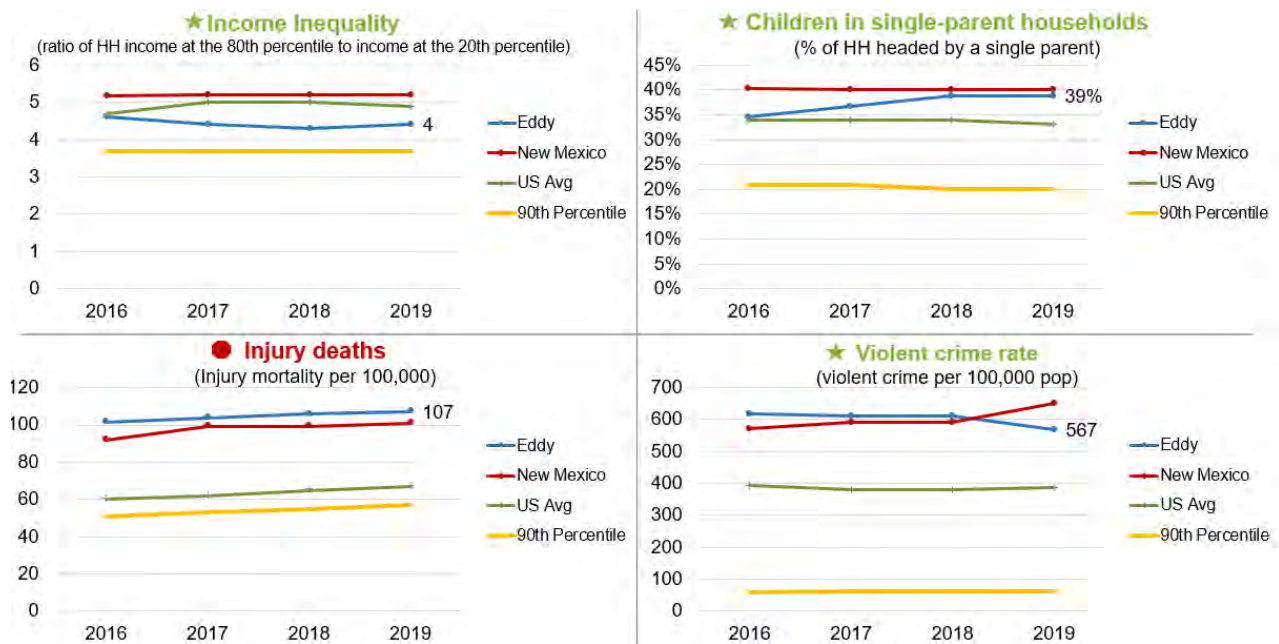
- The percentage of adults with diabetes in Eddy County at 10% was the same as the U.S. but higher than NM at 9%.
- Preventable hospital stays in Eddy County were 3,718 per 100,000 Medicare enrollees which was higher than NM (3,212), but lower than the U.S. (4,648).
- The population per primary care physician was higher in Eddy County than NM and the U.S. at 2,619.
- The population per dentists was higher in Eddy County than NM and the U.S. at 3,167.
- The population per mental health providers was higher in Eddy County than NM and the U.S. at 851.

Social & Economic Factors

Social and economic factors account for 40% of the county rankings. There are eight measures in the social and economic factors category. Eddy County ranked 9th out of 32 New Mexico counties.



Source: High School graduation – County Health Rankings; NM Dept of Public Instruction, 2016-2017
 Source: Some college - County Health Rankings; American Community Survey, 5-year estimates, 2013-2017.
 Source: Children in poverty - County Health Rankings; U.S. Census, Small Area Income and Poverty Estimates, 2017
 Source: Social associations - County Health Rankings; County Business Patterns, 2016



Source: Income inequality and children in single-parent households - County Health Rankings; American Community Survey, 5-year estimates 2013-2017.
 Source: Injury deaths – County Health Rankings; CDC WONDER mortality data, 2013-2017.
 Source: Violent crime - County Health Rankings; Uniform Crime Reporting – FBI, 2014 & 2016

Social & Economic Factors STRENGTHS

- The high school graduation rate was higher in Eddy County at 75% than NM at 71% but lower than the U.S. at 85%.
- The percentage of children in poverty was lower for Eddy County (22%) than NM (26%), but higher than the U.S. (18%).
- Social associations were higher in Eddy County at 11 memberships per 10,000 population than NM at 8 and the U.S. at 9 memberships. Associations include membership organizations such as civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, religious organizations, political organizations, labor organizations, business organizations, and professional organizations.
- The violent crime rate in Eddy County was 567 violent crimes per 100,000 population, lower than NM at 650, but higher than the U.S. at 386.
- Income inequality represents the ratio of house hold income at the 80th percentile compared to income at the 20th percentile. Income inequality was lower in Eddy County at 4 than in NM and the U.S. both at 5.
- The percentage of children in single-parent households was 39% in Eddy County, lower than NM at 40%, but higher than the U.S. at 33%.
- The poverty estimates for 2017 has poverty in Eddy County at 16.9%, lower than NM (19.0%) and the U.S. (13.4%).
- The median household income in Eddy County was lower than NM at \$51,108.

Social & Economic Factors OPPORTUNITIES

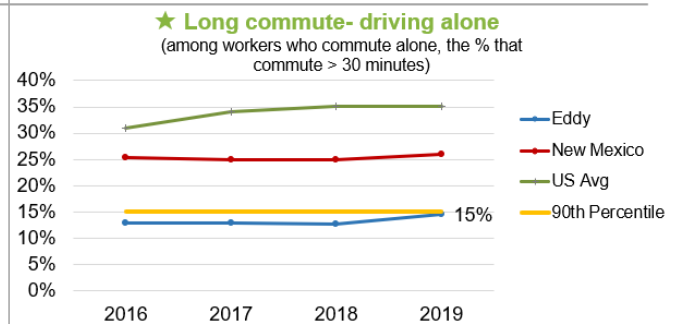
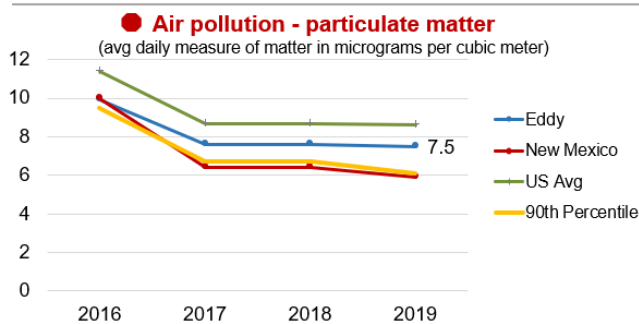
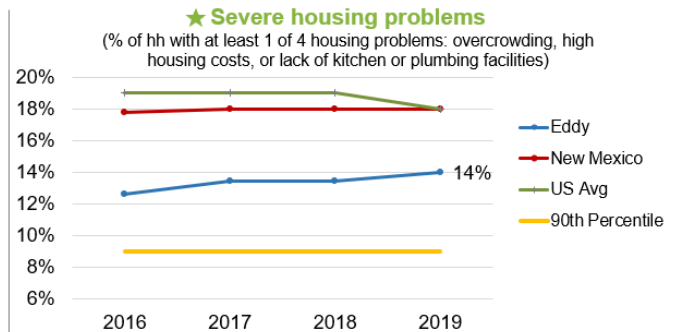
- 52% of Eddy County adults had some postsecondary education which was lower than NM (60%) and the U.S. (65%).
- Injury deaths were higher in Eddy County at 107 per 100,000 population than NM and the U.S.



Photo Credit: Artesia General Hospital Facebook

Physical Environment

Physical environment contains four measures in the category and accounts for 10% of the County rankings. Eddy County ranked 30th out of 32 New Mexico counties in physical environment.



Source: Drinking water violations – County Health Rankings; EPA, Safe Drinking Water Information System, 2017. Source: Severe housing problems – County Health Rankings; HUD Comprehensive Housing Affordability Strategy data, 2011-2015. Source: Driving alone to work and long commute – County Health Rankings: American Community Survey, 5-year estimates, 2013-2017. Source: Air pollution – County Health Rankings: CDC National Environmental Health Tracking Network, 2014

Physical Environment STRENGTHS

- Severe housing problems in Eddy County were 14%, lower than NM and the U.S. both at 18%.
- 15% of workers in Eddy County who commute alone commute over 30 minutes which was lower NM at 26% and the same as the top 10% of counties in the U.S.

Physical Environment OPPORTUNITIES

- Eddy County had drinking water violations.
- Air pollution as measured by the average daily measure of matter in micrograms per cubic meter was 7.5 in Eddy County, higher than NM at 6, but lower than the U.S. at 9.

There were Four Broad Themes that Emerged in this Process:

- Eddy County needs to continue to create a “Culture of Health” which permeates throughout the towns, employers, churches, and community organizations to engender commitment to health improvement.
 - There is a direct relationship between health outcomes and affluence (income and education). Those with the lowest income and education generally have the poorest health outcomes.
 - While any given measure may show an overall good picture of community health, subgroups such as the lower income census tracts may experience lower health status measures.
 - It will take a partnership with a wide range of organizations and citizens pooling resources to meaningfully impact the health of the community. However, Eddy County has many assets to improve health.
-



Photo Credit: Lake Carlsbad; carlsbadnewmexico.com

Significant Community Health Needs Summary

Significant community health issues came to light throughout the CHNA process.

Community Survey

- Mental health
- Access to care – more primary care and specialists, more walk-in availability
- Substance use disorder
- Chronic diseases
- More healthy eating, active living options
- Obesity
- Affordable health insurance
- Affordable healthcare

Secondary Data

- Smoking
- Obesity
- Physical inactivity
- Low rate of high school graduation
- High violent crime rate
- High air pollution (particulate matter)
- Access to primary care, dentists and mental health providers
- Excessive drinking
- Teen birth rate
- Injury deaths

2016 CHNA

- Access to care
- Chronic diseases
- Obesity
- Smoking
- Mental health
- Substance abuse

Community Health Prioritized Health Needs

Prioritization of Health Needs

Prioritization Criteria

Magnitude / scale of the problem	How big is the problem? How many people does the problem affect, either actually or potentially? In terms of human impact, how does it compare to other health issues?
Seriousness of Consequences	What degree of disability or premature death occurs because of this problem? What would happen if the issue were not made a priority? What is the level of burden on the community (economic, social or other)?
Feasibility	Is the problem preventable? How much change can be made? What is the community's capacity to address it? Are there available resources to address it sustainably? What's already being done, and is it working? What are the community's intrinsic barriers and how big are they to overcome?

Most Significant Community Health Needs 2019

Using the above criteria, the hospital leadership team prioritized the most significant community health needs based on the information collected in the CHNA.

1. Mental health
2. Access to care
3. Chronic diseases

Impact of 2016 CHNA and Implementation Plan

Impact

Artesia General Hospital selected five of six significant health needs for implementation: Access to care, chronic diseases, obesity, smoking and mental health. Due to lack of expertise and resources, they did not select substance abuse.

The hospital created two goals:

1. Continue physician recruitment in target specialties and service lines to improve access to care and
2. In conjunction with schools, churches, and local agencies hold prevention awareness and public education that may include, but not limited to the following:
 - Smoking cessation programs
 - Nutritional education
 - Diabetic education
 - Behavioral health education
 - Exercise and physical fitness

The impact over the last three years is outlined below

Access to care and chronic diseases:

- Extended Hours of Operation from 7 a.m. – 7 p.m. – Memorial Family Practice/Radiology/Rehab
- Added 6 new providers to Memorial Family Practice – Artesia
- Added 2 new FP providers in Carlsbad
- Added a Multi-Specialty Office in Carlsbad – 6 providers rotating for convenience of patients
- As part of Multi-Specialty Office – Lab Services
- Added 1 additional Orthopedic Surgeon and 2 advance practice clinicians to Orthopedics
- Added 1 additional General Surgeon
- Built a Wound Care Center with Hyperbaric Chambers (2) added 1 Wound Care NP/Certified Hyperbaric Technician
- Added Endocrinologist
- Diabetic Educator/Insulin Pump Trainer as part of Endocrinology Center
- Added 3rd Cardiologist
- Added Pediatrician
- Added Neurologist
- Added Pain Management Physician
- Added Urogynecologist
- Added a Behavioral Counselor that partnered with the Artesia School District in Lunch and Learns
- Added Sleep Center



Impact of 2016 CHNA and Implementation Plan, cont.

Impact

Relative to prevention awareness and public education, Artesia General Hospital provided:

- Public CPR Training
- Held and participated in Healthfairs/Public Education for healthy eating, diabetic education, bone and joint (arthritis) men's urological issues
- Annually offered free flu shots to the public in conjunction with a food drive to support food banks
- Offered free "FIT" Colon Cancer screenings
- Alzheimer's support group
- Purchased additional exercise equipment for local park
- Quarterly Blood Drive
- Participated in the State of NM Smoking Cessation Program advertised through our clinics
- Offered Orbera Weight Loss (since discontinued)
- Developed Clinical Rotations with Colleges/Universities/Medical Schools i.e. – Texas Tech Surgical Residents; University of Texas Health Sciences at El Paso – ER Residents; Burrell College of Osteopathic Medicine; ** see awards and accreditations
- Undertook population health management initiatives with ACO – chronic care managers

Artesia General Hospital strives to continually improve access and quality care in the community. Below are some achievements and awards Artesia has received.

Artesia General Hospital

- NIAHO® Hospital Accreditation Program, 2019-2022
- DNV GL Healthcare
- Recognized for providing a high standard of quality, management and patient safety in compliance with the Medicare Conditions for Participation of Hospitals.

Most Wired – Small and Rural, 2017

- American Hospital Association's (AHA) Health Forum
- Recognized as an industry leader in healthcare information technology for creating more ways for patients to access healthcare services and capture health information.

Stage 6 on the EMR Adoption ModelSM (EMRAM)

- HIMSS Analytics
- Recognized as being among the top third of U.S. hospitals for achieving significant advancements in our electronic medical record (EMR) systems.

Diabetes Center

- Diabetes Education Accreditation Program (DEAP), 2019-2020
- American Association of Diabetes Educators
- Recertified for meeting national standards of quality for Diabetes Education and Training— including staff, individualization of curriculum and ongoing support.



Impact of 2016 CHNA and Implementation Plan, cont.

Impact

Laboratory Services

- College of American Pathologists
- Recognized for following the strictest standards of accuracy, technical process and safety in lab testing. We're proud to be the only hospital in Southeastern New Mexico that has received CAP accreditation.

American Medical Technologists (AMT)

- American Society for Clinical Pathology (ASCP)
- American Society for Clinical Pathology Microbiology (ASCP-MICM)
- Health Employee Worker (HEW)
- Our pathologists, pathologist assistants and laboratory professionals are part of these national member organizations.

Clinical Laboratory Improvement Amendments (CLIA)

- Centers for Medicare & Medicaid Services (CMS)
- Ensures quality laboratory testing matches federal standards applicable to all U.S. facilities or sites that test human specimens for health assessment or to diagnose, prevent, or treat disease.

Radiology

- American College of Radiology Accredited Facility
- Recognized as a top radiology facility for meeting requirements for equipment, medical personnel and quality assurance. Our Radiology department is accredited with special recognition for Computed Tomography (CT), Mammography, MRI and Ultrasound.

Intersocietal Accreditation Commission

- Recognized for safety, patient care and high-quality facilities and equipment in the areas of Nuclear Medicine and Nuclear Cardiology.

Pink Ribbon Facility for Breast Health

- Hologic
- Recognized as a digital imaging center that provides excellence in breast health, as well as exceptional commitment and support for the women of our community.



Community Asset Inventory

Community Asset Inventory

The separate document contains a list of community assets and resources that can help improve the health of the community and assist with implementation of the plan accompanies this document.



Photo Credit: Artesia General Hospital Facebook

Community Health Needs Assessment for Eddy County

Completed by Artesia General Hospital in partnership with:

Stratasan

