Community Health Needs Assessment 2019

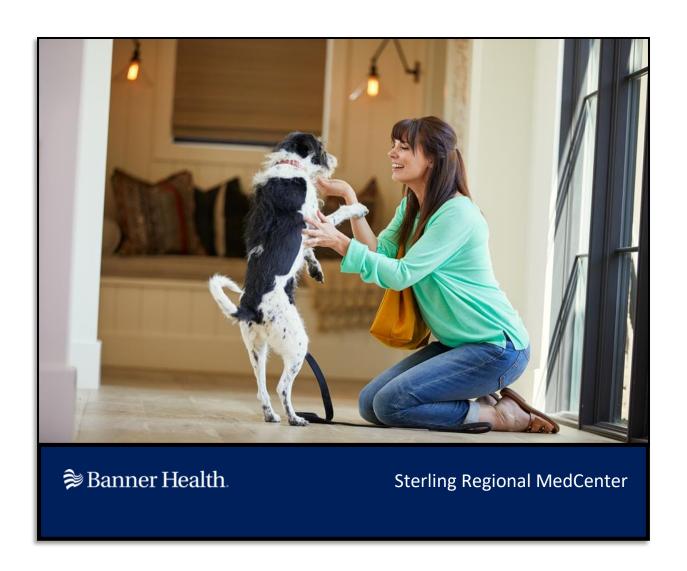




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EXECUTIVE SUMMARY

The Patient Protection and Affordable Care Act (ACA) has requirements that nonprofit hospitals must satisfy to maintain their tax-exempt status under section 501(c)(3) of the Internal Revenue Code. One such requirement added by the ACA, Section 501(r) of the Code, requires nonprofit hospitals to conduct a Community Health Needs Assessment (CHNA) and adopt implementation strategies to address the identified needs for the community at least once every three years. As part of the CHNA, each hospital is required to collect input from individuals in the community, including public health experts as well as residents, representatives or leaders of low-income, minority, and medically underserved populations.

As part of the process for evaluating community need, a Banner Health CHNA Steering Committee was formed. This committee, which was commissioned to guide the CHNA process, was comprised of professionals from a variety of disciplines across the organization. This steering committee has provided guidance in all aspects of the CHNA process, including development of the process, prioritization of the significant health needs identified and development of the implementation strategies, anticipated outcomes, and related measures. A list of the steering committee members can be found in Appendix B.

Beginning in early 2019, Banner Health conducted an assessment for the health needs of residents of Sterling and Colorado as well as those in its primary service area (PSA). For the purposes of this report, the primary service area is defined as the area where the top 75 percent of patients for the respective facility originate from. The CHNA process undertaken and described in this report was conducted in compliance with federal requirements.

Headquartered in Phoenix, Arizona, Banner Health is one of the nation's largest nonprofit health care systems and is guided by our nonprofit mission: "Making health care easier, so life can be better." This mission serves as the cornerstone of operations at our 28 acute care facilities located in small and large, rural and urban communities spanning 6 western states. Collectively, these facilities serve an incredibly diverse patient population and provide more than \$113M annually in charity care — treatment without expectation of being paid. As a nonprofit organization, we reinvest revenues to add new hospital beds, enhance patient care and support services, expand treatment technologies, and maintain equipment and facilities. Furthermore, we subsidize medical education costs for hundreds of physicians in our residency training programs in Phoenix and Tucson, Arizona and Greeley, Colorado.

With organizational oversight from a 13-member board of directors and guidance from both clinical and non-clinical system and facility leaders, our more than 50,000 employees work tirelessly to provide excellent care to patients in Banner Health hospitals, urgent cares, clinics, surgery centers, home care, and other care settings.

While we have the experience and expertise to provide primary care, hospital care, outpatient services, imaging centers, rehabilitation services, long-term acute care and home care to patients facing virtually any health conditions, we also provide an array of core services and specialized services. Some of our core services include: cancer care, emergency care, heart care, maternity services, neurosciences, orthopedics,



pediatrics and surgical care. Specialized services include behavioral health, burn care, high-risk obstetrics, Level 1 Trauma care, organ and bone marrow transplantation and medical toxicology. We also participate in a multitude of local, national and global research initiatives, including those spearheaded by researchers at our three Banner – University Medical Centers, Banner Alzheimer's Institute, and Banner Sun Health Research Institute.

Ultimately, our unwavering commitment to the health and well-being of our communities has earned accolades from an array of industry organizations, including distinction as a Top 5 Large Health System three out of the five past years by Truven Health Analytics and one of the nation's Top 10 Integrated Health Systems according to SDI and Modern Healthcare Magazine. Banner Alzheimer's Institute has also garnered international recognition for its groundbreaking Alzheimer's Prevention Initiative, brain imaging research and patient care programs. Further, Banner Health, which is the second largest private employer in both Arizona and Northern Colorado, continues to be recognized as one of the "Best Places to Work" by Becker's Hospital Review.

In the spirit of the organization's continued commitment to providing excellent patient care, Banner Health conducted a thorough, system wide Community Health Needs Assessment (CHNA) within established guidelines for each of its hospital and healthcare facilities with the following goals at the heart of the endeavor:

- Effectively define the current community programs and services provided by the facility.
- Assess the total impact of existing programs and services on the community.
- Identify the current health needs of the surrounding population.
- Determine any health needs that are not being met by those programs and services, and / or ways to increase access to needed services.
- Provide a plan for future programs and services that will meet and / or continue to meet the community's needs.

The CHNA results have been presented to the leadership team and board members to ensure alignment with the system-wide priorities and long-term strategic plan. The CHNA process facilitates an ongoing focus on collaboration with governmental, nonprofit and other health-related organizations to ensure that members of the community will have greater access to needed health care resources.

Banner Health has a strong history of dedication to community and of providing care to underserved populations. The CHNA process continues to help identify additional opportunities to better care for populations within the community who have special and / or unmet needs; this has only strengthened our commitment to improving the health of the communities we serve.

For Sterling Regional MedCenter's leadership team, this has resulted in an ongoing commitment to continue working closely with community and healthcare leaders who have provided solid insight into the specific and unique needs of the community since the previous cycle. In addition, after accomplishing measurable changes from the actions taken in the previous CHNAs, we have an improved foundation to



work from. United in the goal of ensuring that community health needs are met now, and, in the future, these leaders will remain involved in ongoing efforts to continuously assess health needs and subsequent services.



INTRODUCTION

PURPOSE OF THE CHNA REPORT

The purpose of this CHNA is to identify and prioritize significant health needs of the community served by Sterling Regional MedCenter. The priorities identified in this report help to guide the hospital's ongoing community health improvement programs and community benefit activities. This CHNA report meets requirements of the ACA that nonprofit hospitals conduct a CHNA at least once every three years.

Sterling Regional MedCenter is dedicated to enhancing the health of the communities it serves. The findings from this CHNA report serve as a foundation for understanding the health needs found in the community and will inform the implementation strategies selected. This report complies with federal tax requirements set forth in Internal Revenue Code Section 501(r) requiring hospital facilities owned and operated by an organization described in Internal Revenue Code Section 501(c)(3) to conduct a CHNA at least once every three years. Regarding the CHNA, the ACA specifically requires nonprofit hospitals to:

- 1. Collect and take into account input from public health experts, community leaders, and representatives of high need populations this includes minority groups, low-income individuals, medically underserved populations, and those with chronic conditions;
- 2. Identify and prioritize community health needs;
- 3. Document a separate CHNA for each individual hospital; and,
- 4. Make the CHNA report widely available to the public. In addition, each nonprofit hospital must adopt an implementation strategy that describes how the hospital will address the identified significant community health needs.

This is the third cycle for Banner Health, with the second cycle completed in 2016. Feedback on the previous CHNA and Implementation Strategy will be addressed later in the report.

This CHNA report was adopted by the Banner Health's board on December 6, 2019.

This report is widely available to the public on the hospital's website bannerhealth.com, and a paper copy is available for inspection upon request at CHNA.CommunityFeedback@bannerhealth.com

Written comments on this report can be submitted by email to: CHNA.CommunityFeedback@bannerhealth.com

ABOUT STERLING REGIONAL MEDCENTER

Sterling Regional MedCenter is a 25-bed licensed hospital located within northeastern Colorado, in Logan County. The hospital was opened in 1938 to serve the community and has never strayed from the community focus, constantly striving to live the Banner Health mission of "Making health care easier, so life can be better".



Sterling Regional MedCenter is committed to providing a wide range of quality care, based on the needs of the community, including the following services:

- 24-hour Emergency Department
- Level III Trauma Care
- Imaging Services
 - Digital x-ray; 64-Slice CT; PET / CT; 1.5 Tesla MRI; Nuclear Med; Bone Density; 3D
 Mammography; Ultrasound; Echocardiogram
- Inpatient, Observation, and Outpatient Care
 - 24-hour Hospitalist coverage
 - o Dedicated Intensive Care Unit
 - Labor Delivery Recovery Post-Partum
- Rehab Therapy (Physical, Occupational, Speech, Oncology)
- Cardiac and Pulmonary Rehab
- In-Lab / In-Home Sleep Diagnostics
- Perioperative Services
 - General Surgery; Orthopedic and Total Joint Replacement; GYN; ENT; Endoscopy
- Cardiology
- David Walsh Cancer Center
 - Radiation Oncology, Medical Oncology, and Infusion Therapy
- Laboratory Services
 - Hematology, Microbiology, Blood Bank, Pathology
- Family Practice Residency "Rural Training Track" (2nd and 3rd Year Residents)
- Onsite Ground Transportation for transfer to higher level of care
- Two dedicated Family Practice "rural health designated clinics", and one Specialty Clinic (for Surgery, Orthopedics, Women's Health, Cardiology, and visiting specialists)

The staff of 250 physicians and 46 volunteers provides personalized care complemented by leading technology from Banner Health and resources directed at preventing, diagnosing, and treating illnesses. On an annual basis, Sterling Regional MedCenter's health professionals render care to more than – 30,000 outpatients, about 5,000 inpatients, and approximately 10,000 patients in the Emergency Department (ED). The staff also welcomes an average of 220 newborns into the world each year.

Sterling Regional MedCenter is also part of the Banner TeleICU program, where specially trained physicians and nurses back up the bedside ICU team and monitor ICU patient information 24-hours a day, seven days a week.

The David Walsh Cancer Center greatly enhances Banner Health's ability to provide excellent care to its communities by providing comprehensive cancer care (radiation oncology, medical oncology, diagnostics) throughout Colorado's northeast corridor.



Sterling Regional MedCenter primarily serves the cities of Sterling and Akron, as well as Logan County leveraging the latest medical technologies to ensure safer, better care for patients. Physicians and clinical personnel document patient data in an electronic medical record rated at the highest level of implementation and adaptation by HIMSS Analytics, a wholly-owned nonprofit subsidiary of the Healthcare Information and Management Systems Society.

To help meet the needs of uninsured and underinsured community members, Sterling Regional MedCenter follows Banner Health's process and policies for financial assistance, including payment arrangements. A strong relationship with the community is a very important consideration for Banner Health. Giving back to the people we serve through financial assistance is just one example of our commitment. In 2018, Sterling Regional reported \$2,350,000 in Charity Care for the community while we wrote off an additional \$1,339,000 in bad debt on uncollectable money owed to the facility.

DEFINITION OF COMMUNITY

Sterling Regional MedCenter is in the northeast corner of Colorado in the South Platte River Valley. The area boomed during the years the Overland Trail was heavily traveled (1858-1869) but later, many communities along the trail became ghost towns. Ruins and old foundations still exist throughout this area, which can best be seen along county roads and in the nearby prairies. Interstate 76 as well as Highways 6, 61, and 138 connect Sterling to surrounding areas. Colorado Highway 14 West which is Sterling's Main Street, is the Gateway to Pawnee National Grasslands, an alternative route to the Rocky Mountain National Park, and provides easy access to Fort Collins (Colorado, 2016).

Logan County's original development as an agricultural community has gifted it with a heritage rich in "small town" atmosphere with a beautiful downtown and friendly neighbor. The modern infrastructure includes rebuilt roads and bridges following the 2013 flood, Sterling has a new water treatment plan which came online in 2014, and broadband internet. Northeastern Junior College — a premier two-year residential college — has outstanding educational programs, national-ranked sports teams and enhances the community's cultural activities through its art galleries, theater and music offerings (Colorado 2016).

DESCRIPTION OF COMMUNITY

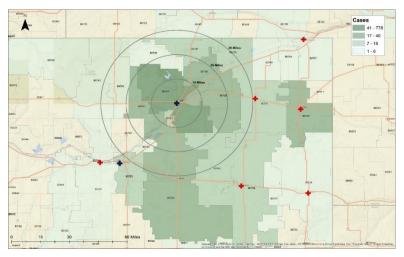
Primary Service Area

The Primary Service Area (PSA) is determined based on where the top 75 percent of patients for the respective facility originate from. In Table 1 the top ~75 percent of the Sterling Regional MedCenter PSA is listed.



Table 1. Primary Service Area							
Zip	Zip County % Cumulative						
80751	Logan County	69.9%	69.9%				
80720	Washington County	3.6%	73.5%				
80741	Logan County	3.3%	76.8%				

Source: McKesson, 2018



Source: Banner Strategy and Planning

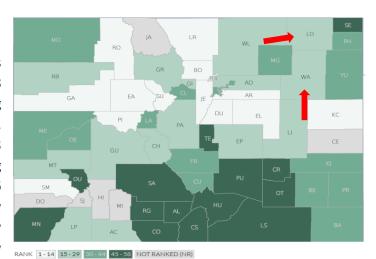
Hospital Inpatient Discharges and Map

Sterling Regional MedCenter's Inpatient Origin by Zip Code data informs the primary service area. For the 2019 CHNA report the data derives from the 2018 calendar year and is determined by the top 3 contiguous quartiles, equaling 75 percent of total discharges. The City of Sterling accounted for 70 percent of Sterling Regional MedCenter's inpatient discharges in 2015. An

additional 7 percent of discharges came from Akron and Merino combined. This is known as the Primary Service Area (PSA).

Health Outcomes Ranking and Map

2019 Colorado County Health Outcomes Ranking: Logan County ranked #34 of 58 participating counties, a decrease in ranking compared to the 2016 outcomes (#29 of 58). Washington county ranked #26 of 58 participating counties, a decrease in ranking compared to the 2016 health outcomes (#16 or 58). The health outcomes determine how healthy a county is by measuring how people feel while they are alive and how long they live. Health outcomes are influenced by health factors, which are thus



Source: County Health Rankings and Roadmaps, 2018

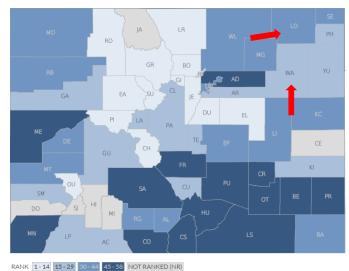


influenced by programs and policies in place at the local, state, and federal levels. Health outcomes indicate whether health improvement plans are working. Listed below are the two areas that the study looked at when determining health outcomes:

- Length of Life: measuring premature death and life expectancy.
- Quality of Life: measures of low birthweight and those who rated their physical and mental health as poor. (County Health Rankings, 2019)

Health Factors Ranking and Map

2019 Colorado County Health Factors Ranking: Logan County ranked #42 of 58 participating counties, a decrease in ranking compared to the 2016 health factors (#35 of 58). Washington County ranked #21 of 58 participating counties, a slight decrease in ranking compared to the 2016 health factors (#19 of 58). Health factors represent things that can be modified to improve the length and quality of life and are predictors for how healthy communities can be in the future. While there are many factors, from education to the environment in which a person lives, this study focused on the following four factors:



Source: County Health Rankings and Roadmaps, 2018

- Health Behaviors: rates of alcohol and drug abuse, diet and exercise, sexual activity, and tobaccouse.
- Clinical Care: showing the details of access to quality of health care.
- Social and Economic Factors: rating education, employment, income, family and social support, and community safety.
- Physical Environment: measuring air and water quality, as well as housing and transit. (County Health Rankings, 2019)

COMMUNITY DEMOGRAPHICS

Table 2 provides the specific age, gender distribution, and data on key socio-economic drivers of health status of the population in the Sterling Regional MedCenter primary service area compared to Logan County and the state of Colorado.



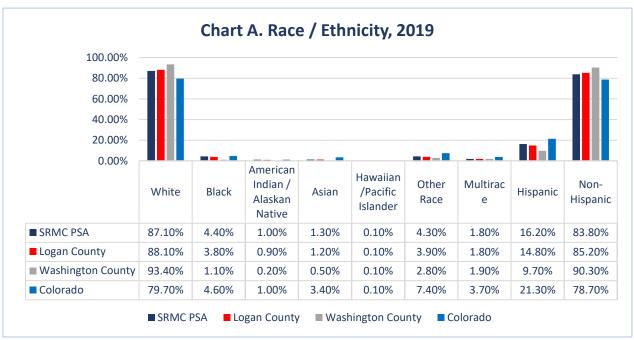
Table 2. Community Demographics					
	Sterling Regional MedCenter PSA	Logan County	Washington County	Colorado	
Population: estimated 2018	19,830	23,249	5,222	5,640,545	
Gender					
 Male 	55.7%	55.1%	52.2%	50.3%	
 Female 	44.3%	44.9%	47.8%	49.7%	
Age					
 0 to 9 years 	10.3%	10.4%	11.4%	12.2%	
 10 to 19 years 	12.2%	12.3%	12.8%	12.8%	
 20 to 34 years 	24.1%	22.6%	17.3%	21.8%	
 35 to 64 years 	36.3%	36.9%	37.5%	38.9%	
 65 to 84 years 	14.2%	14.8%	18.35	12.6%	
 85 years and over 	2.9%	2.9%	3.4%	1.6%	
Social & Economic Factors					
No HS diploma	10.3%	10.1%	8.6%	8.5%	
 Median Household Income 	\$44,300	\$46,300	\$51,200	\$72,400	
 Unemployment 	1.8%	1.9%	0.9%	2.2%	

Source: Advisory Board 2019



Race / Ethnicity (PSA, County and State)

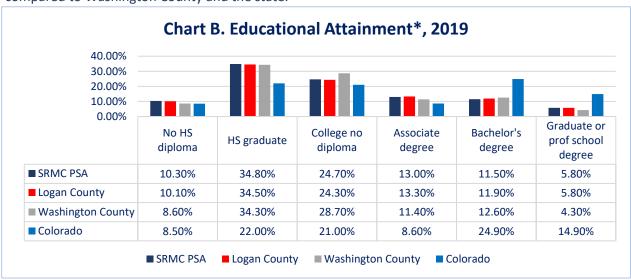
The PSA has a larger population of White (87%) compared to Colorado. The prevalence of the population being Hispanic is higher in Colorado overall than both counties and the PSA.



Sources: Crimson, Advisory Board, 2019

Educational Attainment (PSA, County and State)

The PSA and Logan County have higher rates of the population 25 and over not receiving HS diplomas for compared to Washington County and the state.

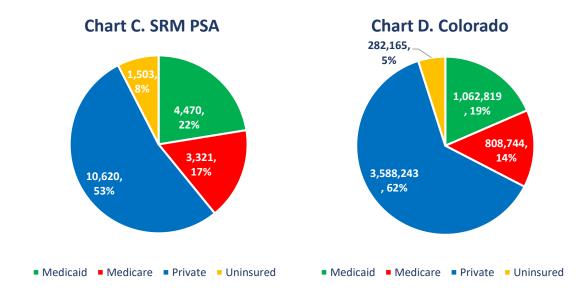


*Over the Age of 25; Sources: Crimson, Advisory Board, 2019



<u>Insurance Coverage Estimates for Primary Service Area and State of Colorado Population</u>

Chart C and D indicate the PSA has a higher percentage of the community on Medicaid and Medicare compared to the state. In the PSA a higher percentage of the population is uninsured (8 percent), compared to that of the state (5 percent). Overall the majority the population for both the PSA and state are insured Privately.



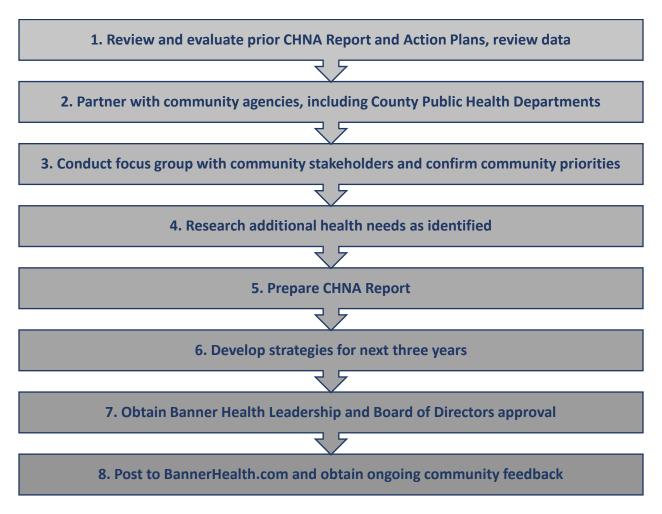
Sources: 2017-18 Colorado State Data, Truven



PROCESS AND METHODS USED TO CONDUCT THE CHNA

Sterling Regional MedCenter's process for conducting Community Health Needs Assessments (CHNAs) involves a leveraged multi-phased approach to understanding gaps in services provided to its community, as well as existing community resources. A focused approach to understanding unmet needs especially for those within underserved, uninsured and minority populations included a detailed data analysis of national, state and local data sources, as well as obtaining input from leaders within the community.

Sterling Regional MedCenter's eight step process, based on experience from previous CHNA cycles, is demonstrated below. The process involves continuous review and evaluation of our CHNAs from previous cycles, through both the action plans and reports developed. Through each cycle Banner Health and Sterling Regional MedCenter has been able to provide consistent data to monitor population trends.





BANNER HEALTH CHNA ORGANIZATIONAL STRUCTURE



PRIMARY DATA / SOURCES

Primary data, or new data, consists of data that is obtained via direct means. For Banner, by providing health care to patients, primary data is created by providing that service, such as inpatient / outpatient counts, visit cost, etc. For the CHNA report, primary data was also collected directly from the community, through stakeholder meetings.

The primary data for the Community Health Needs Assessment originated from Cerner (Banner's Electronic Medical Record) and McKesson (Banner's Cost Accounting / Decision Support Tool). These data sources were used to identify the health services currently being accessed by the community at Banner locations and provides indicators for diagnosis-based health needs of our community. This data was also used to identify the primary services areas and inform the Steering Committee (Appendix C) and facility champions on what the next steps of research and focus group facilitation needed to entail.

SECONDARY DATA / SOURCES

Secondary data includes publicly available health statistics and demographic data. With input from stakeholders, champions, and the steering committee, additional health indicators of special interest were investigated. Comparisons of data sources were made to the county, state, and PSA if possible.

Data analytics were employed to identify demographics, socioeconomic factors, and health trends in the PSA, county, and state. Data reviewed included information around demographics, population growth, health insurance coverage, hospital services utilization, primary and chronic health concerns, risk factors and existing community resources. Several sources of data were consulted to present the most



comprehensive picture of Sterling Regional MedCenter's PSA's health status and outcomes. Appendix B contains the data sources.

DATA LIMITATIONS AND INFORMATION GAPS

Although the data sources provide an abundance of information and insight, data gaps still exist, including determining the most appropriate depth and breadth of analyses to apply. Additional gaps include:

	Table 3. Data Limitations and Information Gaps				
Data Type	Data Limitations and Data Gaps				
Primary Data	 Data not available on all topics to evaluate health needs within each race / ethnicity by age-gender specific subgroups. Limited data is available on diabetes prevalence and health risk and lifestyle behaviors (e.g. nutrition, exercise) in children. 				
Secondary Data	 Data not available on all topics to evaluate health needs within each race / ethnicity by age-gender specific subgroups. Not all counties participated in the Colorado County Health Outcomes and Health for 2018, thus understanding the health rankings for the county was limited due to the lack of a complete data set Limitations on County Level data for mortality statistics, specific incidence rates, and racial/ethnic breakdowns Since Colorado has such small numbers for certain conditions it is difficult to compare data at a national level. State and national data including PSA zip codes was difficult to find, data was based on Logan and Washington County, Colorado and national comparisons Some data was over two years old, making it hard to assess what the current health needs are. 				

COMMUNITY INPUT

Once gaps in access to health services were identified through data analytics, as explained above, Banner Health system representatives worked with Sterling Regional MedCenter's leadership to identify those impacted by a lack of health-related services. The gaps identified were used to drive the conversation in facilitating Community Stakeholder Focus Groups. Focus group participants involved PSA community leaders, community focused programs, and community members, all of which represented the uninsured,



underserved, and minority populations. These focus groups (through a facilitated conversation) reviewed and validated the data, providing additional health concerns and feedback on the underlying issues for identified health concerns. A list of the organizations that participated in the focus groups can be found under Appendix C and a list of materials presented to the group can be found under Appendix D.

PRIORITIZATION OF COMMUNITY HEALTH NEEDS

To be considered a health need the following criteria was taken into consideration:

- The county had a health outcome or factor rate worse than the state / national rate
- The county demonstrated a worsening trend when compared to state / national data in recent years
- The county indicated an apparent health disparity
- The health outcome or factor was mentioned in the focus group
- The health need aligned with Banner Health's mission and strategic priorities

Building on Banner Health's past two CHNAs, our steering committee and facility champions worked with Banner Health corporate planners to prioritize health needs for Cycle 3 of the CHNA. Facility stakeholders, community members, and public health professionals were among major external entities involved in identifying health needs, which were then brought to the steering committee. Both Banner Health internal members, and external entities were strategically selected for their respective understanding of community perspectives, community-based health engagement, and health care expertise.

Using the previous CHNAs as a tool, the steering committee reviewed and compared the health needs identified in 2019 to the previous health needs. The group narrowed the community health needs to three. It was determined that Banner Health, as a health system would continue to address the same health needs from Cycle 2, the 2016 CHNA, due to the continued impact these health needs have on the overall health of the community. These needs and the strategies to address the needs align with the shortand long-term goals the health system has, specific strategies can be tailored to the regions Banner Health serves, and the health needs can address many health areas within each of them. The graphic below lists the three health needs, and the areas addressed by the strategies and tactics.

Access to Care

- Affordability of care
- Uninsured and underinsured
- Healthcare provider shortages
- Transportation barriers

Chronic Disease Management

- High prevalence of: heart disease, diabetes, and cancer
- Obesity and other factors contributing to chronic disease
- Health literacy

Behavioral Health

- Opioid Epidemic
- Vaping
- Substance abuse
- Mental health resources and access



DESCRIPTION OF PRIORITIZED COMMUNITY HEALTH NEEDS

Banner Health has a strong history of dedication to its community and of providing care to the underserved populations. The CHNA process continues to help identify additional opportunities to better care for populations within the community who have special and / or unmet needs; this has only strengthened our commitment to improving the health of the communities we serve. The following statements summarize each of the areas of priority for Sterling Regional MedCenter and are based on data and information gathered through the CHNA process.

PRIORITY #1: ACCESS TO CARE

Access to care is a critical component to the health and wellbeing of community members. Often individuals without insurance, and even those who are underinsured, experience greater difficulty readily accessing health care services, particularly preventative and maintenance health care. This can be very costly, both to the individuals and the health care system. Focus group participants overwhelmingly felt that access to care is an important issue for the community.

Low-income populations are known to suffer at a disproportionate rate to a variety of chronic ailments, delay medical care, and have a shorter life expectancy compared to those living above the poverty level (Elliott, Beattie, Kaitfors, 2001). Understanding income and its correlation to access to care, primarily through access to health insurance, is necessary to understand the environmental factors that influence and persons health. Research supports the correlation between income and health, compared to high-income Americans those with low-incomes have higher rates of heart disease, diabetes, stroke, and other chronic conditions (Khullar, Dhruv, Chokshi, 2018).

Table 4 breaks down the percentage of the community living in various states below federal poverty levels. An average of one third of the populations in both Logan and Washington County lives at 185 percent below the federal poverty level.

Table 4. Percentage Below Federal Poverty Level (FPL) 2013 – 2017						
	Logan County	Washington County	Colorado	US		
Population Below FPL						
50%	7.19%	3.49%	5.14%	6.48%		
100%	16.79%	9.91%	11.51%	14.58%		
185%	35.72%	29.74%	25.08%	30.11%		



200%	37.98%	31.51%	27.55%	32.75%		
Children Below FPL						
100%	23.57%	10.34%	14.54%	20.31%		
200%	52.74%	37.64%	34.67%	42.24%		

Source: U. S. Census Bureau, American Community Survey, 5-Year Estimates, 2013 – 2017

The populations living in Logan and Washington County are in a Health Professional Shortage Area (HPSA). HPSAs are an indicator for access and health status issues based on whether there is a health care provider shortage in primary, dental, and / or mental health. In the US 22.07 percent of the population is living in an area affected by a HPSA, which is low when compared to Colorado and Logan County (Colorado – 23.58%; Logan County – 18.13% (HHS, 2019).

A correlation to the counties HPSA status is the demand for primary care physicians. Those living in Logan and Washington County have a higher ratio of the population to primary care physician (PCP) compared to Colorado and top performing counties in the United States. Washington County has a high ratio for population to PCPs that is four times that of the state and has been increasing in difference for the past three years. Logan County has a ratio that is trending smaller, yet is still larger than that of the state and U.S.

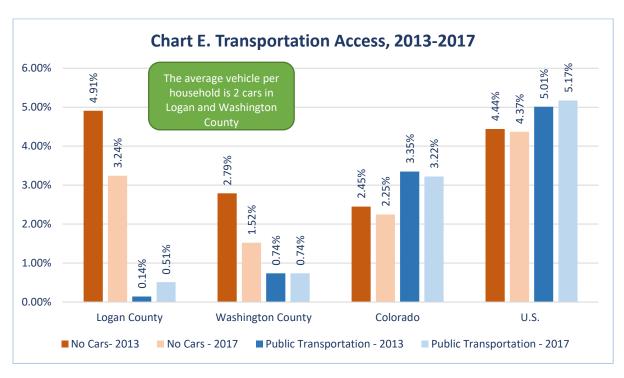
Table 5. Ratio of Population to Primary Care Physicians						
	Logan County Washington County Overall in Performers (Percentile					
2017	1,500:1	4,780:1	1,240:1	1,040:1		
2018	1,380:1	4,860:1	1,240:1	1,030:1		
2019	1,290:1	4,910:1	1,230:1	1,050:1		

Source: County Health Rankings, 2017-2019

Transportation barriers are often associated as a barrier to healthcare access – including missed appointments, delayed care, and missed / delayed medication use. This in turn can result in poor health management, leading to poor health outcomes (Syed, Gerber, Sharp, 2013).



Less than 5 percent of Logan County had no car in 2013, that decreased in 2017 to 3.24 percent of the population, a 34 percent decrease with no car access in four years. This decrease represents a more stable rate of access to transportation for these residents (Refer to Chart E). For this report we have used commuter data to interpret general utilization of public transportation for county residents, Logan County public transportation is not available at a county wide level. Lack of public transportation can lead to low utilization of public transportation services. Logan county is designated as a rural county by the Department of Agriculture, thus transportation barriers listed above and in Chart E can have a larger impact, due to the lack of alternative transportation options in rural environments (USDA, 2019).



Source: U.S. Census Bureau, American Community Survey, 5-Year Estimates, 2013 – 2017

PRIORITY #2: CHRONIC DISEASE MANAGEMENT

Chronic diseases such as cancer, diabetes, and heart disease affect the health and quality of life of Logan and Washington County residents, but they are also major drivers in health care costs. Smoking or tobacco use, obesity, physical inactivity and excessive drinking are all risk factors that contribute to one's predisposition for being diagnosed with a chronic disease. The focus group agreed that there are several factors that contribute to the rate of chronic disease that is seen within the primary service areas of Sterling Regional MedCenter. In Colorado alone cardiovascular disease is the number one cause of premature death.



In 2018 the leading cause of premature death in both Logan and Washington County was cardiovascular disease, in Washington County the rate far outpaced that of the state. In Table 6 you can see the impact chronic diseases play in premature deaths for the state.

Table 6. Chronic Disease Mortality, per 100,000, 2018						
Logan County Washington Colorado						
Cardiovascular Disease	165.0	197.1	167.9			
Cancer	133.8	146.1	126.2			
Chronic Lower Respiratory Disease	58.0	50.2	43.3			
Pneumonia and Influenza	*	54.16	9.5			
Diabetes Mellitus 14.83 * 15.8						
Alzheimer's Disease	21.36	*	28.9			
*represents data not reported to the state						

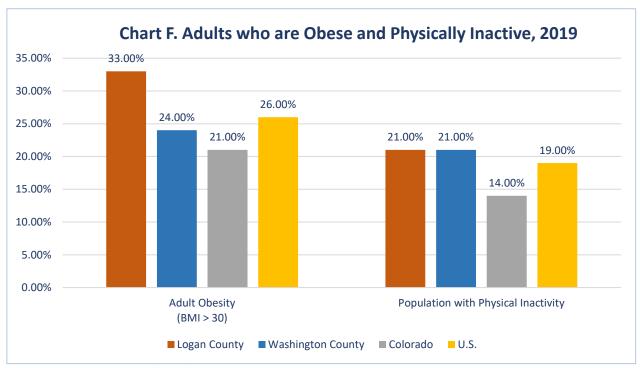
Source: Colorado Department of Public Health and Environment, 2018

Obesity can be an indicator for chronic diseases down the road, in Weld County the population who is obese is higher compared to state rates (Chart F). Obesity is defined as having a Body Mass Index (BMI) score greater than 30 (BMI > 30.0), while being overweight, a precursor to obesity, is defined as having a BMI from 25 to 30 (CDC, 2015). Body Mass Index is determined by a person's height and weight. Obesity can contribute to chronic diseases, as well as community environmental factors such as physical inactivity and food access (CDC, 2017).



Chart F shows the populations county, state, and national trends of obesity and physical inactivity prevalence. One third of Logan County's population is obese, and a quarter of Washington County's adult population is obese, both rates are higher than the states average. This aligns with the populations prevalence of physical inactivity when compared to Colorado and the United States (County Health Rankings, 2019).

Access to foods, specifically to fresh and health food can be a strong indicator for positive health behaviors, grocery store access is a key way to measure healthy food access. As of 2016, there were 8.81 grocery stores per 100,000 residents in Logan County and 20.77 per 100,000 residents in Washington County indicating a greater disparity in grocery store access when compared to state and national averages (Colorado – 15.87; U.S. 21.18) (US Census Bureau, 2019). The factors of poor physical inactivity and lower access to grocery stores compared to the state and national averages, correlates with a higher prevalence of obese populations in Logan and Washington County.



Source: County Health Rankings, 2019

PRIORITY #3: BEHAVIORAL HEALTH (SUBSTANCE ABUSE / DEPRESSION / BEHAVIORAL HEALTH)

Behavioral Health encompasses both mental health conditions, such as depression and anxiety disorder; and substance abuse issues, including opioid addiction, alcohol, illicit drugs, and tobacco. According to the Substance Abuse and Mental Health Services Administration in 2018 47.6 million U.S. adults experienced a mental illness, representing 1 in 4 adults or 19.1 percent of the adult population in the U.S (SAMHSA, 2019). In Logan County there is a slightly higher population to mental health care provider ratio compared

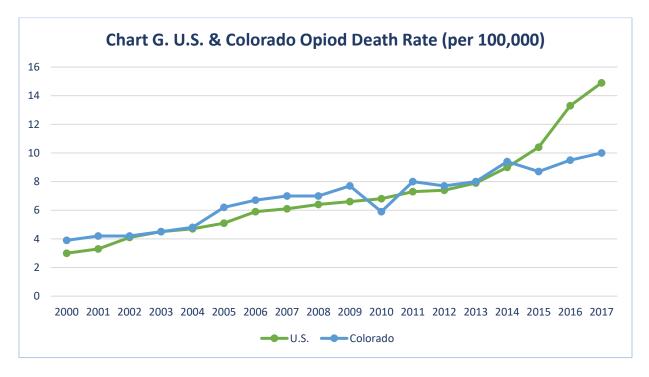


to the state and country. Lack of access to a mental health provider can have reverberating effects on the behavioral health of a community.

Table 7. Access to Mental Health Care Providers in 2019					
Logan County Washington Colorado U.S.					
Ratio of Population to Mental Health Providers	360:1	2,470:1	300:1	310:1	

Source: County Health Rankings, 2019

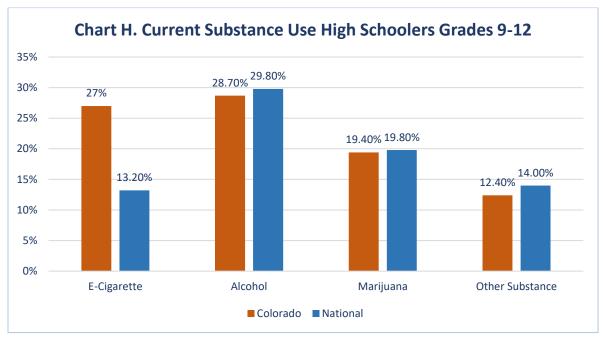
The opioid crisis is affecting communities throughout the United States, in Colorado there has been a steady increase in the number of opioid deaths from 2000 to 2017 (Chart H). From 2013 to 2017 the age adjusted rate for death by prescription opioids was 2.9 per 100,000 in Logan County, data was not available for Washington Count (CDPHE, 2017). During that time frame, 2014-2017, the opioid prescription fill rate decreased in Logan County from 734.8 per 1,000 county residents to 696.4 per 1,000 county residents (CDPHE, 2017). Although Colorado in comparison to the U.S. does not have a death rate as high, the rate continues to trend upward in Colorado.



Source: Centers for Disease Control and Prevention, 2019



E-Cigarette use (electronic vapor product use) among Colorado High Schoolers is much higher compared to national rates. Use of alcohol, marijuana, and other substances for Colorado high schoolers is similar to the national average. Colorado has a significantly higher prevalence of current (past 30 days) e-cigarette use compared to the national rate (21% Colorado vs. 13.2% national). Pacific Islander youth in Colorado are at twice the rate as the state average for other substance abuse and are at a higher risk of alcohol and e-cigarette use, compared to their peers (Healthy Kids of Colorado Survey, 2017).



Source: Healthy Kids Colorado Survey (HKCS), 2017

Lung disease as the result of vaping is a rising health concern, specifically its effects on the health and health behaviors of youth, as of November there are currently over 2,000 confirmed and probable cases, not including cases that are under investigation. Vaping has affected 36 states, resulted in nearly 50 deaths, and the numbers continue to rise (CDC, September 2019). Characteristics that factor into an adolescent smoking include, older age (High School aged), being male, being white (compared to Black and Hispanic adolescents), lacking college plans, having parents who are not college educated, and experiencing highly stressful events (HHS, 2019).

NEEDS IDENTIFIED BUT NOT PRIORITIZED

Focus Group participants brought up care transitions, social determinants of health, and perinatal care as other health priorities. However, since some were able to be addressed in the other health priorities, such as social determinants of health in health access, participants decided these priorities were not something they felt should be addressed at this time.



2016 CHNA FOLLOW UP AND REVIEW

FEEDBACK ON PRECEDING CHNA / IMPLEMENTATION STRATEGY

In the focus groups the facilitators referred to the cycle 2 CHNAs significant areas. Specific feedback on the impact the strategies developed to address the health need is included in Table 8 below. In addition, the link to the 2016 report was posted on the Bannerhealth.com website and made widely available to the public. Over the past three years little feedback via the email address has been collected, but the account has been monitored.

Feedback from cycle 2 has served as the foundation for our participation and development within the State's "Hospital Transformation Program" – a five-year initiative to drive greater collaboration between hospitals and community partners to improve access to care; provide care coordination and care transition; improve performance delivery; improve outcomes; provide complex care management to targeted populations; better coordinate Behavioral Health and Substance Abuse Disorder care; and recognize and address social determinants.

In order to comply with the regulations, feedback from cycle 3 will be solicited and stored going forward. Comments can be sent to CHNA.CommunityFeedback@bannerhealth.com

IMPACT OF ACTIONS TAKEN SINCE PRECEDING CHNA

Table 8 indicates what actions have been taken on the cycle 2 CHNA action plan in creating impact in the Sterling Regional MedCenter PSA.

Table 8. Implementation Strategies 2016 for Sterling Regional MedCenter Primary Service Area

Significant Need #1: Access to Care

Strategy #1: Increase use of Banner Urgent Care facilities and improve access to primary care services Impacts of Strategy:

- We work with other healthcare resources to increase and improve access to care.
- We have developed educational materials to educate our patients and the community on the insurance marketplace.
- We participate and offer health activities in the community.
- Yes, we are continuing to promote utilization of our MyBanner portal, our online patient portal.
- In 2015 our Banner Health Clinic was opened, and we continue to support the facility in order to expand access to PCP's for our patients.

Significant Health Need #2: Chronic Disease (Diabetes / Heart Disease)

Strategy #1: Increase personal management of Chronic Disease

Impacts of Strategy:

• We are continuing to work to increase mammography screening at our facility



• We provide educational offerings to the community, and work with our partners to educate our broader community on chronic disease.

Significant Need #3: Behavioral health (Mental Health & Substance Abuse)

Strategy #1: Increase identification of behavioral health needs and access to early interventions Impacts of Strategy:

- We use the depression screening tool with both our adult and pediatric patients in our Primary Care Provider clinics.
- Our mental health and substance abuse webpage, with information and resources is utilized by our patients.



APPENDIX A. STAKEHOLDERS AND RESOURCES POTENTIALLY AVAILABLE TO ADDRESS NEEDS

Listed below are available resources in the community to address the three priority needs. This list, while not exhaustive, identifies individuals / organizations external to Banner Health that represent the underserved, uninsured, and minority populations. Stakeholders were identified based on their role in the public health realm of the hospital's surrounding community. These stakeholders are individuals / organizations with whom we are collaborating, or hope to do, around improving our communities. Each stakeholder is vested in the overall health of the community and brought forth a unique perspective with regards to the population's health needs. This list does not include all the individuals and organizations that have participated in the focus groups.

Name of Organization	Website	Phone Number	Address	Priority Area
Northeast Health Partners	www.northeasthealthpartners.o	888-502-4189	710 11th Avenue Suite 203 Greeley, CO 80631	BH/SA
Centennial Area Health Education Center	www.cahec.org	970-330-3608	2105 Clubhouse Dr. Greeley, CO 80634	All
Colorado Regional Health Connectors	www.practiceinnovationco.org/r hc2/			All
Northeast Colorado Health Department	www.nchd.org	877-795-0646	700 Columbine Street Sterling, CO 80751	All
Colorado Department of Human Services	www.colorado.gov/CDHS	303-866-5700	1575 Sherman St., 8 th Floor, Denver, CO 80203- 1714	All
Centennial Mental Health	www.centennialmhc.org	970-522-4392	Centennial Mental Health Center 211 W. Main Street Sterling, CO 80751	BH/SA
Colorado Psychiatric	www.cpack.org	719-579-7897 719-538-1479		ВН



Name of Organization	Website	Phone Number	Address	Priority Area
Access & Consultation				
Front Range Behavioral	www. frontrangementalhealth.com	800-511-2795	1067 E. US Hwy 24, #294, Woodland Park, CO 80863	ВН
Banner Health Medical Group	www.bannerhealthnetwork.com	800-827-2464		CD/AC
Banner North Colorado Family Medicine	https://www.bannerhealth.com/locations/greeley/north-colorado-family-medicine	970-810-2424	1600 23rd Ave Greeley, CO 80634	CD/AC
Northeast Colorado RETAC	www.ncretac.org	970-774-3280	45199 County Road 36 - Fleming, CO 80728	AC
Sterling Living Center	www.savaseniorcare.com/sterlin g-living-center	970-522-2933	1420 South 3 rd Avenue Sterling, CO 80751	AC
Eastern Colorado Services for the Developmentally Disabled	www.ecsdd.org	970-522-7121	617 South 10 th Avenue, Sterling, CO	BH/AC
Hospice of the Plains	www.hospiceoftheplains.org/	970-526-7901	100 Broadway #1-A, Sterling,CO	AC
Salud	www.saludclinic.org	970-484-0999	203 S. Rollie Avenue Fort Lupton, Co 80621	CD/BH



APPENDIX B. LIST OF DATA SOURCES

PRIMARY AND SECONDARY DATA SOURCES

The primary data sources that were utilized to access primary service information and health trends include:

Advisory Board (2019) Primary Service Area Demographic Data.

Elliott, M. K. Beattie, S. E. Kaitfors. (May 2001) Health needs of people living below poverty level. Family Medicine; 33(5): 361–366.

Colorado Department of Public Health and Environment. (2017) CDPHE Community Level Estimates on Health Conditions and Risk Behaviors 2014-17.

Colorado Department of Public Health and Environment (2017) Rx Consortium Dashboard.

Colorado Department of Public Health and Environment. (2017) Logan County Opioid Profile.

Colorado Department of Public Health and Environment. (2017) Health Kids Colorado Survey.

Colorado Department of Public Health and Environment. (2018) Colorado Health Information Dataset.

County Health Rankings and Roadmaps. (2019) Colorado Health Outcomes and Factors.

Health and Human Services – Health Resources and Services Administration (February 2019) Health Professional Shortage Area.

Health and Human Services – Office of Population Affairs. (April 2019) Adolescents and Tobacco: Risk and Protective Factors

Khullar, Dhruv and Chokshi, Dave A. (October 2018) Health, Income, & Poverty: Where We Are & What Could Help. Health Affairs – Health Policy Brief the Culture of Health.

McKesson. (2018) Primary Service Area Data Set.

National Center for Disease Control and Prevention – Division of Nutrition, Physical Activity, and Obesity. (May 2015) Healthy Weight – Assessing Your Weight Body Mass Index.

National Center for Disease Control and Prevention – Division of Nutrition, Physical Activity, and Obesity. (2017). Adult Obesity Causes and Consequences.

National Center for Disease Control and Prevention – Smoking & Tobacco Use. (November 2019) Outbreak of Lung Injury Associated with the Use of E-Cigarette, or Vaping, Products.

National Center for Disease Control and Prevention – National Center for Health Statistics. (2019) Stats of the State of Colorado.

Substance Abuse and Mental Health Services Administration - Center for Behavioral Health Statistics and Quality. (2019). Key substance use and mental health indicators in the United States: Results from the 2018 National Survey on Drug Use and Health.



Syed, S. T., Gerber, B. S., & Sharp, L. K. (2013). Traveling towards disease: transportation barriers to health care access. *Journal of community health*

Truven. (2017-18) Colorado State Data

U.S. Census Bureau. (2017) American Community Survey

U. S. Department of Agriculture – Economic Research Service (2019) Atlas of Rural and Small-Town America, Rural -Urban Continuum Code.

FOCUS GROUPS

Date	Time	Population	Location



APPENDIX C. STEERING COMMITTEE AND CHNA FACILITY-BASED CHAMPIONS

STEERING COMMITTEE

Banner Health CHNA Steering Committee, in collaboration with Sterling Regional MedCenter's leadership team and Banner Health's Strategic Planning and Alignment department were instrumental in both the development of the CHNA process and the continuation of Banner Health's commitment to providing services that meet community health needs.

Steering Committee Member	Title
Darin Anderson	Chief of Staff
Derek Anderson	AVP HR Community Delivery
Ramanjit Dhaliwal	AVP Division Chief Medical Officer Arizona Region
Phyllis Doulaveris	SVP Patient Care Services / CNO
Kip Edwards	VP Facilities Services
Anthony Frank	VP Financial Operations Care Delivery
Russell Funk	CEO Pharmaceutical Services
Larry Goldberg	President University Medicine Division
Margo Karsten	President Western Division / CEO Northern Colorado
Becky Kuhn	Chief Operating Officer
Patrick Rankin	CEO Banner Medical Group
Lynn Rosenbach	VP Post-Acute Services
Joan Thiel	VP Ambulatory Services



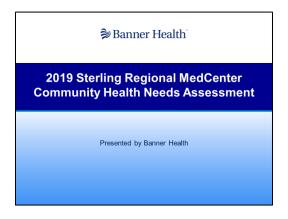
CHNA FACILITY-BASED CHAMPIONS

A working team of CHNA champions from each of Banner Health's 28 Hospitals meets on a monthly basis to review the ongoing progress on community stakeholder meetings, report creation, and action plan implementation. This group consists of membership made up of CEOs, CNOs, COOs, facility directors, quality management personnel, and other clinical stakeholders.



APPENDIX D. MATERIALS USED IN FOCUS GROUP

Slides used for focus groups



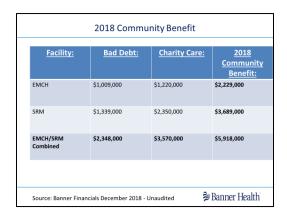


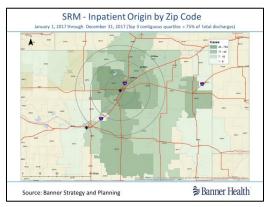
Community Health Needs Assessment Purpose

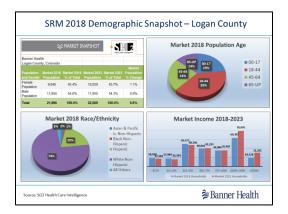
- Gather input and feedback from community leaders that represent the community
- Validate and/or identify significant areas of healthcare need within the community
- Promote collaborative partnerships
- Identify opportunities to engage with the community in addressing potential areas of need
- Requirement of the Patient Protection and ACA

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County Health Rankings

Health Outcomes

 Health outcomes in the County Health Rankings represent how healthy a county is. They measured two types of health outcomes: how long people live (mortality) and how people feel while alive (morbidity).

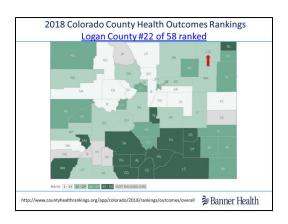
Health Factors

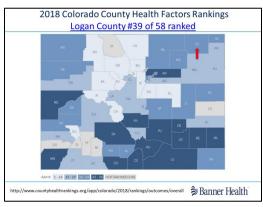
 Health factors in the County Health Rankings represent what influences the health of a county. They measured four types of health factors: health behaviors, clinical care, social and economic, and physical environment factors. In turn, each of these factors is based on several measures.

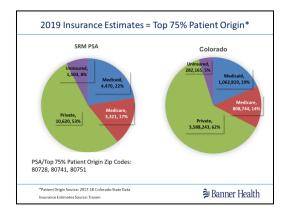
Source: www.countyhealthrankings.org

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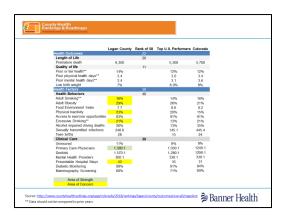
2019 County Health Rankings

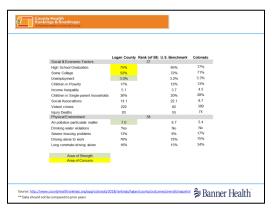
- Logan County ranks 22nd out of 58 Colorado Counties in Health Outcomes
- Adult smoking, adult obesity, physical inactivity and excessive drinking are areas of improvement to explore, compared to national benchmark.
- Preventable hospital stays are higher than both state and national benchmarks.
- Lower percentage of mammography screenings than US benchmark

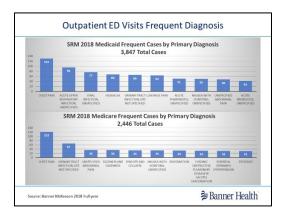
Source: www.countyhealthrankings.c

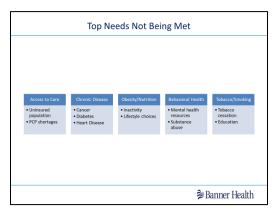
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Hospital Transformation Program Northeast Colorado Public Health 2/25/19 Opportunities for collaborative initiatives- Phase 2 Build focus groups for prioritized initiatives

Six Priority Areas

- HTP envisions transforming care across the following six priority areas:
 - 1. Care Coordination and Care Transitions
 - 2. Complex Care Management for Targeted Populations
 - 3. Behavioral Health and Substance Use Disorder Coordination
 - 4. Perinatal Care and Improved Birth Outcomes
 - 5. Recognizing & Addressing Social Determinants
 - 6. Reduce Total Cost of Care

Three populations with two program focuses

Populations

- 1. High utilizers of care
- 2. Venerable Populations (pregnant women or end of life)
- 3. Individuals with Behavioral Health Conditions and Substance Use disorders

Focuses

- 1. Clinical and Operational Efficiencies
- 2. Community Development Efforts to address population health and cost of care

Focus Groups

- What are the resources in Logan county?
- What are the gaps in Logan county?
- What questions apply to your group?
- What are two actionable items from your group?



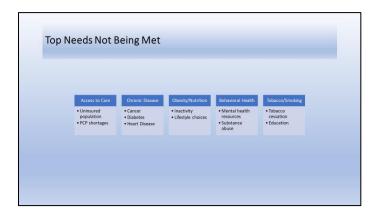
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Source: wasser outputs the althoughtness on

Hospital Transformation Program Northeast Colorado Public Health 3/29/19 Six Focused Priorities- Phase 2 Develop actionable items for prioritized initiatives







Three populations with two program focuses

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Focus Groups

- What are the resources in Logan county?
- What are the gaps in Logan county?
- What questions apply to your group?
- What are two actionable items from your group?







Summary for Focus group 1

Clinical and Operational Efficiencies

Resources:

Sterling Regional MedCenter Case management; Devonshire and Sterling Living Center social workers, Hospice care manager, UC and Salud nurse case managers, AHEC We have many for a smaller community (maybe not all are known well), health fairs, Centennial Mental Health, Northeast CO Health Department, Nursing homes, Assisted living facilities, home health agencies, non-medical home care companies and limited Hospice care to name a few.

Gaps:

Lack of physician availability, transportation (especially for out of town appointments/specialists), in home private caregiver shortage, limited homeless and VA resources, need for Urgent care/ intermediate care facility, mental health access.

1. Improvement of Patient Experience- more follow up, focus on preventative care

- 2. Improve and Coordinate Processes of Care- more communication

Summary for Focus group 1

- What could improve care coordination? Nediciacl case managers/home follow up, callback follow up from facilities, increased communication between facilities without violating HIMA communication between facilities without violating HIMA in the control of th
- How do we address homeless healthcare issues? no resources for homeless, no shelters, public transportation is lacking, do have some food banks/ churches that provide meals, Cooperating ministries can only do so much
- How do we address Veteran healthcare issues? transportation can be an issue to get them out of town, mobile clinic at NJC is limited, contracted SNF and home care limited in this area

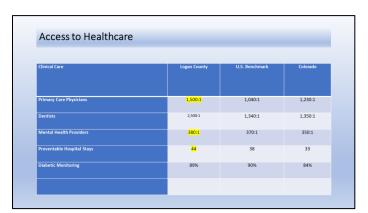
Track at hospital in case management department:

Look to see if related to previous admission/diagnosis, high risk group, non-compliance, failed outpatient treatment with compliance, howevelege deficit, lack of PCP, normal progression of disease,

etc.

"How do we prevent this?"- lack of providers/appointments, being referred to ED, questioned "no-show" rates to clinic appointments; admissions to Nursing homes,







Summary for Focus group 2

Key Populations for Chronic Complex: HF, Diabetes, COPD, Cancer

Gaps

- . Compliance, Knowledge, Overwhelmed
- Cost of medications
- DME availability
 Complexity of paperwork for providers
 What is covered
- Various insurance navigation/contracts
- Insurance not covering long enough
- Education on Advanced Directives/Palliative care prior to admissions
- No urgent care
- Not enough workman's comp providers
- Care transition communication

Summary for Focus group 2

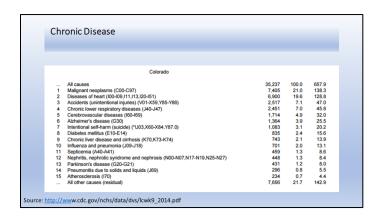
Solutions/Resources

- Extended hours at primary care offices/increased access
- Diabetes Education-Tap into more resources (support group, UCHealth has a class could be offered in a larger venue and attract more people from community, 1 Friday/month, Banner Health outpatient Diabetic education class
- New grant received for the public-school system to focus on wellness
- Meeting with DME that is available.
- Need a smoother process/help with paperwork
- High Priority list of patients-get in with providers in 1-2 days when they call
- Read only access between Banner Health and UCHealth (Epic and Cerner)

Focus Group 3: Behavioral Health and Substance Use Disorder Coordination



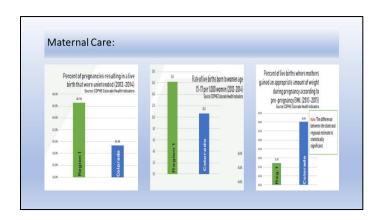


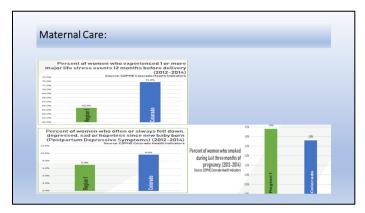


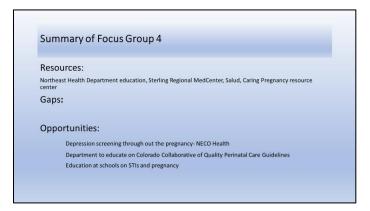


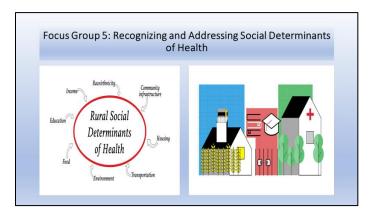


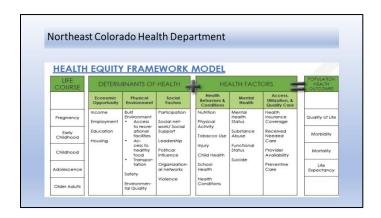


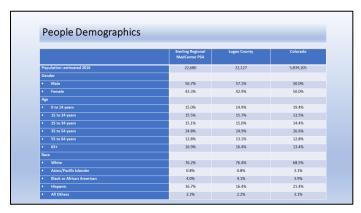


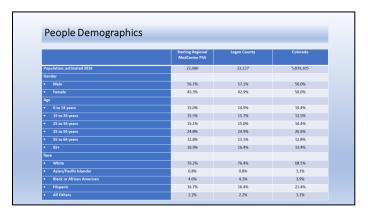


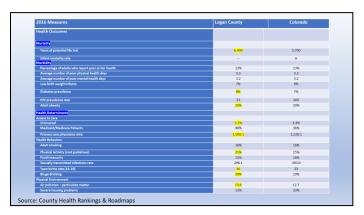




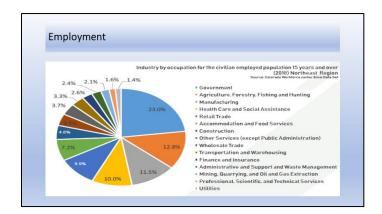


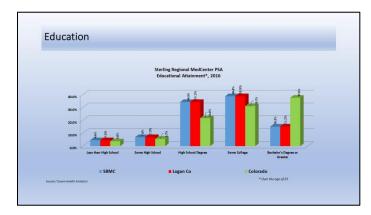


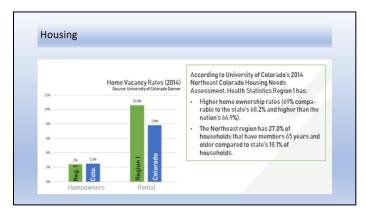


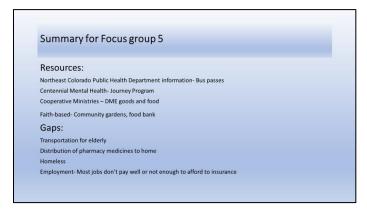






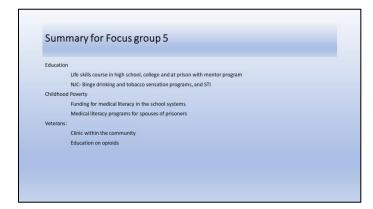


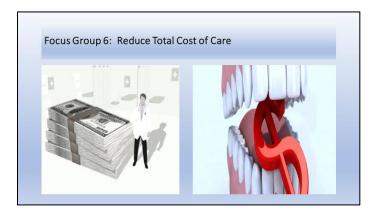




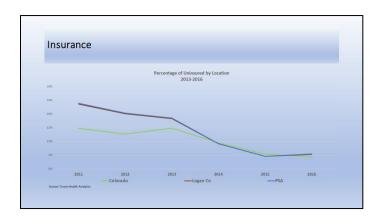












Colorado County Data Workbook				
	Logan C	County	Colorado	
	Number	Percentage	Number	Percentage
HEALTH INSURANCE				
UNINSURANCE (2015)				
Uninsured residents	1,612	7.3%	445,284	8.2
PRIVATE INSURANCE (2015)				
Employer-sponsored insurance	8,832	39.9%	2.810.745	51.5
Individually purchased insurance	1,856	8.4%	464,703	8.5
MEDICAID AND CHILD HEALTH PLAN PLUS (CHP+) (2016)				
Medicaid enrollees	4,872	21.9%	1,329,069	23.9
Children enrolled in Child Health Plan Plus	297	1.3%	57,945	1.0
ELIGIBLE BUT NOT ENROLLED (2015)				
Children eligible but not enrolled (EBNE) in Medicald	69	3.3%	14,702	2.6
Children eligible but not enrolled (EBNE) in Child Health Plan Plus	16	6.4%	15.256	21.3
Adults eliable but not enrolled (EBNE) in Medicaid	398	13.9%	99,542	13.5

