## **Orchard Hospital**

Gridley, California

# Community Health Needs Assessment



December 2016

Prepared by: Orchard Hospital

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### Introduction

Orchard Hospital located in Gridley, California is a 501(c)(3) Critical Access Hospital offering 24 hour emergency services, inpatient, outpatient and rural health clinic services. Orchard Hospital is dedicated to always providing the finest personalized healthcare to North Valley communities by offering a wide range of integrated services, from prevention through treatment to wellness.

Orchard Hospital is the only acute care hospital in Gridley, as well as along the Highway 99 corridor between Sacramento and Chico, providing much needed emergency care for travelers.

Orchard Hospital is certified for 24 general acute care beds (4 Monitored Beds and 20 Unspecified General Acute Care) and offers the following medical services:

- Cardiology
- Social Services
- Emergency Services
- Inpatient/Outpatient Surgery (General and Orthopedic)
- Imagining Services
- Respiratory Therapy
- Cardiopulmonary
- Laboratory
- Physical Therapy
- Senior Life Solutions
- Rural Health Clinic Services

#### **Rural Health Clinic Services**

- Laboratory
- Digital Radiology
- DEXA Scanning
- o MRI
- Digital Mammography
- Ultrasound (General and Cardiac)
- o Physicals
- Workers Comp
- o Industrial Medicine
- Drug Screening
- Psychotherapy
- o Interventional Pain Management
- Nephrology
- Podiatry
- Physical Therapy
- Internal Medicine

## IMPACT EVALUATION

Together We Can! Healthy Living in Butte County and all Butte County hospitals have partnered to better understand and address the concerns of the community. The partnership has allowed the county and hospitals to work together, thru planning meetings to explore ideas, sharing assessment tools and data to address the needs of the county as a whole.

The agencies plan to continue their collaboration to further address the needs of the community. As this partnership continues to strengthen, it could possibly set forth best- practices for other agencies and hospitals in the country.

Orchard Hospital will continue to take part in the Together We Can! Healthy Living in Butte County collaboration. The hospital is currently a stake holder for many of the Community Health Improvement Plan goals and will continue their involvement in this county-wide initiative.

For this community health needs assessment, all Butte County Hospitals conducted follow-up focused conversations to gather community input. All focused conversations utilized the same guidelines that were prepared by the CHC and adopted from Community Health Assessment completed by Together We Can! Healthy Living in Butte County. To better address the needs of the community as a whole, all the follow-up focused conversations are summarized below.

In 2013 and 2014, health assessments conducted by Enloe Medical Center, Feather River Hospital, Orchard Hospital, Oroville Hospital and Together We Can! Healthy Living in Butte County identified the following top concerns: substance abuse, overweight/obesity, lack of exercise/physical activity, access to healthy food, mental health, diabetes, access to affordable health care, heart disease, shortage of primary care doctors/access to specialists, pulmonary issues in relation to tobacco use, secondhand smoke and asthma. The follow-up conversations from each of the hospitals revealed that community members agreed these concerns reflect the communities' needs.

Other major concerns discussed in the follow-up conversations were transportation, language and cultural competency and sensitivity, community outreach, programs and resource awareness, health and nutrition education, elderly needs, Alzheimer's and dementia resources, children's health, and environmental issues related to air and water quality.

Community members suggested other improvements including: transportation services, safe disposal for medications, partnering with California State University, Chico, recruitment of more primary care physicians, veteran resources, collaboration between agencies to better provide for those who are substance abusers, homeless, and/or mentally ill, resources for cancer patients, increase school education and increase public knowledge.

During each hospital's follow-up conversation, community members brought up concerns and suggestions. Enloe Medical Center's community suggested resources, changes and improvements in the following areas: physical activity, outreach, volunteer opportunities to promote healthy lifestyle, communication, housing access, veteran resources, behavioral health clinic, telemedicine, air quality, water quality conservation, homeless population, housing, and mental health. Feather River Hospital's community suggested improvements for the following areas: domestic violence, homelessness, children's health and nutrition, pain medication prescription and management, education on healthy habits and lifestyle, and access to healthy food. Orchard Hospital's community members suggested a Blue Zone Initiative for overall well-being, cardiac events, resources for substance addiction and abuse, physical activity opportunities, healthy heart events, mental health resources, obstetrics and gynecology (OB/GYN) services, tobacco use education, and youth outreach. Oroville Hospital's community members suggested collaboration between agencies to better provide for the community, veterans resources, transportation assistance, community education opportunities, resources for substance abusers and the homeless, tobacco education, additional health care services, broader scope of healthcare, and that the hospital look for ways to motivate community members to engage and utilize available resources.

The overall focused conversations revealed many overlapping needs between the communities such like transportation services, resources for substance abuse, mental health and homelessness, community outreach to racial and ethnic minorities, seniors, youth and veterans, health and nutrition education, the need for more primary care physicians and specialists, and collaboration among agencies to better meet the needs of these communities.

The World Health Organization (WHO) envisions an integrated people-centered approach to health services. The WHO defines integrated people-centered health services as putting the needs of people and communities, not diseases, at the center of health systems, and empowering people to take charge of their own health. The five interwoven strategies for moving towards integrated people-centered health services are: 1) empowering and engaging people and communities, 2) strengthening governance and accountability, 3) reorienting the model of care, 4) coordinating services within and across sectors and 5) creating an enabling environment. With established partnerships, implementation strategies, goals, and future collaborations,

Butte County hospitals and Together We Can! Healthy Living in Butte County are taking a crucial step to create a healthier community.

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<sup>&</sup>lt;sup>1</sup> World Health Organization, Framework on Integrated People-Centered Health Services. Available from: http://www.who.int/servicedeliverysafety/areas/people-centred-care/framework/en/

## **Methods**

Together We Can! Healthy Living in Butte County and all Butte County hospitals have partnered to better understand and address the concerns of the community. The partnership has allowed the county and hospitals to work together, by meeting to explore ideas, sharing assessment tools and data to address the needs of the county as a whole. This CHNA report was completed in compliance with the IRS requirements described in section 501(r)(3) of the Internal Revenue Code.

CHNA Advisory Committee was formed collaboratively among local hospitals. The team was tasked with completing the objectives outlined by the IRS CHNA requirements and consisted of the following members:

- Orchard Hospital Lyndi Little Wallace, Director of Marketing and Community Outreach; Jay Croy, RN, Education/Infection Prevention
- Enloe Medical Center Deanna Reed, Community Outreach Coordinator
- Butte County Department of Public Health Gene Azparren, Program Manager, Accreditation
- Butte County Department of Public Health- Sandy Henley, Public Health Epidemiologist
- Oroville Hospital- Shanna Roelofson, Director of Marketing
- Feather River Hospital Courtney Rasmussen, Marketing and Communication

## **Community Served Determination**

The service area for Orchard Hospital was created with input from the Orchard Hospital CHNA Advisory Committee. The definition includes Butte County. Specific key findings and prioritized needs were based on data obtained in the survey from the Gridley, Biggs and Richvale area.

#### CHNA Process and Methods Used to Conduct the 2013-2016 Assessment

In order to capture an accurate picture of the health needs of our community as possible, in 2013 Orchard Hospital partnered with Butte County Public Health, as well as the neighboring hospitals to conduct the Community Health Needs Assessment. Beginning in August 2016, the collaborative team collected new data to evaluate the 2013 implementation strategies

#### PHASE 1:

We had a team research publicly available secondary data from four online sources: CountyHealthRankings.org, CHNA.org, HealthIndicators.gov and QuickFacts.Census.gov. Demographic information about members of our community was gathered, in addition to information about a variety of health behaviors, social and economic factors, and health outcomes. The information compiled was used to initiate in-depth discussions during Phase 2 of the project, as well as to shape the questions asked in our Community Health Focus Group meetings in Phase 3.

#### PHASE 2:

Beginning in the spring of 2014, hundreds of state and local agency representatives and community members joined the Butte County Public Health Department in forming the Together We Can! Healthy Living in Butte County partnership. The partnership embarked on a year-long evaluation process to determine the county's health status and prioritize areas for improvement.

In April of 2015, results of the initiative were published in the 2015-2017 Community Health Assessment (CHA), which informed the partnership and the community at large of several health areas warranting improvement efforts in Butte County. Of these, the highest priorities were determined to be substance abuse, socioeconomic factors that influence health, and chronic disease. The partnership then coalesced in order to identify community assets and strategies to achieve positive gains in these priority health areas, and aligned them in the 2015-2017 Community Health Improvement Plan.

Priority Areas	Community Health Objectives
Substance Abuse	• Implement best-practices for managing prescription pain medications in
	all area hospitals.
	Provide Continuing Medical Education (CME) for Butte County
	prescribing providers regarding prescription opioid misuse and abuse.
	Reduce lifetime and last 30 day tobacco, alcohol (including binge
	drinking), and marijuana use among Butte County adolescents.
	• Increase Treatment Providers Association (TPA) meeting attendance.
Socioeconomic	Increase participation in Butte County Women, Infants, & Children
Factors that	(WIC) and CalFresh programs.
Influence Health	Establish and maintain a community garden in a low-income area.
	• Increase utilization of Butte 2-1-1 by homeless persons to connect with
	social services such as transitional housing.
Chronic Disease	Reduce adult and adolescent tobacco/ nicotine product use.
and Conditions	Increase local elementary schools' capacity to meet daily physical
	activity requirements.

#### PHASE 3:

Beginning in August 2016, the collaborative team collected new data to evaluate the 2013 implementation strategies. This data was collected from a variety of local events in Gridley to present a community profile. Implementation strategies performed by Orchard Hospital reported to CHNA.

## **Primary Data Collection**

A community survey was distributed to local organizations within Gridley. The survey was developed to capture input regarding health needs in the community. A copy of this survey can be found in Appendix 3.

## **Secondary Data Collection**

Secondary data was collected from a variety of local, county and state resources to present a community profile, death characteristics, access to health care, chronic diseases, social issues and other demographic characteristics. Data was collected and presented at the county level and wherever possible, compared to the State of California.

The secondary data collected for this analysis was collected from the following sources:

- California Department of Public Health County Health Status Profiles 2014
- California State Census for 2010
- United States Census Bureau
- County Health Rankings (www.countyhealthrankings.org)
- Health Indicators Warehouse (www.healthindicators.gov)

#### Third Data Collection

Third data was collected in 2016 to evaluate the 2013 implementation strategies. This data was collected from a variety of local events in Gridley to present a community profile. Implementation strategies performed by Orchard Hospital reported to CHNA.

- Meeting Sites

  O Gridley Rotary Club

  National Night Out
  Farmers Market

#### **Information Gaps**

There were no major gaps in information for this CHNA as demographic and health status information was available at the county level.

## **Community/Demographic Profile**

(Primary Data Results)

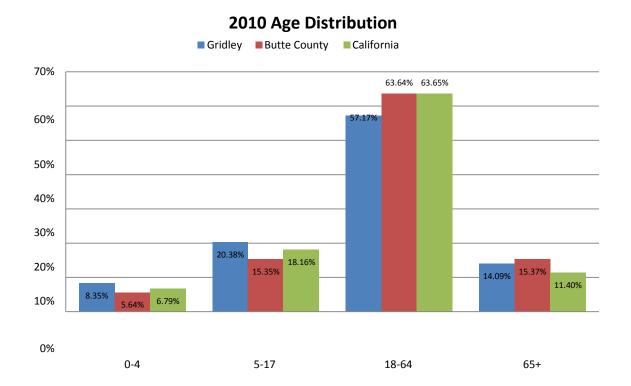
Butte County encompasses 1636.46 square miles and has an approximate population of 220,000. There are 134.4 persons per square mile in the county with the California average of 239.1 persons per square mile. The highest point is Humboldt Peak at 7,870 feet and the lowest point is 90 feet above sea level.

## **Population**

	2010	2015 (estimate) (2010-2012)	% Change (2010-2012)	# Change (2010-2012)
Gridley	6584	6567	-0.26%	-17
Butte County	220,000	221,539	0.69%	1539
California	37,253,956	38,041,430	2.11%	787,474

## **Population by Age**

Butte County has a general population of approximately 220,000 of which Gridley, Biggs and Richvale make up 8,535.



## **Population by Race and Ethnicity**

Daga	Gridley		Butte County		California	
Race	No.	%	No.	%	No.	%
White Alone	4,283	65.1%	189,669	86.2%	21,453,934	57.59%
Hispanic or Latino	2,987	45.4%	220,000	100.0%	14,750,686	38.4%
Black Alone	55	0.84%	3,415	1.55%	2,299,072	6.17%
American Indian &	98	1.49%	4,395	2.00%	362,801	0.97%
Asian Alone	249	3.78%	9,057	4.12%	4,861,007	13.05%
Pacific Islander Alone	3	0.05%	452	0.21%	144,386	0.39%
Some Other Race Alone	1,552	23.57%	12,141	5.52%	6,317,372	16.96%
Two or More Races	344	5.22%	10,444	4.75%	1,815,384	4.87%

## Income

Income data was analyzed for Butte County and compared to the state of California and the Nation. 2011 census data reveals that the Median household income for Gridley & Butte County is lower than the State and Nation.

2014	Gridley	Butte County	California	USA
Median Household Income	\$35,455	\$43,165	\$61,933	\$53,657

## **Poverty**

2011	Butte C	ounty	California	
2011	No.	%	No.	%
Under age 5	N/A	N/A	614,837	24.7%
Ages 5-17	8,259	25.6%	1,431,148	21.7%
All Ages	48,784	22.6%	6,121,726	16.6%

## SUBSTANCE-RELATED AND ADDICTIVE DISORDERS

The most recently released edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) treats substance abuse and dependence as a continuum with mild to severe symptoms. Generally, substance abuse is less severe and thought of as the over consumption of an addictive substance such as alcohol (e.g. binge drinking), while substance dependence is more severe and is marked by the development of tolerance for the substance and symptoms of psychological and physiological withdrawal in its absence (e.g. delirium tremens). The American Society of Addiction Medicine defines addiction as "a primary, chronic disease of brain reward, motivation, memory and related circuitry" adding that "dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors<sup>2</sup>." Substance-related and addictive disorders impose an incredible cost to individuals, families, and society, with an estimated financial strain annually in the U.S. of over half a trillion dollars<sup>3</sup>. These disorders often occur simultaneously with other health problems (e.g. comorbid disorders), including mental health conditions and chronic pain among others.

#### Alcohol abuse

One of the most common forms of alcohol abuse is binge drinking. Binge drinking is defined as having had five or more drinks on a single occasion at least once in the past month. It is associated with health problems including: unintentional injuries; intentional injuries; alcohol poisoning; liver disease; sexually transmitted diseases; and cardiovascular diseases among others<sup>4</sup>.

Table Status-1: Adult binge drinking in the past year; 2014

Binge drinking in	Butte		California		
the past year	Population	Percentage	Population	Percentage	
No binge drinking in past year	111,000	63.8%	19,222,000	67.4%	
Binge drinking in past year	63,000	36.2%	9,317,000	32.6%	
Total	174,000	100.0%	28,539,000	100.0%	

Source: 2014 California Health Interview Survey

In Butte County, adults age 18 and over reported binge drinking at a slightly higher rate than the statewide rate in 2014 (see *Table Status-1*). This is likely influenced by the percentage of young adults attending college and universities in Butte County, as statewide and national data suggest that binge drinking is a particular concern among college age adults, with over fifty percent of college students

 $<sup>^2\</sup> http://www.asam.org/for-the-public/definition-of-addiction$ 

<sup>&</sup>lt;sup>3</sup> http://www.drugabuse.gov/related-topics/trends-statistics

<sup>&</sup>lt;sup>4</sup> http://www.cdc.gov/alcohol/fact-sheets/ binge-drinking.htm

reporting binge drinking nationally<sup>5</sup>.

Underage drinking is associated with a wide range of health, social, and academic challenges. Teen alcohol consumption has been linked to risky health behaviors such as unprotected sex and impaired driving, poor academic performance, physical and/or dating violence, motor vehicle accidents, crime, and suicide attempts<sup>6</sup>.

Table Status-2: Binge Drinking by Grade Level in Butte County and California, 2011 - 2013

	Percent of Teens Binge Drinking in Butte County by Number of Days in Last 30						
Grade	0 days	1 day	2 days	3-9 days	10-19 days	20-30 days	
7th Grade	95.4%	1.6%	0.9%	0.7%	0.4%	1.1%	
9th Grade	88.7%	3.1%	2.6%	2.9%	1.0%	1.7%	
11th	77.8%	4.9%	5.3%	6.9%	2.3%	2.8%	
All	87.6%	3.1%	2.9%	3.4%	1.2%	1.8%	
1							
	Percent of Te	ens Binge Drinkir	ng in California by I	Number of Da	ys in Last 30		
Grade	Percent of Te	ens Binge Drinkir 1 day	ng in California by I 2 days	Number of Da 3-9 days	ys in Last 30 10-19 days	20-30 days	
Grade 7th Grade			· ·	1	<u> </u>	<b>20-30 days</b> 0.9%	
	0 days	1 day	2 days	3-9 days	10-19 days	,	
7th Grade	<b>0 days</b> 94.8%	1 day 1.9%	2 days 0.9%	<b>3-9 days</b> 0.9%	<b>10-19 days</b> 0.5%	0.9%	

Source: 2011 - 2013 California Healthy Kids Survey (CHKS)

Excessive alcohol consumption that continues into adulthood can have long-term consequences. The rate of binge drinking among teenagers in Butte County is slightly lower than for the state of California overall (see *Table Status-2*).

#### Illicit substance abuse

The use of illicit substances (e.g. street drugs) is associated with adverse effects on both short and long term physiological, neurological, and behavioral health. These include cardiovascular disease, stroke, cancer, HIV/AIDS, hepatitis, and lung disease; as well as an increased risk for mood, anxiety, and other mental health disorders.

The use of marijuana by teens is associated with poor academic performance, delinquency and aggressive behavior<sup>36</sup>. Smoking marijuana can trigger anxiety attacks, memory impairment, coordination loss, increased heart rate, breathing problems, and/or cognitive deficits<sup>36</sup>.

<sup>&</sup>lt;sup>5</sup> http://www.niaaa.nih.gov/alcohol-health/special-populations-co-occurring-disorders/college-drinking

<sup>&</sup>lt;sup>6</sup> Child Trends. (2012). Binge drinking. Retrieved from: http://www.childtrendsdatabank.org/?q=node/284

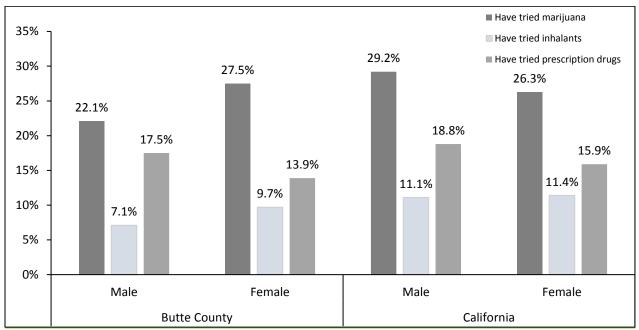


Figure Status-1: Percentages of teens who have ever tried marijuana, inhalants, or prescription drugs by gender. Source: 2011 - 2013 California Healthy Kids Survey (CHKS)

The percentage of teens in Butte County who reported ever trying marijuana, inhalants, or the recreational use of prescription drugs was lower than in California overall, except for female marijuana use which was slightly higher for Butte County (see *Figure Status-1*).

Table Status-3: Health consequences<sup>1</sup> of alcohol and drug abuse, ED treat and release rates, 2014

	Alcohol		Drugs of Abuse	
Location	Number	Rate	Number	Rate
<b>Butte County</b>	2,270	1,011.1	1,854	825.8
California	294,430	763.8	248,713	645.2

Source: California Office of Statewide Health Planning and Development, Emergency Department Patient Data Report generated from http://epicenter.cdph.ca.gov on: http://epicenter.cdph.ca.gov on: June 03, 2016. Rates are per 100,000 people in the population.

Patients frequently present at hospital Emergency Departments (ED) seeking treatment for acute substance and alcohol related conditions such as an unintentional drug overdose or alcohol poisoning. The ED treatment and release rates for conditions related to both alcohol and drugs abuse were considerably higher for Butte County than for California overall (see *Table Status-3*).

<sup>&</sup>lt;sup>1</sup> Health consequences include alcohol and drug (AOD) poisoning (overdoses), mental disorders, and physical diseases 100% attributable to AOD, but not indirect consequences of AOD (e.g., motor vehicle injuries due to AOD impairment).

#### **Tobacco**

Smoking and tobacco use are contributing risk factors for a number of adverse health conditions including heart disease, stroke and respiratory illnesses. Smoking and tobacco use during adolescence may lead to additional unhealthy behavior and substance abuse, and almost all smokers begin in adolescence<sup>7</sup>. Research demonstrates that the density of tobacco retailers located near schools is directly associated with adolescent smoking. Restricting access to retail tobacco sources for adolescent youth through local ordinances has been shown to reduce rates of smoking.

Table Status-4: Tobacco retail density

	2012 Census			Number	Percent
	County		Retailers per	Retailers w/in	Retailers w/in
Local Lead	Population	Tobacco	1,000	1000 feet of a	1000 feet of a
Agency	Estimate	Retailer Count	Population	School	School
Butte	221,539	237	1.07	58	24.47%
	38,016,323		0.97		27.37%

Source: California Board of Equalization (BOE) List of Licensed Tobacco Retailers, 11/30/2012 All retailers on the BOE list are included

In Butte County the tobacco retail density is one tobacco retailer location per 1,000 people, which is just slightly higher than for California overall. However, the percent of tobacco retailers within half a mile of a school is slightly lower for the state overall than for Butte County (see *Table Status-4*).

#### **Social Economic Factors**

**Socioeconomic status (SES)** is a measure of a family's or individual's social and economic position. It is based on education, income, and occupation. An assessment of community health in Butte County would be incomplete without measuring the SES of its residents. SES greatly influences an individual's access to resources that are important for health, such as: healthcare, education, safe and affordable housing, food, and recreation. Access to these resources helps facilitate good health and wellbeing (see *Table Status-5 2006-2013 data*).

#### **Household Income**

Household income refers to the combined income of all people living in one home. Household income includes: salaries and wages, retirement income, government assistance, and capital gains from investments such as real estate or stocks and bonds. The median household income for Butte County is considerably lower than for California overall, as well as nationally (see Table Status-6 2012-2014 data).

<sup>&</sup>lt;sup>7</sup> Youth and Tobacco Use. (2013). Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. Retrieved from: http://www.cdc.gov/tobacco/data\_statistics/fact\_sheets/youth\_data/tobacco\_use/

## Table Status-5: Socioeconomic 2006-2013

CHNA 2013 Data						
Topic	Butte County	CA	US	Difference	Year	
Children						
Children in Poverty	28%	23%	14%	5%	2013	
Education						
Population with No High School Diploma	14%	19%	15%	5%	2006-2010	
High School Graduation Rate	85%	76%	-	9%	2013	
Some college	66%	60%	70%	6%	2013	
College degree: adults 25+ (percent)	24%	30%	28%	7%	2009-2011	
Finance						
Median Household Income (dollars)	\$39,208	\$57,275	\$50,502	\$18,067	2011	
Population Receiving Medicaid*	22%	18%	16%	4%	2008-2010	
Poverty Estimated (percent)	23%	17%	16%	6%	2011	
Unemployment Rate	14%	12%	5%	2%	2013	
Insurance						
Uninsured: persons less than 65 years (percent)	19%	21%	-	2%	2010	

<sup>\*</sup>Approximately 71.07% of patients seen at ORCHARD HOSPITAL are Medicare or MediCal insured.

Table Status-6: Median Household Income in Butte County, California, and U.S., 2012-2014.

Report Area	Median Income	Median Income	Median Income
	2012	2013	2014
<b>Butte County</b>	\$40,960	\$42,752	\$43,365
California	\$58,328	\$60,190	\$61,933
United States	\$51,371	\$52,250	\$53,657

Source: U.S. Census Bureau, 2012-2014 American Community Survey.

<sup>-</sup> Median Income in inflation adjusted dollars for each year.

#### **CHRONIC DISEASES**

Chronic diseases account for roughly 2 out of 3 deaths worldwide. In the United States, chronic non-communicable health conditions are the top driver of healthcare costs. These health conditions are often a result of lifestyle choices and behaviors, and in many instances are preventable. A quarter of adults and three quarters of seniors in the U.S. have multiple chronic conditions, which increases the complexity, severity, and the cost of their care<sup>8</sup>.

The Center for Medicare and Medicaid Services (CMS) is the largest third party payer of medical expenses in the U.S., and most hospitals receive a significant portion of their reimbursement for care from CMS. CMS tracks data for 17 chronic conditions among its beneficiaries, as these account for the majority of CMS spending on healthcare<sup>9,10</sup>.

#### **Cardiovascular Disease**

Cardiovascular diseases are diseases of the heart and the blood vessels throughout the body, including the blood vessels of the brain. Examples of cardiovascular disease include: coronary heart disease; heart failure; sudden cardiac death; hypertensive heart disease; irregular heartbeat (arrhythmia/atrial fibrillation); heart attack (myocardial infarction); and stroke (cerebrovascular disease). Heart disease and stroke are common health issues, with Butte County reporting increased risk for both over the state and national numbers (see table status- 7A).

Table Status-7A: Cardiovascular Health

Table Status 7A. Caralovascalar Health									
CHNA 2013 Data									
Topic	Butte County	CA	US	Difference	Year				
Cardiovascular Health	Cardiovascular Health								
High blood pressure: adults 18+	20%	26%	-	6%	2009				
Heart Disease Prevalence	5%	3%	4%	2%	2006-2010				
Stroke deaths (per 100,000)	60	37	42	23	2010				
Stroke Mortality	47	41	42	6	2006-2010				

Table Status-7B 2016: Adults diagnosed with coronary heart disease or angina.

Report Area	Population Aged 18+	Adults with Heart Disease	Percent of Adults with Heart Disease
<b>Butte County</b>	229,609	15,603	6.8%
California	28,256,677	974,929	3.5%
United States	236,406,904	10,407,185	4.4%

Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County

<sup>8</sup> Goodman, et al. (2014). IOM and DHHS Meeting on Making Clinical Practice Guidelines Appropriate for Patients with Multiple Chronic Conditions. Annals of Family Medicine, 12(3): 256–259.

<sup>&</sup>lt;sup>9</sup> Anderson, G. (2010). Chronic care: making the case for ongoing care. Princeton, NJ: Robert Wood Johnson Foundation.

<sup>&</sup>lt;sup>10</sup> Bauer. U.E., Briss, P.A., Goodman, R.A., & Bowman, B.A., (2014). Prevention of chronic disease in the 21st century: elimination of the leading preventable causes of premature death and disability in the USA. Lancet, 384 (9937):45-52.

Chronic morbidity and high mortality rates are associated with these diseases. In fact, coronary heart disease is the leading cause of death in the United States, and the second leading cause of death in Butte County. Lower socioeconomic status (SES) is associated with increased risk for cardiovascular disease including heart failure (cardiac arrest)<sup>11</sup>. In Butte County, approximately 7% of the total population is living with heart disease, which is higher than both California overall and the nation (see *Table Status-7B*).

#### **Heart Disease and Health Insurance**

At-risk groups for heart disease and other chronic conditions have historically been uninsured and underinsured. These groups have historically faced considerable barriers to healthcare services, including the high costs associated with care for heart disease, and are less likely to seek preventive care or less intensive levels of care during less advanced stages of disease (see table status-7C).

Table Status-7C: Type of current health coverage for adults under age 65 in Butte County, 2014.

Ever diagnosed with heart disease	Uninsured	Medicaid	Employment- based	Privately purchased	Other public	All
<b>Butte County</b>						
Has heart disease	9.5%*	9.1%*	1.9%*	-	-	4.7%*
Doesn't have heart	90.5%*	90.9%*	98.1%*	100.0%*	100.0%*	95.3%*
disease	18,000	34,000	75,000	7,000	1,000	134,000
California	•					
Has heart disease	3.1%	6.9%	2.2%	1.9%*	13.0%*	3.5%
	127,000	322,000	280,000	36,000	70,000	835,000
Doesn't have heart	96.9%	93.1%	97.8%	98.1%*	87.0%*	96.5%
disease	3,951,000	4,359,000	12,275,000	1,815,000	470,000	22,870,000

#### **Clinic Care and Health Outcomes**

Cancer is the leading cause of death in Butte County. It is characterized by the uncontrolled growth and spread of abnormal cells and consists of more than 100 different diseases. The risk of developing cancer increases with age and varies by gender and race. As the average age of the population has increased, so has the incidence of cancer. Family history of cancer is also associated with risk for these diseases. Up to 80.0% percent of all cancers are related to lifestyle or environmental factors, such as smoking and diet. Changes in lifestyle or environmental conditions may greatly reduce the incidence of cancer. Opportunities exist to reduce the burden of cancer through improved prevention, early detection, and treatment. For instance, there is convincing evidence that screening for colorectal cancer reduces the death rate (mortality rate) in adults between the ages of 50 and 75. Early detection is key to the effective treatment of many cancers and can be lifesaving. In addition, the cost of treating cancer is significantly lower if detected early (see table status-8A).

<sup>&</sup>lt;sup>11</sup> Reinier, K., Thomas, E., Andrusiekj, D.L., et al. (2011). Socioeconomic status and incidence of sudden cardiac arrest. Canadian Medical Association Journal. 183(15):1705–1712.

#### Table Status-8A CHNA 2010-2013 data

Topic	Butte County	CA	US	Difference	Year
Cancer		•			
Cancer Deaths Overall (per 100,000)	151	227	186	76	2010
Breast Cancer Incidence	137	123	122	14	2005-2009
Breast Cancer Screening (Mammogram)	65%	62%	73%	3%	2013
Cervical Cancer Incidence	9	8	8	1	2005-2009
Cervical Cancer Screening (Pap Test)	81%	77%	74%	4%	2004-2010
Colon and Rectum Cancer Incidence	40	44	40	4	2005-2009
Colon Cancer Screening (Sigmoid/Colonoscopy)	52%	52%	52%	0%	2004-2010
Lung Cancer Incidence	70	52	67	18	2008-2010
Prostate Cancer Incidence	157	143	151	14	2005-2009

### Table Status-8B CHNA 2016 data: All cancer incidence rates in Butte County, 2009-2013

Year	2009	2010	2011	2012	2013	5 Year
						Average
Population at Risk	219,777	219,914	219,913	221,016	222,090	220,542
Total Cases	1293	1307	1323	1301	1187	1282.2
Age-Adjusted Rate	490.86	494.06	498.16	479.03	433.43	478.86
California Age-Adjusted Rate	438.45	429.01	418.86	408.39	398.00	417.96

Sources: California Department of Public Health. Data accessed July 10, 2014. Based on December 2015 Extract. Note: All rates are per 100,000. Rates are age-adjusted to the 2000 U.S. Standard Population. Retrieved March 22, 2016 from: <a href="http://www.cancer-rates.info/ca/index.php">http://www.cancer-rates.info/ca/index.php</a>

Between 2009 and 2013, the average number of people at risk for cancer annually in Butte County was 220,542. Over this time period a total of 6,411 cases of invasive cancer were diagnosed, with an average of 1,282 people diagnosed per year. The age-adjusted rate for all cancers in Butte County was 478.9 cases per 100,000 people, which was notably higher than for the state of California overall (see *Table Status-8B*).

### **Breast Cancer Incidence**

Breast cancer is a malignant tumor that starts in the cells of the breast and is the most common type of cancer in women of every race and ethnicity in California. The incidence rate of breast cancer in Butte County ranks as the 6th highest out of all 58 counties in California.

Year	2009	2010	2011	2012	2013	5 Year Average
Population at Risk	108,784	108,828	108,945	109,584	110,234	109,275
Total Cases	201	174	184	139	151	169.8
Age-Adjusted Rate	158.3	136.5	139.0	106.4	106.4	129.3
California Age-Adjusted Rate	135.4	132.3	127.2	105.5	98.0	119.7

Sources: California Department of Public Health. Data accessed July 10, 2014. Based on October 2013 Extract (Released December 13, 2013) Note: All rates are per 100,000. Rates are age-adjusted to the 2000 U.S. Standard Population.

Between 2009 and 2013, the average number of women at risk for breast cancer annually in Butte County was 109,275. Over this time period a total of 849 cases of invasive breast cancer were diagnosed, with an average of 170 people diagnosed per year. The age-adjusted rate for incidence of female breast cancer in Butte County was 129.3 per 100,000, which was slightly higher than for California overall (see *Table Status-8C*).

#### **Prostate Cancer Incidence**

Prostate cancer is one of the most commonly diagnosed cancers in men, and the second leading cause of cancer related male deaths after skin cancer.

Table Status-8D CHNA data 2016: Prostate Cancer Incidence Rates in Butte County, 2009-2013

Year	2009	2010	2011	2012	2013	5 Year Average
Population at Risk	107571	108319	108784	108866	109036	108515
Total Cases	196	197	199	170	185	189
Age-Adjusted Rate	162.12	162.30	156.77	133.31	139.55	150.8
California Age-Adjusted Rate	155.13	140.70	134.23	129.57	124.61	136.4

Sources: California Department of Public Health. Data accessed July 10, 2014. Based on October 2013 Extract (Released December 13, 2013)

Note: All rates are per 100,000. Rates are age-adjusted to the 2000 U.S. Standard Population.

Between 2009 and 2013, the average number of men at risk for prostate cancer annually in Butte County was 108,515. Over this time period a total of 947 cases of invasive prostate cancer were diagnosed, with an average of 189 people diagnosed per year. The age-adjusted rate for incidence of male prostate cancer in Butte County was 150.8 per 100,000, which was higher than for California overall (see *Table Status-38*).

#### **Diabetes**

Diabetes (mellitus) is a group of chronic diseases characterized by high blood glucose levels resulting from defects in insulin production, insulin action, or both. It is associated with high morbidity and mortality rates. The most common types of diabetes are: type 1, type 2, and gestational diabetes. Serious complications from diabetes include kidney damage and chronic kidney disease, nerve damage, risk of amputation, blindness, stroke, heart disease, complications in pregnancy, and even premature death. However, people with diabetes can take steps to control symptoms of the disease and lower their risk for complications. Percentage of Butte County residents who receive annual screenings and management of their disease is high, but there is still room for improvement (see table status-9A.

Table Status-9A CHNA data 2010-2013

Table Status SA CHINA data 2010 2013					
Topic	Butte County	CA	US	Difference	Year
Diabetes					
Diabetes adults (percent)	9%	9%	-	0%	2010
Diabetic screening	79%	81%	90%	3%	2013
Diabetes Management (Hemoglobin A1c Test)	79%	81%	84%	2%	2010

There is a clear link between obesity and type 2 diabetes in that as the rate of obesity increases so does the rate of type 2 diabetes. According to the 2011-2012 California Health Interview Survey (CHIS), approximately 9% of the adult Butte County population has been diagnosed with some form of diabetes, with nearly 17% of the population age 65 and over being diagnosed. This is consistent with national trends, as the overall rate of adults diagnosed with diabetes has been rapidly increasing, with the highest percentage of new cases occurring in adults age 55 and over 12. Diagnoses of type 2 diabetes increase with age due to a decreased level of activity and exercise, loss of muscle mass, and increase in weight 13.

Cases of diabetes during pregnancy include both pre-existing and gestational diabetes. Gestational diabetes is defined as diabetes first diagnosed during pregnancy in which a woman's glucose tolerance may return to normal after delivery; however, her risk for developing diabetes remains high. All forms of diabetes during pregnancy may result in complications during labor and delivery. According to the 2011-2012 CHIS, the rate of pre-existing or gestational diabetes during pregnancy in Butte County is slightly higher (about 7 cases per 100 pregnancies) than for California (about 5 cases per 100 pregnancies).

<sup>12</sup> http://www.cdc.gov/diabetes/statistics/age/fig1.htm

<sup>&</sup>lt;sup>13</sup> http://www.mayoclinic.org/diseases-conditions/type-2-diabetes/basics/risk-factors/con-20031902

## **Pulmonary Health**

The number of reported deaths due to chronic lower respiratory disease in Butte County is more than double that of the state. Chronic bronchitis, emphysema and asthma – all conditions associated with chronic lower respiratory disease – may be affected by Butte County's higher than average tobacco use (see table status 10A).

Table Status-10A CHNA data 2010-2013

Tubic Status 10A CITIVA data 2010 2015	<i>4</i>				
Topic	Butte County	CA	US	Difference	Year
Pulmonary Health					
Asthma Prevalence	17%	13%	13%	110/2	2006- 2010
Chronic lower respiratory disease (CLRD) deaths (per 100,000)	74	35	45	39	2010
Air Quality					
Daily fine particulate matter	11	12	9	1	2013

#### **Asthma**

Asthma is a chronic, often lifelong condition in which inflammation of the airways to the lungs occurs, making breathing difficult. It is a rapidly increasing health problem and is a leading cause of school and workplace absences and hospitalization, especially among children.

Table Status-10B 2016 CHNA data: Adults ever diagnosed with asthma, 2011-2014

	Hispanic /Latino	White	African American /Black	American- Indian /Alaska Native	Asian	Native Hawaiian/ Pacific Islander	Two or More Races	All
Butte County	8.4%*	19.4%	1	-	13.6% *	1	40.2% *	17.2%
California	11.4%	15.5%	20.0%	29.3%	10.9%	2.5% *	25.8%	13.9%

Source: 2011 – 2014 (pooled) California Health Interview Survey.

(hyphen) = Estimate is less than 500 people.

According to the California Health Interview Survey, a higher percentage of adults in Butte County have been diagnosed with asthma than in California overall. This was true of all racial and ethnic groups for which data was available, except Hispanic/Latino (see *Table Status-10B 2016 CHNA Data*).

<sup>\*</sup> Statistically unstable: an unstable cell has not met the criteria for a minimum number of respondents needed AND/OR has exceeded an acceptable value for coefficient of variance.

## Table Status-10C 2016 CHNA Data: Asthma hospitalizations rates per 10,000 residents in 2012.

Age	<b>Butte County</b>	California
0-4 Years	24	22.1
5-17 Years	4.1	7.8
All Ages ( children and adults)	8.3	8.6

Source: Office of State wide Health Planning and Development (OSHPD), 2012

Children without access to regular medical care are more likely to suffer from serious asthmatic attacks that may result in repeated absences from school, trips to the emergency room, and even hospitalization. In Butte County, the asthma related hospitalization rate for children from birth to four years old is 24 hospitalizations per 10,000 residents, which is slightly higher than the rate for California overall. For Butte County, children between the ages 5 and 17 the rate is about 4 hospitalizations per 10,000 residents, which is lower than the statewide rate for children in this age group (see *Table Status-10C 2016 CHNA Data*).

Table Status-10D 2016 CHNA data: Expected Asthma ED Visits Payment Type for Butte County and California, 2010.

Payment Source	Butte County	California
Medicare	15.4%	12.6%
Medi-Cal	54.9%	37.1%
Private	18.1%	31.1%
Other	11.7%	19.3%

Source: Office of Statewide Health Planning and Development (OSHPD), 2010.

A much higher percentage of patients presenting with asthma related conditions in Butte County (54.9%) emergency departments are Medi-Cal beneficiaries than in California overall (37.1%). In order to qualify for Medi-Cal, a family or individual must earn less than 138% of the federal poverty level (see *Table Status-10D 2016 CHNA data*). This highlights the influence that socio-economic status may be playing in relation to asthma in Butte County. Furthermore, results of the most recent California Health Interview Study (CHIS) indicated a substantially higher percentage of Medi-Cal beneficiaries report being current smokers in Butte County (42.0%) than in California overall (19.0%), which is a major risk factor for the development of asthma in both the direct form and via second hand smoke.

## **Chronic Obstructive Pulmonary Disease**

Chronic Obstructive Pulmonary Disease (COPD) is the third leading cause of death in the United States. It is a progressive disease and its symptoms frequently worsen across time<sup>14</sup>. The leading factor for the development of COPD is smoking. However, exposure to air pollution, chemical fumes, or dust over long periods of time may also lead to the development of COPD. It is an obstructive disease, meaning that air flow into and out of the lungs is diminished. This prevents oxygen from being exchanged for carbon dioxide waste in the lungs, causing less oxygenated blood and body tissues<sup>15</sup>. It is most frequently diagnosed in middle aged and older adults, and has no cure. However, progress of the disease may be diminished by lifestyle changes such as quitting smoking, and undergoing treatment for the condition.

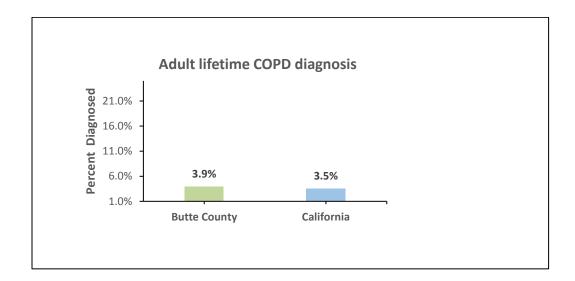


Figure Status-2: Percent of adults 18 and over diagnosed with COPD.

Source: Derived from Estimated Prevalence and Incidence of Lung Disease: American Lung Association: Epidemiology and Statistics Unit Research and Health Education, May 2014. Estimates based on 2012 BRFSS.

A slightly higher percentage of the adult population in Butte County than in California overall have been diagnosed with COPD, including chronic bronchitis and emphysema (see *Figure Status-2*).

#### MENTAL HEALTH

The World Health Organization (WHO) defines mental health as "a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community". The

<sup>14</sup> http://www.nhlbi.nih.gov/health/health-topics/topics/copd

 $<sup>^{15}\,</sup>http://www.lung.org/lung-disease/copd/about-copd/understanding-copd.html$ 

WHO estimates that about half of the world's population is affected by a mental health disorder at some point in their lifetime. Mental health disorders can impact an individual's self-esteem, interpersonal and professional relationships, and ability to function in everyday life. An individual's mental health can also impact their physical health and patterns of behavior. For example, it is well known that individuals diagnosed with clinical depression experience more pain, and are at a higher risk of developing substance use disorders 16,17,18.

Pervious 2013 CHNA Data Mental health concerns and suicide deaths are issues facing Butte County residents, with significantly higher than state averages according to 2010 reports (see table status-11A).

Table Status-11A CHNA data 2010-2013

Topic	Butte County	CA	US	Difference	Year
Mental Health					
Mentally Unhealthy Days: Adults (per person)	6	4	-	2	2010
Physically or Mentally Unhealthy Days: Adults (per person)	10	7	-	3	2010
Suicide Deaths (per 100,000 pop.)	24	11	12	13	2010

Rates of premature death and years of potential life lost before age 75 are both reported significantly higher than state averages (see table status-11B).

Table Status-11A CHNA data 2010-2013

Topic	Butte County	CA	US	Difference	Year
Miscellaneous					
Alzheimer's disease deaths (per 100,000)	64	29	27	35	2010
Fall deaths (per 100,000)	11	6	8	5	2010
Premature Death	8,637	5,971	7,131	2,666	2008- 2010
Years of potential life lost before age 75 (per 100,000)	7,944	5,570	6,811	2,374	2008- 2010

<sup>16</sup> Lépine, J. P., & Briley, M. (2004). The epidemiology of pain in depression. Human Psychopharmacology, Clinical and Experimental, 19: S3–S7.

<sup>&</sup>lt;sup>17</sup> Davis L, Uezato A, Newell JM, Frazier E., (2008). Major depression and comorbid substance use disorders. Current Opinion in Psychiatry, 21: 14–18.

<sup>18</sup> Office of Applied Studies, Substance Abuse and Mental Health Services Administration. (2007). National Survey on Drug Use and Health (NSDUH)'s Report: Co-occurring Major Depressive Episode (MDE) and Alcohol Use Disorder among Adults. Rockville, MD: Substance Abuse and Mental Health Services Administration.

## (Figures Status-3 2016 CHNA data)

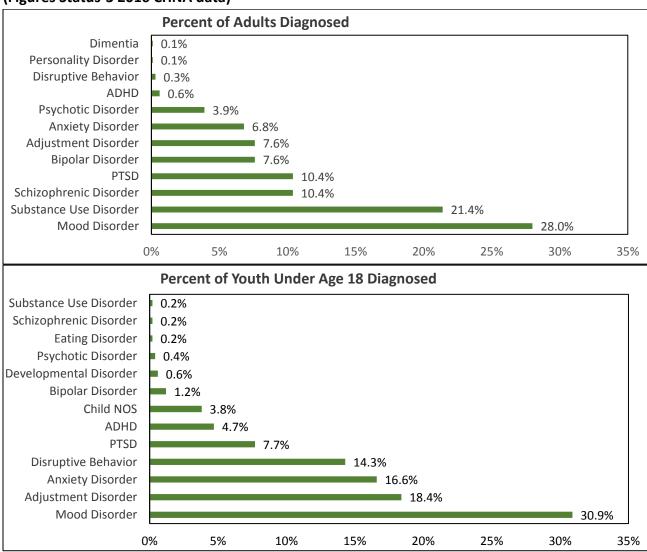


Figure Status-3A 2016 CHNA data: Mental Health Disorders for Adults and Youth under Age 18 Presenting at BCDBH, 2014-2015.

Source: Butte County Behavioral Health Systems Performance Data Report Fiscal Year 2014-2015.

The Butte County Department of Behavioral Health serves patients of all ages seeking treatment for mental health conditions. In 2014, the leading mental health diagnoses for both adults and youth (under age 18) receiving care at the Butte County Department of Behavioral Health were mood disorders, such as depression. The second leading diagnoses in adults were substance use disorders. When substance abuse is combined with a high rate of poverty, chances of suicide are increased. In contrast, adjustment disorders (poor coping in response to stressful events) were the second leading diagnosis for youth under the age of 18 in Butte County (see *Figure Status-3A*). Of note, results of the Healthy Living in Butte County survey indicate that residents identifying as LGBT+ are significantly more likely to be concerned about mental health than residents identifying as exclusively heterosexual. Nationally, LGBT+ populations are more susceptible to depression and have a higher suicide rate than the general population<sup>19</sup>.

<sup>&</sup>lt;sup>19</sup> Pandya, A., (2014). Mental health as an advocacy priority in the lesbian, gay, bisexual, and transgender communities. Journal of Psychiatric Practice, 20(3):225-7.

#### Suicide

Suicide and suicidal behaviors affect people of all ages, ethnicities, religions, socioeconomic groups and geographic locations. Suicidal behavior is influenced by an array of biological, psychological, social, environmental and cultural risk factors. Suicide is the tenth leading cause of death in the nation<sup>20</sup>.

Table Status-11C 2016 CHNA data: Suicide three-year average rates per 100,000 population, Butte County and California, 2012-2014.

County of residence	2013 Population	2012-2014 Deaths (3 year average)	Crude death rate	Age-adjusted death rate
<b>Butte County</b>	222,035	35.7	16.1	15.5
California	38,202,206	4,014.0	10.5	10.2

Source: California Department of Public Health, 2012-2014 Death Statistical Master Files.

Suicide rates in rural areas tend to be higher than in urban settings. It is likely that the number of suicides reported each year is lower than the actual number that occurs due to the negative social stigma associated with committing suicide. Between 2012 and 2014 there was an average of nearly 36 deaths attributed to suicide per year in Butte County. When this 3 year average is adjusted to calculate the crude death rate (e.g. the average number of suicides per year divided by the population, times 100,000), it is clear that suicide is roughly one and a half times as common per capita in Butte County as in California overall. This also holds true when these rates are adjusted for age (see *Table Status-11C*).

Table Status-11D: Age-adjusted suicide rates by gender in Butte County, California, and the U.S. per 100,000 population, 2009-2013.

Report Area	Male Suicide Rate	Female Suicide Rate				
Butte County	29.0	8.3				
California	16.3	4.6				
United States	19.9	5.2				

Source: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2009-13. Source geography: County

Males are significantly more likely to commit suicide, but females are more likely to report attempting suicide<sup>21</sup>. In Butte County, the suicide rate among men is significantly higher than women. However, both men and women in Butte County have higher suicide rates than California overall and the United States (see *Table Status-11D*). Factors thought to underlie the gender specific difference in suicide rates include men being more likely to attempt suicide by gunshot which results in death more frequently, and that women are more likely to seek treatment for depression, a major risk factor for suicide.

<sup>21</sup> Centers for Disease Control and Prevention. (2014). Suicide prevention. Retrieved from: http://www.cdc.gov/ViolencePrevention/pub/youth suicide.html

<sup>&</sup>lt;sup>20</sup> http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61\_06.pdf

## Table Status-11E 2016 CHNA data: Five year suicide and nonfatal self-inflicted injury hospitalizations and emergency room visits<sup>1</sup> by method in Butte County, 2010 through 2014.

Method of	Death attributed to		Self-inflicted injury		Self-inflicted injury	
Suicide/Self	Suicide, (2009 – 2013)		resulting in		resulting in Emergency	
Inflicted Injury			Hospitalization		Department visit	
	Number	Percent	Number	Percent	Number	Percent
Cut/Pierce	7	3.4%	74	9.1%	549	38.6%
Firearm	106	51.2%	8	1.0%	4	0.3%
Hanging/Suffocation	43	20.8%	6	0.7%	27	1.9%
Jump	6	2.9%	9	1.1%	2	0.1%
Poisoning	37	17.9%	699	85.7%	763	53.7%
Other	8	3.9%	20	2.5%	97	6.8%
Total	207	100.0%	816	100.0%	1,422	100.0%

Source: California Vital Statistics Death Files and California Office of Statewide Health Planning and Development, Patient Data. Report generated from http://epicenter.cdph.ca.gov on: June 1, 2016. California Department of Public Health, Safe and Active Communities Branch.

Additional risk factors for suicide include: a family history of suicide or past suicide attempts, mental or physical illness, substance abuse, stressful life events, and incarceration. According to the data collected by the California Vital Statistics Death Files and California Office of Statewide Health Planning and Development, poisoning is the most common form of intentional, self-inflicted, non-fatal injury resulting in hospitalization. Of all reported suicides, firearms were the most common method used, followed by hanging/suffocation and poisoning (see *Table Status-11E*).

#### **Veterans Mental Health**

Men and women who have served in the U.S. military are at a higher risk than the general population for specific mental health issues. Between 2000 and 2007, a third of patients in the U.S. being treated at the Veterans Health Administration were diagnosed with a mental health disorder. Twenty percent were diagnosed with posttraumatic stress disorder (PTSD), and fourteen percent were diagnosed with depression. PTSD is thought to develop after a terrifying experience, or series of experiences, involving physical harm or the threat of physical harm. While it is frequently associated with veterans returning from combat, it may also occur in the general population due to traumatic experiences such as child abuse, car accidents, plane crashes, natural disasters, or rape. It is characterized by three categories of symptoms: re-experiencing (flashbacks, nightmares), avoidance (trouble remembering the event, avoiding places or objects that are reminders of the experience), and hyper-arousal (being on edge or easily startled<sup>22</sup>).

<sup>&</sup>lt;sup>1</sup> Self-inflicted nonfatal injuries include many that are not necessarily "attempted suicides" (e.g., cut/pierce injuries and low-dose poisonings).

<sup>&</sup>lt;sup>22</sup> http://www.nimh.nih.gov/health/topics/post-traumatic-stress-disorder-ptsd/index.shtml

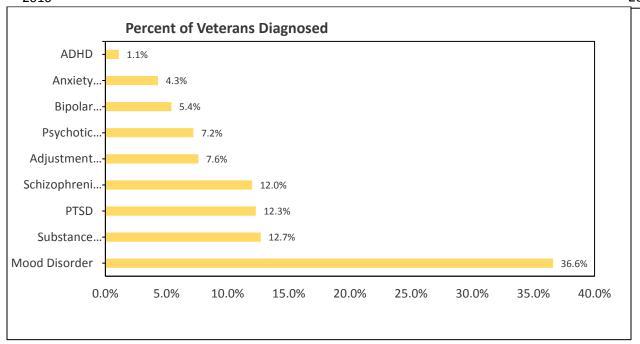


Figure Status-3B 2016 CHNA data: Mental Health Disorders for Veterans Presenting at BCDBH, 2014-2015. Source: Butte County Behavioral Health Systems Performance Data Report Fiscal Year 2014-2015.

In 2015, the leading mental health diagnosis for veterans seeking care at the Butte County Department of Behavioral Health was mood disorders, such as depression, followed by substance use disorders, PTSD, and schizophrenia (see *Figure Status-3B*). These are the leading mental health diagnoses among veterans nationally<sup>23</sup>. Roughly fifteen percent of patients identifying as veterans while seeking care at the Butte County Department of Behavioral Health indicated they were homeless at the time of treatment. This is considerably higher than the percent of adults seeking treatment overall that indicated they were homeless (8.6%), and is of particular concern as homeless veterans have been shown to be at a significantly higher risk of developing a substance use disorder<sup>24</sup>. Of note is that exposure to "theatre of combat" while serving increases the risk for developing mental health disorders, and there is a well-documented shortage of mental health care providers in the Veterans Health Administration, with less than half of veterans reporting adequate access to mental health care services. The level of rurality experienced by veterans in Butte County may also be a factor in their ability to obtain adequate mental health care services, as there are likely transportation and other geographic barriers to accessing care.

<sup>&</sup>lt;sup>23</sup> http://www.samhsa.gov/veterans-military-families

<sup>&</sup>lt;sup>24</sup> http://www.samhsa.gov/data/sites/default/files/spot121-homeless-veterans-2014.pdf

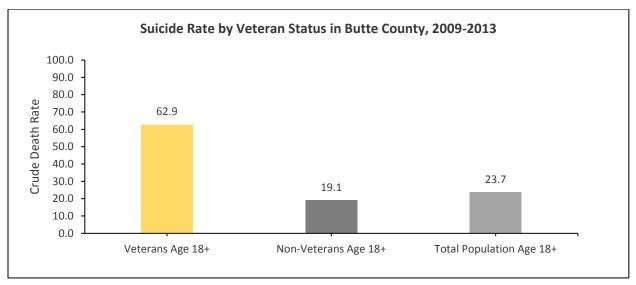


Figure Status-3C 2016 CHNA data: Suicide by Veteran Status, Age 18 Years and Over in Butte County, 2009-2013.

Adapted from: California Vital Statistics Death Files. Report generated from http://epicenter.cdph.ca.gov on: February 25, 2015; and U.S. Census Bureau, 2009-2013 5-Year American Community Survey.

Rates are calculated per 100,000 population.

There is increased concern for suicide risk in the veteran population. In the United States, an active duty military member commits suicide every 36 hours<sup>25</sup>, and a veteran commits suicide every 80 minutes<sup>26</sup>. Suicide has accounted for significantly more deaths among active duty military and veterans of the Iraq / Afghanistan conflicts than deaths from combat, with suicide among active duty Army reaching the highest rate ever recorded in 2012<sup>27</sup>. Understanding and reducing deaths from suicide among veterans is a national priority. The American Psychiatric Association reports that veteran males in the U.S. have twice the risk for suicide than non-veteran males. Veteran females are three times more likely to commit suicide than non-veteran females.

From 2009 to 2013, the suicide rate per 100,000 population among veterans was roughly three times as high as non-veterans age 18 and over in Butte County (see *Figure Status-3C*).

<sup>&</sup>lt;sup>25</sup> Department of Defense, (2010). The Challenge and the Promise: Strengthening the Force, Preventing Suicide, and Saving Lives. Final Report of the DOD Task Force on Prevention of Suicide by Members of the Armed Forces.

<sup>&</sup>lt;sup>26</sup> http://www.cnas.org/files/documents/publications/CNAS\_LosingTheBattle\_HarrellBerglass.pdf

<sup>&</sup>lt;sup>27</sup> http://www.samhsa.gov/veterans-military-families.

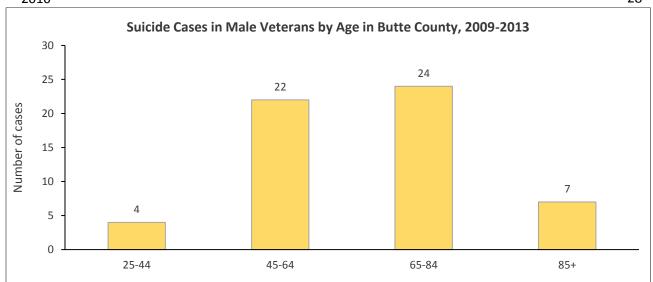


Figure Status-3D 2016 CHNA data: Veteran Suicide Cases by Age in Males Age 25 Years and Over in Butte County, 2009-2013.

Source: California Vital Statistics Death Files. Report generated from http://epicenter.cdph.ca.gov on: June 1, 2016. California Department of Public Health, Safe and Active Communities Branch.

Patterns of suicide risk across age groups differ among veterans, compared with risks in the general population. Older veterans are understood to have higher risks for suicide than younger veterans. In Butte County, veterans between the ages of 65-84 years have a higher risk for committing suicide than other veteran age groups (see *Figure Status-3D*). This is observed on a national level as well, with approximately 7 out of 10 veteran suicides occurring in veterans over the age of 50<sup>28</sup>. Factors other than age that increase the risk for suicide among veterans include: being male, having access to guns, and living in a rural area.

#### **Mental Health and Addiction Parity**

In the U.S., the Department of Health and Human Services estimates that fewer than 1 out of 5 people are living completely free of any mental health concerns. People with both short term and chronic mental health conditions often go unrecognized and untreated. This is associated with shortened life span, lower rates of full time and steady employment, and higher rates of homelessness.

One reason that people with mental health concerns frequently go untreated is due to a negative stigma often associated with mental health disorders. Symptoms of both mental health and substance use disorders have frequently been viewed as failings of character rather than attributed to a medical condition. The stigma associated with mental health disorders remains a major barrier to treatment for people experiencing symptoms.

<sup>&</sup>lt;sup>28</sup> http://www.va.gov/opa/docs/Suicide-Data-Report-2012-final.pdf

Table Status-11F CHNA 2016 data: Adults over age 18 reporting difficulties/delays obtaining care for mental health in Butte County and California, 2005.

Report Area	Had difficulties or delays		Didn't have diff	iculties or delays	Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Butte County</b>	4,000	10.4%*	36,000	89.6%*	40,000	100%
California	357,000	6.5%	5,149,000	93.5%	5,507,000	100%

Source: 2005 California Health Interview Survey

Historically, there have also been financial barriers to treatment distinct from general medical conditions such that insurers were less likely to include coverage for mental health services. However, the federal Mental Health Parity and Addiction Equity Act of 2008 has required all group health insurance plans that offer mental health benefits to do so at a level equivalent to those offered for general medical care, including benefits for substance use disorder treatment. Among adults in Butte County who reported a need for assistance with mental health, slightly more than ten percent reported difficulties or delays in receiving care (see *Status-11F*).

## AGING AND SENIOR RELATED HEALTH

#### **Falls in Older Adults**

The danger and effect of falls is a major factor influencing the health and independence of California's aging and senior population. Annually, approximately one third of California's seniors will fall. These falls result in 213,000 visits to the emergency room, and more than 60,000 hospital admissions<sup>29</sup>. More than 40.0% of seniors who are hospitalized with a hip fracture are unable to continue living independently, and 25.0% die within a year of sustaining the injury<sup>43</sup>. The high level of medical expenses associated with falls also place a considerable financial burden on those involved with both care and treatment of the patient. Research indicates that preventive efforts for seniors, specifically multi-factorial fall risk assessments and individually tailored interventions, can result in fewer hospitalizations and reduced medical costs.

Table Status-12: Fall related injury and death rates among seniors in Butte County, 2014

Age group	Non-Fatal departmen		Non-Fatal Hospitalizations		ons Deaths Due to Fall	
	Butte County	California	Butte County	California	Butte County	California
50-64	2,385.6	1,642.8	595.3	263.3	*	4.2
65-84	3,545.9	3,209.0	1,647.1	1,031.2	*	19.1
85+	10,781.3	10,198.8	6,041.7	4,422.2	*	139.1
Total (age 50+)	3,423.9	2,680.8	1,387.1	770.1	30.8	17.1

<sup>&</sup>lt;sup>29</sup> California Department of Health Services, Epidemiology and Prevention for Injury Control Branch

<sup>\*</sup> Statistically unstable: an unstable cell has not met the criteria for a minimum number of respondents needed AND/OR has exceeded an acceptable value for coefficient of variance; - (hyphen) = Estimate is less than 500 people.

Source: California Vital Statistics Death Files and California Office of Statewide Health Planning and Development Report generated from http://epicenter.cdph.ca.gov on: July 19, 2016.

\* Rates are not displayed if they are based on fewer than 20 cases because they are not reliable. Rates are calculated per 100,000 population.

In 2014, the rates of both fall related injuries and deaths among adults age 50 and over in Butte County were considerably higher than those of California overall. The rates for both Butte County and California were highest for non-fatal emergency department visits, followed by non-fatal hospitalizations and death (see Table Status-12).

#### **HEALTH CARE AND PREVENTIVE SERVICES**

Health insurance is important at every age and provides access to healthcare including opportunities for screenings, vaccinations, and testing for chronic diseases. Having access to primary and preventative care through health insurance helps to prevent the development of health issues and provide treatment at their onset. This can slow the progress of symptoms and minimize the development of chronic disease. Lack of access to health services leads to poor health outcomes and results in substantial economic costs.

#### **Health Insurance Status**

Health equity is reached when all people have the opportunity to make choices that allow them to live a long, healthy life, regardless of their income, education or ethnic background. Access to high quality health care services is essential for achieving health equity. In order to improve quality of life in Butte County, residents must have access to care and be well informed about their treatment choices. People without health insurance face considerable financial barriers to high quality and appropriate medical care. This often results in forgoing routine checkups, preventative care, and medical treatments during initial stages of disease until symptoms become more advanced and are more costly to treat.

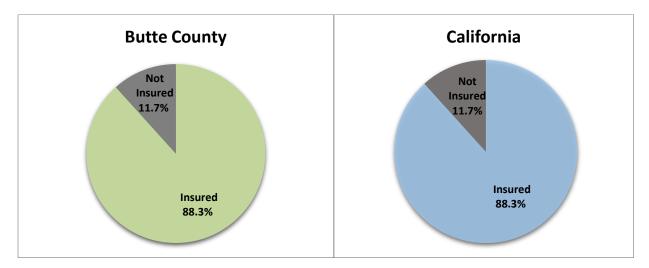


Figure Status-4: Percentage of people with and without Health Insurance Coverage in 2014

Source: U.S. Census Bureau, 2014 American Community Survey 1-Year Estimates

The Healthy People 2020 objective is for one hundred percent of people to have health insurance. In 2014, percentages of those with and without health insurance were equivalent in both Butte County and California overall (see *Figure Status-4*).

## **CAUSES OF DEATH**

All deaths that occur in Butte County are reported with detailed information including: age; race/ethnicity of the deceased person; place of residence at the time of death; cause of death; and other characteristics. Butte County's population varies regionally across several key demographics, including age. That is, in different geographic areas of the county, there are considerable differences in the percentage of people representing specific age groups. For instance, there are likely more young adults between the ages 18 and 25 residing in the downtown Chico area (near the CSU Chico campus) than living in Paradise. When comparing across geographic areas, the Age Adjusted Death Rate (AADR), is typically used to control for the influence that different age distributions might have on the frequency of causes of death.

Table Status-12: Mortality rates in Butte County and California, 2011-2013.

	Butte County ( age	California Current ( age	
Cause of Death	adjusted death rates )	adjusted death rates )	National Objective
All causes	791.3	641.1	a
All Cancers	179.0	151.0	161.4
Coronary Heart Disease	103.3	103.8	103.4
Accidents (un-intentional	60.4	27.9	36.4
injuries)			
Chronic Lower	55.7	35.9	a
Respiratory Disease			
Lung Cancer	45.7	33.6	45.5
Cerebrovascular Disease	44.1	35.9	34.8
(stroke)			
Alzheimer's Disease	41.3	30.8	a
Drug-induced Deaths	32.6	11.1	11.3
Prostate Cancer	25.0	20.2	21.8
Female Breast Cancer	19.4	20.7	20.7
Diabetes	17.5	20.8	b
Suicide	16.8	10.2	10.2
Influenza/ Pneumonia	15.6	16.3	a
<b>Chronic Liver Disease</b>	14.9	11.7	8.2
Colorectal Cancer	13.3	13.9	14.5
Firearm-Related Deaths	12.0	7.8	9.3
Motor Vehicle Accidents	10.6	7.6	12.4
Homicide	4.4*	5.1	5.5

Sources: California Department of Public Health, 2011-2013 Death Statistical Master Files.

a. Healthy People 2020 (HP 2020) National Objective has not been established.

b. National Objective is based on both underlying and contributing cause of death which requires use of multiple cause of death files.

The leading cause of death in Butte County between 2011 and 2013 was cancer, with an AADR of 179.3 deaths per 100,000 people. Other causes of death, in order of greatest to least frequent

AADR's were coronary heart disease, accidents (un-intentional injuries), chronic lower respiratory disease, stroke (cerebral vascular disease), and Alzheimer's disease. Cancer was also the leading cause of death for California overall, followed by coronary heart disease, stroke, chronic lower respiratory disease, Alzheimer's disease, and accidents (see Table Status-12).

## **Summary of Key Findings and Prioritized Needs**

Response to the Community Health Needs Assessment

A list of organizations that participated in the community input through focus groups can be found in **Appendix 1**. These focus groups were selected because they represented the broad interest of the community served by Orchard Hospital. Collectively, they advocate on behalf of the medically underserved, low income and minority populations within the community through their organizations.

In August of 2016, focused groups were held at community events and service clubs. The survey was distributed at that time. Respondents were asked to prioritize and rank health issues from 2013, important factors for a healthy community, most challenging risky behaviors, and greatest needs affecting children's health. Questions can be found in **Appendix 2**.

The following were identified through the survey process as being the most important health problems facing our local community (in order of response received):

- 1. Obesity-Nutrition, Healthy Choices
- 2. Diabetes
- 3. Substance Abuse-Tobacco-Drugs and Alcoholism
- 4. Heart Disease/ High Blood Pressure
- 5. COPD/ Asthma/ Respiratory/Lung Disease
- 6. Mental Health Issues- Suicide, Alzheimer's and Dementia
- 7. Cancer
- 8. Stroke
- 9. Sexually Transmitted Diseases

The health needs were prioritized by the community within the service area of Orchard Hospital. The criteria used to prioritize the health needs can be found in **Appendix 4**.

## **Existing Health Care and other Facilities and Resources**

A complete list of health care and other facilities available within the community to meet the health needs including location, contact information and description of services can be found in **Appendix 5**.

## **Implementation Plan**

Once the health needs were prioritized by the Orchard Hospital Administration, the final step in the CHNA process was to develop an implementation strategy. The purpose of the implementation strategy is to develop a clear set of goals to respond to the priorities identified. This strategy will include a written plan that addresses each of the community health needs identified through the CHNA, describe how the hospital plans to meet the health needs, and identify health needs the hospital does not intend to meet and why.

The following implementation strategy components within each priority were addressed:

- 1. Objectives/Strategy
- 2. How
- 3. Programs/Resources to Commit
- 4. Impact of Programs/Resources on Health Need
- 5. Accountable Parties
- 6. Partnerships/Collaboration

The detailed implementation strategy for each priority can be found in **Appendix 6**. In summary the following priorities were addressed through the implementation strategy:

- 1. Obesity
- 2. Diabetes
- 3. Substance Abuse/Cancer-"Tobacco"
- 4. Heart Disease/High Blood Pressure
- 5. Mental Health Issues
- 6. Teen Pregnancy/Obstetrics and Gynecology services
- 7. Respiratory/Lung Disease/ COPD
- 8. Stroke
- 9. Suicide

The implementation strategy detail for each priority located in **Appendix 6** provides supporting tactics, programs/resources, accountable parties, and potential partnerships/collaboration.

### Form 990 (Schedule H) Reference Chart

A reference chart was created for the purposes of the Form 990 (Schedule H) Internal Revenue Service requirements. A chart of requirements and the corresponding page referencing the indicated task can be found in **Appendix 7**.

# Appendix 1

### **List of Participating Organizations for Community Input**

#### Rotary Club of Gridley

This group represents the needs of the entire community including but not limited to; the needs of the senior population, low-income population, medically underserved, needs of children throughout the community and the minority population.

The group includes local business owners, Attorney's, City Administrator, law enforcement, education, foster care and the medical community (doctors, nurses, etc).

#### **COMMUNITY EVENTS**

#### National Night Out

This group represents the needs of the entire community including but not limited to; the needs of the senior population, low-income population, medically underserved, younger community at the middle and high school level and the minority population.

#### Farmers Market

This group represents the needs of the entire community including but not limited to; the needs of the senior population, low-income population, medically underserved, younger community at the middle and high school level and the minority population.

# Appendix 2

# 2016 CHNA Focused Conversation Reporting Form Community Members

#### **Questions:**

- 1. In 2013 and 2014, Orchard Hospital and the Together We Can! Healthy Living in Butte County partnership conducted a community health needs assessment to identify our community's top health needs. The following concerns were identified: Obesity and Diabetes and Pulmonary Issues (smoking, asthma).
  - a. Do you agree these are the top concerns of our community?
  - b. If no, what is/are the reason(s)?

[Did most people agree/disagree? Was there consensus?]

[What were the other reasons?]

- 2. In the past several years, the following action plans have been implemented to address these concerns:
  - a. Were you aware of these action plans?
  - b. Did you know these resources are available to the community?
  - c. Have you or a family member utilized any of these resources?
    - i. If yes, were they helpful?
    - ii. If no, what is preventing you or a family member from using these resources?
  - d. What other resources would you like to see to address these top concerns?

[Were most people aware/unaware of action plans?]

[Did most participants know these resources were available?]

[Did most participants or their family members utilize the resources?]

[Were resources mostly helpful or unhelpful?]

[What were major issues preventing participants from using resources]

3. Are there any other health concerns you think the hospital could address to make this community healthier? Specifically, what resources, changes, or improvements would you like to see to address these concerns?

Orchard Hospital Community Health Needs Assessment 2016

## [What were other top health concerns, resources, changes, or improvements participants suggested?]

•

4. If you had one suggestion on how to improve the health of your community, what would that be?

[What were the most common improvements suggested?]

•

Facilitator and Recorder Name(s)	Email Address(es):	Phone Number(s):
Jay Croy	Jcroy@OrchardHospital.com	530-846-9000
Lyndi Little Wallace	llittle@OrchardHospital.com	530-846-9000



## **News Release**

#### County residents invited to focus groups on community health

Together We Can! Healthy Living in Butte County and four local hospitals have teamed up to continue addressing the health needs of Butte County residents

CHICO, Calif., AUGUST 2, 2016 – Four area hospitals (Enloe Medical Center, Feather River Hospital, Orchard Hospital and Oroville Hospital), in partnership with the Together We Can, Healthy Living in Butte County community collaborative, are partnering to complete the latest county-wide community health needs assessment (CHNA).

Since the last CHNA in 2013, much work has been done toward improving the top identified health needs in Butte County, including multiple surveys that have collected feedback on local health needs. Now residents of Butte County are invited to attend one of several upcoming focused discussion groups to learn what has been done to address the identified needs, share their insight into changes that have occurred, and help shape the direction of the action plans for 2017-2019.

#### Focused discussion groups:

- Chico | Thursday, Aug. 11 (10 a.m. to Noon) and Thursday, Aug. 18 (4:30-6:30 p.m.)
- **Gridley** | Tuesday, Aug. 2 (5-8 p.m.) and Thursday, Aug. 4 (Noon to 1:30 p.m.)
- Oroville | Monday, Aug. 1 (Noon to 1 p.m.) and Tuesday, Aug. 9 (Noon to 1 p.m.)
- Paradise | Wednesday, Aug. 3 (5:30-7 p.m.) and Tuesday, Aug. 9 (11:30 a.m. to 1 p.m.)

Find additional information and RSVP to save your space at togetherwecanbc.com.

Under the Affordable Care Act, hospitals throughout the country are required to conduct a Community Health Needs Assessment every three years and develop an action plan in response to the findings. "The collaborative approach taken over the past three years to improve the health of Butte County has been inspiring," said Deanna Reed, Enloe Medical Center's Community Outreach Coordinator. "Now we're taking it to the next level, looking at what's already been done along with ways to advance all the good work taking place, ensuring we're moving forward in a positive direction to truly enact change."

The most recent survey findings are available on the Together We Can, Healthy Living in Butte County website. Results from this year's CHNA and subsequent action plans will be made available by the hospitals involved later this year.

**Enloe Medical Center** is a local, nonprofit health care organization. For more information, please call (530) 332-7300 or visit us online at http://www.enloe.org. Enloe Medical Center is located at 1531 Esplanade, Chico, Calif. 95926.

**Feather River Hospital** is part of Adventist Health, a faith-based, not-for-profit integrated health care delivery system serving communities in California, Hawaii, Oregon and Washington. Feather River Hospital is located at 5974 Pentz Road, Paradise, Calif. 95969. For more information, please call (530) 876-7208 or visit us online at http://www.frhosp.org.

**Orchard Hospital** is a local, nonprofit health care organization. For more information, please call (530) 846-9000 or visit us online at <a href="http://www.orchardhospital.com">http://www.orchardhospital.com</a>. Orchard Hospital is located at 240 Spruce Street, Gridley, Calif. 95948.

**Oroville Hospital** is a local, nonprofit health care organization. For more information, please call (530) 533-8500 or visit us online at <a href="http://www.orovillehospital.com">http://www.orovillehospital.com</a>. Oroville Hospital is located at 2767 Olive Highway, Oroville, Calif. 95966.

**Together We Can! Healthy Living in Butte County** is a community partnership bringing together, among others, representatives not just from health and healthcare organizations, but also community members, businesses, public safety, education, government, non-profits and many more organizations to build strategies to realize a shared vision of a healthier Butte County. Learn more at <a href="http://togetherwecanbc.com">http://togetherwecanbc.com</a>.

# Appendix 3





Please take 15-20 minutes to complete the survey below. **The purpose of this survey is to get your opinions about community health issues in Butte County.** Healthy Living in Butte County (HLBC) will use the results of this survey and other information to determine the most often identified problems that can be addressed through community action.

All survey answers are strictly confidential; the results will be reported in a summarized manner in such a way that individual information cannot be identified. You can skip any question that you do not feel comfortable answering.

**Your opinion is important!** If you have already completed a survey, please don't fill out another one. Thank you, and if you have any questions, please contact us (*see contact information at the end of the survey*).

1. \	Where do you live?	' Please <b>check one (1)</b> f	from the following list:	
	Bangor	Clipper Mills	Gridley	Thermalito
	Berry Creek	Cohasset	Magalia	Palermo
	Biggs	Concow	Oroville	Yankee Hill
	Butte Meadows	Durham	Paradise	Nord
	Cherokee	Forbestown	South Oroville	Stirling City
	Chico	Forest Ranch	Richvale	Honcut
	Other	······································		
2. V	Vhere do you work	? Please <b>check one (1)</b>	from the following list:	
	Biggs	Chico	Gridley	Paradise
	Magalia	Durham	Richvale	Thermalito
	Palermo	Oroville	Work outside Butte County	Do not work
	Other			

	the list below, what do you think are the <b>thre</b> ounty a good place to live?	e <b>e</b> mo	st important factors that make Butte				
Pl	Please check only three (3) from the following list:						
	Community involvement		Healthy behaviors and lifestyles				
	Low crime/safe neighborhoods/ strong law enforcement services		Low death and disease rates				
	Good schools		Religious or spiritual values				
	Access to health care/ health care is available when needed		Arts and cultural events				
	Parks and recreation (includes bike paths, hiking trails)		Values diversity, tolerance and inclusiveness				
	Clean environment		Good jobs and healthy economy				
	Affordable housing		Good hospitals				
	Strong family life		Dedicated residents/volunteerism				
	Sense of community		Many effective community-based and non profit organizations				
	Culturally appropriate services and opportunities		Support networks for individuals and families				
	Many health care providers		Specialized health care				
	Dental vans		Good transportation services				
	Access to healthy food		Support for seniors/elderly				
	Quality child care/afterschool care		Quality early childhood education				
	Other						

4. In the list below, what do you think are the **three** most important health issues in Butte County? The most important health issues are those that you feel have the greatest impact on overall community health in Butte County. Please check only three (3) from the following list: Obesity (being overweight) Vaccinations Violence/crime (e.g., gangs, firearm-Homelessness related injuries) Mental health issues (e.g., depression or Tobacco use emotional problems, suicide) Sexually transmitted diseases (e.g., Alcohol and drug abuse (substance abuse) Syphilis, gonorrhea, chlamydia) Lack of access to health care Teenage pregnancy Domestic violence Chronic diseases (e.g., cancer, diabetes, high blood pressure) Aging related health issues (e.g., arthritis, Child abuse / Child neglect hearing, vision loss, etc.) Poverty Agricultural pesticide exposure Healthy food access/ poor diet Air quality Inactivity/ Lack of exercise Water quality Unsafe roads Motor vehicle crashes Walkability/bike-ability (sidewalk Unsafe/distracted driving conditions, bike lanes, etc.) Lack of Transportation Lack of safe and affordable housing Lack of affordable childcare Lack of senior services/aging Lack of dental/oral health Other\_\_\_\_ HIV/AIDS

5. I think Butte County is a community to live	in.				
Check one (1) to fill in the blank in the above	statemen	it:			
Very Unhealthy Moder Unhealthy Health	-	Health	у	Very Health	ny
6. I think Butte County is a place to grow up of Check one (1) to fill in the blank in the above					
Very Unsafe Unsafe Moder Safe	ately	Safe		Very S	Safe
7. What would you like to see improved in the physical environment of Butte County?  Please let us know how important each of the following items is to you:					
Transportation	Very Unimportant	Unimportant	Moderately Important	Important	Very important
Sidewalks					
Bikeways bike lanes?					
Park safety					
Park amenities, including toddler playground area					
Other:					
8. Are you satisfied with your current housing situal 8.1 If no, why not? Check all numbers that apply  Too small  Too many people living in the same home (i.e., over-crowded)  Problems with other people, such as neighbors	Too	Yexpensive	own/serv		
Too run down, unsafe, or unhealthy					<del></del>

- 9. A group of community members has been working together to help Butte County build a vision and a set of values for a healthy community. They identified the following items as part of that vision and the values that would support it.
- 9.1 .Please check the box that describes how important you feel each item is as a part of a vision for community health. A vision provides a goal for the future, a statement of where we want the health of our community to be in 5-10 years.

	Very Unimportant	Unimportant	Moderately Important	Important	Very important
All of our communities have a safe and reliable					
transportation system.					
Residents receive a high quality education from preschool through high school.					
Everyone has information and access to quality, integrated health care services with a focus on health education, prevention, and healthy lifestyles.					
Our community values the mental health and well-being of each individual and provides clear information and readily available mental health services.					
We support a positive environment with opportunities for creativity, exercise, and outdoor recreation.					
We promote a smoke and drug-free environment with access to effective substance abuse treatment.					
Our community attracts a variety of desirable employment opportunities.					
Community members have access to nourishing and affordable food, including fresh fruits and vegetables.					
Our children are born healthy into a safe and supportive environment that promotes responsive parenting and breastfeeding.					
Our air and water are clean, and we have safe, designated outdoor spaces for physical activity.					
All residents live in safe, affordable housing that meets their needs.					
Our community supports the diversity and dignity of each person.					

What other ideas would you like to elaborate on or add to this vision? Please write your	
suggestions here:	
	_

# 9.2. Please check the box that describes how important you feel each item is as a value that supports achieving a vision of community health. Values are the beliefs we act upon and support how we work together to achieve our vision.

	Very Unimportant	Unimportant	Moderately Important	Important	Very important
Dignity and respect					
Honesty and integrity					
Compassion					
Open communication and transparency					
Collaboration					
Environmentally sensitive					
Results-oriented					
Cultural Diversity					
Broad representation					
Recognizing that people are our highest value					
10. Where do you go most often to access health					
	h care services	for vours	elf and vo	our family	?
Check one (1) that hest annlies:	n care services	for yours	elf and yo	our family	?
Check one (1) that best applies:  Butte County hospitals including emergency services Clinics/ health centers	School	for yourses/universes health va	ity based		
Butte County hospitals including emergency services	School Mobile	s/univers	ity based	health ce	enters

11.	If you got health care services outside of you matches why?	ur home city, which <b>one</b> reason below best
	Check one (1) reason that best matches v	why:
	My doctor of choice is in another city	No doctors accept Medicare or Medi-Cal
	No providers for services I need	My insurance only covers doctors in another area
	Other	
12.	Within the past year, what types of mental huse?	nealth services did you or anyone in your family
	Check all that apply:	
	None	Counseling/therapy
	Crisis care/emergency mental health services	Residential treatment
	Hospitalization	Needed services, but did not use because
	Psychiatric Medication Management	<u></u>
13.	If you needed mental health care services in services in Butte County?	the past year, were you able to get these
	Check one (1) that best applies:	
	Yes	I was able to get some services in Butte County but not all the services that I needed
	No	I did not need any mental health care services.
	If no, please explain why you were not able t	to get mental health care services in Butte
	County:	

14.	How do you pay for your health care?			
	Check all that apply:			
	No insurance (pay cash)		Medicare Suppl	emental Insurance
	Health Insurance (e.g., private insurance, Blue Shield, HMO)		Veterans Admin	istration
	Covered California		Indian Health Se	ervices
	Medicare		Other	
	Free services			
15.	Within the past year, what types of social serveceive?	vice be	enefits did you o	r anyone in your family
	Check all that apply:			
	None		Subsidized child	d care
	Food stamps (SNAP/CalFresh)		Child welfare se	ervices
	Respite care		Unemployment	services
	CalWORKS		Legal Aid	
	Housing assistance		Social Security	( including SSI and SSDI)
	Medi-Cal/Medicare		Other	
	Veterans Affairs (VA) benefits			
16.	If you received benefits, were you able to get  Yes  No, if no please explain:	them	in Butte County?	(Check one)
17.	Do you think there are enough jobs in Butte C	County	?	
	For adults? Aged 18 years and over		Yes	No
	For youth? Under 18 years of age		Yes	No No
18.	Are you currently employed? (Check one)			
	Not employed Self-employed		Employed part- time	Employed full time
			Ple	ase turn to the next page

19.	If no	t working, what is the main reason you	are not working? (Check one)
		Medically ill or disabled	Taking care of family
		Cannot find work	Need training
		Retired	Student
		Other	
20	Ном	much stress do you feel at your job on a	a regular hasis? (Check one)
20.		No stress Some A	A lot of Too much Not stress working
21.	In B	utte County, the places where I go for re	ecreation most often are:
	Che	eck only three (3) boxes from the list	below:
		Parks/rivers/lakes/beaches/woods	Restaurants
		Movie theaters	Centers for yoga, tai-chi, etc.
		Live theater/performances	Church
		Social club/service club	Senior center
		Sports fields	Library
		Swimming pools	Neighborhood (walking/biking)
		Health/fitness clubs	Bars
		Casinos	Other
22.	Rec	reation activities that I would use if they	y were available in Butte County are:
23.		· · · · · · · · · · · · · · · · · · ·	do you participate in volunteer activities (for rganizations and churches)? (Check one)
		None 1 to 5 hours	6 to 10 hours Over 10 hours

24	. Type of volunteer activ	ities that most i	nterest you ( <b>ch</b>	eck all that appl	<b>y</b> ):
	Fundraising	Gen	eral office servi		t, prepare, oute or serve food
	Tutoring or teachin	dist	ect, make, or ribute clothing, its, or goods		referee, or vise sport teams
	Mentor youth		ergency services nteer		performance, or artistic activities
Be an usher, greeter, or Otherminister					
25	. Do you use the followin	g substances?			
	Substances	Every Day	Some Days	Not At All	Do Others Within Your household Use?
	Alcohol				
	Cigarettes				
	Electronic Cigarettes				
	Chew, Snus or Snuff				
	Cigars and Cigarillos				
	Cocaine				
	Crystal Methamphetamine (Meth)				
	Heroin				
	Marijuana				
	Synthetic Marijuana (also called K2, Spice, Fake, King Kong, Yucatan Fire, Skunk, or Moon Rocks)				

# Please answer the following questions about yourself so we can see how different types of people feel about these local health issues.

26.	Zip code where you live:
27.	How would you classify your gender identity?
	Male Female
	Transgender male (assigned female at birth, identifies as male)  Transgender female (assigned male at birth, identifies as female)
	If your identity is not listed above, please self-identify:
28.	How do you identify your sexual orientation?
	Heterosexual  LGBQ+ (Lesbian, Gay, Bisexual, Queer,
	Questioning, Pansexual, Asexual, 2-Spirit)  If your identity is not listed above, please self-identify:
29.	Your age (birth month and year):
	Under 18 years 18-25 Years 26-39 Years
	40-54 Years 55-64 Years 65-80 Years
	Over 80 years
30.	Ethnic group(s) you most identify with:
	Check one (1) that applies.
	Hispanic/Latino Non-Hispanic/Non- Unknown Latino
	Please turn to the next page

31. What is your race? <b>(Check all that apply)</b>					
Af	rican-American/Black		American Indian/Alaska Native		White
As	ian		Asian Indian		Hmong
Ch	inese		Filipino		Laotian
Pa	cific Islander		Native Hawaiian		Other (specify):
32. Your l	nighest educational level	: <b>(Cl</b>	neck one)		
Le	ess than high school		Associate or Technical Degree		College degree (4 year)
Hi	gh school Diploma		GED		Graduate or professional degree or higher
Ot	her				
33. Annua	al household income: <b>(Cl</b>	neck	one)		
	ess than \$20,000		\$20,000 to \$34,999		\$35,000 to \$49,999
\$	50,000 to \$64,999		\$65,000 to \$79,999		\$80,000 to \$100,000
O	ver \$100,000				
			old*: mily and non-family memb	 ers li	ving in the same house
35. How r	nany children aged 5 yea	ars o	r younger live within the h	iouse	hold?
0	1-2		3-4	5	or more

6. How did you find this survey? <b>(Check one</b>	)
Church	Post Office
Community meeting/ Event	Electronic mail
Grocery store/ Shopping Mall	Other

## Thank you very much for your response!

Please return completed surveys to the address below by October 17, 2014. You can drop off completed surveys at any of the following **Butte County Library Locations**:

Chico Branch	<b>Gridley Branch</b>	Oroville Branch	Paradise Branch
1108 Sherman Ave.	299 Spruce St.	1820 Mitchell Ave.	5922 Clark Rd.
Chico, CA 95926	Gridley, CA 95948	Oroville, CA 95966	Paradise, CA 95969
530-891-2762	530-846-3323	530-538-7641	530-872-6320

You can also scan and fax or email the completed surveys. If you would like more information about this project, please contact us at the number below.

#### Mail completed surveys to:

Attn: Gene Azparren
Butte County Public Health Department
202 Mira Loma Drive
Oroville, CA 95965

Phone: 530-538-7009 - Fax: 530-538-2164 Email: gazparren@buttecounty.net

# Appendix 4

#### **Prioritization of Health Needs**

The administrative team prioritized the health needs of the community primarily based on the results of the survey with the exception of the number three priority, Cancer.

Cancer was placed as a higher priority than Heart Disease/High Blood Pressure due to the current countywide implementation of a federally funded smoking cessation program. We will focus on Cancer as a result of tobacco use.

Orchard Hospital, Butte County Department of Public Health are working collaboratively to increase Cancer awareness as it specifically relates to the use of tobacco.

# Appendix 5

### **BUTTE COUNTY (SOUTH) RESOURCES**

Hospitals				
Orchard Hospital	240 Spruce Street, Gridley	530-846-5671		
Oroville Hospital	2767 Olive Highway, Oroville	530-533-8500		
Enloe Medical Center	1531 Esplanade, Chico	530-332-7300		
Rideout Health	726 4th Street, Marysville	530-751-4000		
Feather River Adventist Health	5974 Pentz Road, Paradise	530-877-9361		
	Health Clinics			
Medical Specialty Center Clinic	284 Spruce Street, Gridley	530-846-9080		
Medical Specialty Center Oroville	2445 Oro Dam Blvd. Suite 8, Oroville	530-353-3332		
Feather River Tribal Health	2145 5th Avenue, Oroville	530-532-6811		
Ampla Clinic (Gridley)	520 Kentucky Street, Gridley	530-846-6231		
	County Health			
Butte County Behavioral Health	995 Spruce Street, Gridley	530-846-7305		
Victim Witness	(no address)	530-538-7340		
Н	ome Health Care			
Hospice				
Butte Home Health & Hospice	(no address)	530-846-3820		
Assisted Living				
Gridley Health and Wellness	246 Spruce Street, Gridley	530-846-6266		
Larkin Guest Home	1297 Larkin Road, Gridley	530-846-4844		
River Valley Care Center	9000 Larkin Road, Live Oak	530-695-8020		
Skilled Nursing Facilities				
Hovlid Community Care Center	240 Spruce Street, Gridley	30-846-9065		
Community Assistance				
Oroville Homeless Coalition	(no address)	530-538-8399		
Meals on Wheels	(no address)	530-712-2600		
Domestic Violence				
Catalyst (Oroville)	(no address)	530-532-6427		
Pharmacies				
CVS Pharmacy	260 Spruce Street, Gridley	530-846-3682		
Rite Aid Pharmacy	1583 Hwy 99, Gridley	530-846-3334		
Safeway Pharmacy	1596 Hwy 99, Gridley	530-846-7360		

# Appendix 6

### Orchard Hospital Gridley, California

### Community Health Needs Assessment Implementation Plan 2016

### **Table of Contents**

Priority:	Obesity	1
Priority:	Diabetes	2
Priority:	Cancer (specifically related to tobacco use)	3
Priority:	Heart Disease/High Blood Pressure	4
Priority:	Mental Health Issues	4
Priority:	Teen Pregnancy/ OB/GYN Services	4
Priority:	Respiratory/Lung Disease	4
Priority:	Stroke	5
Priority:	Suicide	5

#### **Priority: Obesity**

#### **Objective/Strategy**

Enhance care for Childhood Obesity. Orchard Hospital will provide educational information and offer a yearly Fitness Challenge for those children being treated at our health care clinic, between the ages of 8 and 18 with weight loss.

#### How

Utilize the website and social media outlets to include marketing of programs and services available throughout our community for childhood obesity. Communicate service offered through local Service Clubs, Schools, Churches and at Orchard Hospital through existing and new community marketing. Orchard Hospital employees will be encouraged to participate.

#### **Programs/Resources to Commit**

Collaborate with local schools and partner with school nurses and the Center for Nutrition & Activity Promotion. Offering a Summer Program for Nutrition and Activities while supporting play 60.

#### Impact of Programs/Resources on Health Need

• See a marked improvement in management of individual weight and nutrition. This will be evidenced by increased activity among children/teens as well as weight loss.

#### **Accountable Parties**

- Shauna Huston, Orchard Hospital Registered Dietician in Nutritional Services
- Kirsten Storne, Director of the Medical Specialty Center
- Jay Croy, RN, Education/Infection Prevention
- Lyndi Little Wallace, Orchard Hospital Director of Physician Recruitment, Marketing and Community Outreach

#### Partnerships/Collaboration

Butte County Public Health, Orchard Hospital Nutritional Services, Medical Specialty Center clinic, Local Service Clubs, and the Local School Districts.

#### **Priority: Diabetes**

#### **Objective/Strategy**

Enhance care for Diabetes. Orchard Hospital will provide diabetes education to patients identified by providers in the Medical Specialty Clinic. A provider will refer a patient to diabetic counseling with the registered dietician as needed.

#### How

Upgrade website to include marketing of programs and services available throughout our community for diabetes. Patients will be referred when newly diagnosed with diabetes or as needed.

#### **Programs/Resources to Commit**

Orchard Hospital Dietitian and or Provider (MD or FNP) will meet with the patient then have a 20-30 minute diabetic counseling session.

#### Impact of Programs/Resources on Health Need

• See a marked improvement in management of diabetes. This will be evidenced by lower blood sugar levels and weight loss when applicable.

#### **Accountable Parties**

- Julie Thompson, Orchard Hospital Registered Dietician in Nutritional Services
- Jay Croy- Jay Croy, Orchard Hospital RN, Education/Infection Prevention
- Kirsten Storne, Orchard Hospital, Director of the Medical Specialty Center
- Lyndi Little Wallace, Orchard Hospital Director of Physician Recruitment, Marketing and Community Outreach

#### Partnerships/Collaboration

Initially, this process will be in-house (utilizing the services of our Nutritional Services department and the Medical Specialty Center clinic).

#### **Priority: Cancer (specifically related to Tobacco use)**

#### **Objective/Strategy**

Orchard Hospital will continue to promote smoking cessation among young people and adults within our community in order to decrease the % of those who smoke or use smokeless tobacco.

#### How

Upgrade website to include marketing of programs and services available throughout our community for Cancer related to the use of tobacco. Communicate services offered at Orchard Hospital through existing and new community marketing. Orchard Hospital employees will be encouraged to participate.

#### **Programs/Resources to Commit**

Currently Orchard Hospital is in collaboration with the Butte County Department of Public Health and Butte County Drug Abuse Task Force to implement a smoking cessation program. Work with the Local School Districts and the local Parks and Recreation Departments to roll- out programs to the youth. Promotion of this program will continue to be communicated to patients through staff and physicians. Work with our current Human Resource Department and healthcare insurance to offer incentives to our employees for participating in smoking cessation. Orchard Hospital will also be offering the Accessible Intervention and Respiratory Education (AIRE program) for those that have COPD.

#### Impact of Programs/Resources on Health Need

- Decline in the % of those who smoke or use smokeless tobacco
- Additional education to front-line staff

#### **Accountable Parties**

- Kirsten Storne, Orchard Hospital Director of the Medical Specialty Center
- Jodie, Brown Lead, Cardiopulmonary
- Jay Croy, RN, Orchard Hospital Education/Infection Prevention
- Lyndi Little Wallace, Orchard Hospital Director of Physician Recruitment, Marketing and Community Outreach

#### Partnerships/Collaboration

Orchard Hospital will work closely with Butte County Department of Public Health and Gridley/Biggs Unified School Districts.

#### Priority: Heart Disease/High Blood Pressure

Reason for not responding to this priority:

Currently, Orchard Hospital has cardiac services available for patients but no further resources are being committed to heart disease within our facility at this time. Orchard Hospital periodically offers or participates in local/community health fairs and provides information on heart disease and high blood pressures on an ongoing basis. Community members have many walk in locations available for blood pressure checks.

#### **Priority: Mental Health Issues**

Reason for not responding to this priority:

Orchard Hospital will be opening a senior life Solutions program that is designed to meet the unique needs of older adults struggling with depression and anxiety often related to aging. Orchard Hospital is unable to allocate funds to the recruitment of a Mental Health Service Provider to focus on all mental health issues and therefore, we are unable to respond to this priority. Orchard Hospital actively participates as able with county wide behavioral health initiatives and utilizes these resources to assist our community with behavioral health needs.

#### Priority: Teen Pregnancy/ Obstetrics and Gynecology (OB/GYN) Services

Reason for not responding to this priority:

Orchard Hospital only offers Gynecology Services. Orchard Hospital does not offer obstetrics care through our facility at this time. This priority is not currently in alignment with the organization's strengths as we do not offer local pediatrics. County wide initiatives are in place to address this issue.

#### **Priority: Respiratory/Lung Disease**

Reason for not responding to this priority:

Currently, Orchard Hospital has respiratory services available for patients and AIRE Program. Our resources committed to the cancer and smoking cessation priority will include commitment to respiratory/lung disease within our facility at this time.

#### **Priority: Stroke**

Reason for not responding to this priority:

Existing local resources provided through other county hospitals and health facility providers address stroke. Orchard Hospital does not have the specialists or resources for this priority.

#### **Priority: Suicide**

Reason for not responding to this priority:

Suicide would be included in mental health services. Orchard Hospital is unable to allocate funds to the recruitment of a Mental Health Service Provider and therefore, we are unable to respond to this priority. Orchard Hospital actively participates as able with county wide behavioral health initiatives and utilizes these resources to assist our community with behavioral health needs.

# Appendix 7

## Form 990 (Schedule H) Reference Chart

Form 990 Question No.	Description	Reference Page in CHNA Document
	Fiscal Year End	June 30th
	State	CA
1	During the tax year or any prior tax year, did the hospital facility conduct a community health needs assessment (Needs Assessment)? If "No," skip to line 8. If "Yes," indicate what the Needs Assessment describes (check all that apply):	Yes
А	A definition of the community served by the hospital facility	Pg 2
В	Demographics of the community	Pg 5
С	Existing health care facilities and resources within the community that are available to respond to the health needs of the community	Appendix 5
D	How data was obtained	Pg 2
E	The health needs of the community	Pg 12
F	Primary and chronic disease needs and other health issues of uninsured persons, low-income persons, and minority groups	Pg 12
G	The process for identifying and prioritizing community health needs and services to meet the community health needs	Pg 12 and Appendix 4
Н	The process for consulting with persons representing the community's interests	Appendix 1 and 2
I	Information gaps that limit the hospital facility's ability to assess all of the community's health needs	Pg 4
J	Other (describe in Part VI)	Appendix 3: Survey
2	Indicate the tax year the hospital facility last conducted a Needs Assessment: 2013	2013
3	In conducting the most recent Needs Assessment, did the hospital facility take into account input from persons who represent the community served by the hospital facility? If "Yes," descriein Part VI how the hospital facility took into account input from persons who represent the community, and identify the persons the hospital facility consulted	Yes

## Form 990 (Schedule H) Reference Chart (continued)

Form 990 Question No.	Description	Reference Page in CHNA Document
4	Was the hospital facility's Needs Assessment conducted with one or more other hospital facilities? If "Yes," list the other hospital facilities in Part VI.	Yes (See Part VI)
5	Did the hospital facility make its Needs Assessment widely available to the public? If "Yes," indicate how the Needs Assessment was made widely available (check all that apply):	Yes
А	Hospital facility's website	Yes
В	Available upon request from the hospital facility	Yes
С	Other (describe in Part VI)	See Part VI
6	If the hospital facility addressed needs identified in its most recently conducted needs Assessment, indicate how (check all that apply):	Yes
А	Adoption of an implementation strategy to address the health needs of the hospital facility's community	Appendix 6
В	Execution of the implementation strategy	Appendix 6
С	Participation in the development of a community-wide community benefit plan	Appendix 6
D	Participation in the execution of a community-wide community benefit plan	Appendix 6
E	Inclusion of a community benefit section in operational plans	Appendix 6
F	Adoption of a budget for provision of services that address the needs identified in the Needs Assessment	N/A
G	Prioritization of health needs in its community	Appendix 6
Н	Prioritization of services that the hospital facility will undertake to meet health needs in its community	Appendix 6
I	Other (describe in Part VI)	N/A
7	Did the hospital facility address all of the needs identified in its most recently conducted Needs Assessment? If "No," explain in Part VI which needs it has not addressed and the reasons why it has not addressed such needs	Yes

Other: Part VI

#4 – Was the hospital facility's Needs Assessment conducted with one or more other hospital facilities? If "Yes", list the other hospital facilities in Part VI.

Orchard Hospital worked collaboratively with the following hospitals and public health entity to complete the data gathering process for the Community Health Needs Assessment:

- Enloe Medical Center
- Feather River Hospital Adventist Health
- Oroville Hospital
- Butte County Department of Public Health

## #5C – Did the hospital facility make its Needs Assessment widely available to the public? Other (describe in Part VI).

- 1. Notification to the public that the Orchard Hospital Community Health Needs Assessment was available for review and was placed in the local newspaper with the website link to access the report.
- 2. Notification to all of our employees was made through a facility wide mass email. Email included a link to the report on our website and an attachment (PDF) of the report.
- 3. Notification to our employees was also placed on our intranet along with a PDF of the report.