Long Beach Memorial

Community Health Needs Assessment

June, 2013

LONG BEACH MEMORIAL
MEMORIALCARE HEALTH SYSTEM

Table of Contents

Figures

Tables

EXECUTIVE SUMMARY

Introduction: Four major non-profit hospitals in the city of Long Beach; Community Hospital Long Beach, Long Beach Memorial, Miller Children's Hospital Long Beach and St. Mary Medical Center have come together in a community partnership to address the health needs of greater Long Beach. Working together in the community, the four local hospitals conducted the greater Long Beach Community Health Needs Assessment (LBCHNA) survey along with key informant survey for 2012. Secondary data analysis was conducted to support the primary data collection. The results of the surveys and data analysis are shared with community leaders, community-based organizations, stakeholders and the community to improve the quality and quantity of services available; to determine health priorities, and barriers to care and gaps in available services, and to identify social issues/problems in greater Long Beach. This process informs the hospital's development of an implementation strategy related to community benefit programming under their direction.

Service Area: Long Beach Memorial is located at 2801 Atlantic Ave. , Long Beach, California 90806. The service area is located in Los Angeles County is comprised of 27 zip codes covering 6 geocoded regions, expressed as Greater Long Beach.

Methodology: Survey instruments were developed through an iterative process with questions covering health related topics affecting, children, teens, young adults, adults and the elderly. The LBCHNA survey instrument was provided in English and Spanish languages. The surveys were collected from a convenience sample at community forums, health fairs and events within the city of Long Beach from September 2011 until March 2012 using web technology. The total number of surveys collected from the LBCHNA and key informants surveys were 1,309 (only 1,066 were valid) and 122, respectively. The secondary data analysis was conducted using Census 2010, Community Health Assessment (City of Long Beach, Department of Health and Human Services, 2012) and the California Health Interview Survey (CHIS) to validate the primary data collected. These data are up-to-date and provide information related to community demographics, and inform an overall impression of priority health needs for the community. Results are reported in bar and pie charts along with tables to summarize findings.

Results and Recommendations: The LBCHNA found asthma, obesity, mental health, diabetes and arthritis to be the top five health priorities in greater Long Beach. About 14% of the survey respondents needed medical care but did not receive it. Further investigation showed that lack of health, dental and vision coverage are major barriers to care along with lack of information about where to get care and transportation to services. Most needed health care services are family physician/primary care, behavioral health, and specialty care, along with dental care and prescription drugs. Major social issues identified in the study are: lack of exercise, poor nutrition, lack of insurance and affordable health care, air pollution, and drug and alcohol programs. Lastly, the study revealed the top five most needed health related services and they are: transportation, CalFresh (food stamp), before and after school program, counseling and assisted living. Results are mostly consistent between LBCHNA and key informant surveys.

Limitations: The study used convenience sampling to reach vulnerable populations. The study employed basic statistics so the study results may not be generalizable for the whole population of Long Beach.

Future Considerations: Hospitals, in conjunction with the public health department and community organizations, should collaborate and implement the recommendations made in this report. Each hospital should emphasize a certain area (s) so no overlapping occurs. Monitoring and evaluating of each program implemented by hospitals must be made every year until the next LBCHNA report.

With the creation of a community partnership, hospitals are able to decrease the amount of duplicate services as well as increase the amount of resources available to target the most significant community needs of a diverse population.

INTRODUCTION

Community health needs assessments are used to identify and prioritize the community's health needs through the collection and analysis of community input and data. Essential local service providers and policy makers use the community needs assessment results to clearly inform policy development related to health care in the city. Through the analysis of the community data, hospitals can use the results to develop new strategies to improve the health of their community (Bilton, 2011).

In 1996, the Senate Bill 697 passed, requiring non-profit hospitals in the state of California to conduct community needs assessments every three years to assist in the development of their community benefit plans (Official California Legislative Information, 1994). In addition, the Patient Protection and Affordable Care Act of 2010 required all non-profit, tax-exempt hospitals to develop and adopt an implementation strategy to address the identified needs and report such strategies to the Internal Revenue Service (Bilton, 2011). The purpose of this report is to create more transparency between the organization's mission and the community benefit services being offered.

Authors

Over the past twenty years, a community needs assessment has been conducted to determine the specific health needs of the Long Beach population. The Long Beach Community Health Needs Assessment was conducted in partnership with and funded by non-profit hospitals in Long Beach (Long Beach Memorial, Miller Children's Hospital Long Beach, Community Hospital Long Beach and St. Mary Medical Center) and representation from the local health department and City. We contracted with Tony Sinay, Ph.D., department chair of Health Care Administration in the College of Health and Human Services at California State University Long Beach to conduct the primary data collection, analysis and resulting report. This is the fourth health needs assessment Dr. Sinay and his team has conducted for the non-profit hospitals in Long Beach. His background in health care management and statistical analysis provides an excellent partnership in our efforts to collect and analyze primary health data in the City. Cindy Gotz, MPH, C.H.E.S., Community Benefit Manager for Long Beach Memorial and Miller Children's Hospital Long Beach, lead the secondary data assessment and analysis. Her background in public health and community health education provides an excellent foundation to direct this assessment. Cheryl Barrit, M.P.I.A. Preventive Health Bureau Manager, Long Beach Department of Health and Human Services (LBDHHS), was instrumental in providing access to the LBDHHS recent 2012 Community Health Assessment. With a commitment to ensure the health of the Long Beach population, this partnership conducted the Long Beach Community Health Needs Assessment.

Methods

The Community Health Needs Assessment survey for 2012 was based on self-reported health experiences of participants. The data were analyzed, focusing primarily on access to care, availability of health services, major health problems and social issues affecting children, teens, and adults living in the greater Long Beach area. According to Healthy People 2020, access to health care services impacts a range of health outcomes, from physical and mental health status, to disease prevention and treatment of health conditions (U.S. Department of Health and Human Services, 2010). In order to access such services, individuals need to know where to locate the services needed. Through the results of the survey analysis, community partners can identify gaps in services provided, leading to improvements in the health status and quality of life of the community through education, program development, increased access and availability of services.

A key informant survey, which was similar to the LBCHNA survey, was also administered with individuals who represent the local health care system in the city of Long Beach. Using web technology (Survey Monkey), key informants from local hospitals, public health and nonprofit organizations, academicians and city officials responded to a survey to enhance the findings of the LBCHNA survey and attempted to discover relatively new emerging health and health-related issues. Results of the key informant surveys are reported as well.

The secondary data analysis was conducted using Census 2010, Community Health Assessment (City of Long Beach, Department of Health and Human Services, 2012), Office of Statewide Health Planning and Development (OSHPD) and the California Health Interview Survey (CHIS) to validate the primary data collected. Combined with the survey results, these data are up-to-date and provide information related to community demographics and inform the identification of health needs in the community.

Information Gaps

Information gaps that impact the ability to assess the Long Beach Memorial service area health needs were identified. Most notably, there are limited sources for city level data related to adult obesity. The study used convenience sampling to reach vulnerable populations and may be over sampled as compared to other areas of the City. The study employed basic statistics so the study results may not be generalizable for the whole population of greater Long Beach.

Healthcare Facilities and Community Resources

A list of existing facilities and resources within the community that are available to meet identified community health needs are outlined at the end of this report.

Community Served

The city of Long Beach is situated in Los Angeles County in Southern California. According the 2010 U.S. Census, the city is the thirty-fourth largest city in the nation and the fifth largest city in California (California Department of Finance, 2011). Long Beach is recognized as one of the most diverse cities in the nation, with the largest Cambodian population outside of Southeast Asia (U.S. Census Bureau, 2010). The racial composition of the city is predominantly Hispanic or Latino (40.8%), followed by White (29.4%), Black or African American (13.0%), Asian (12.6%), Native Hawaiian and Other Pacific Islander (1.1%), two or more races (2.7%), and 0.2% reporting some other race.

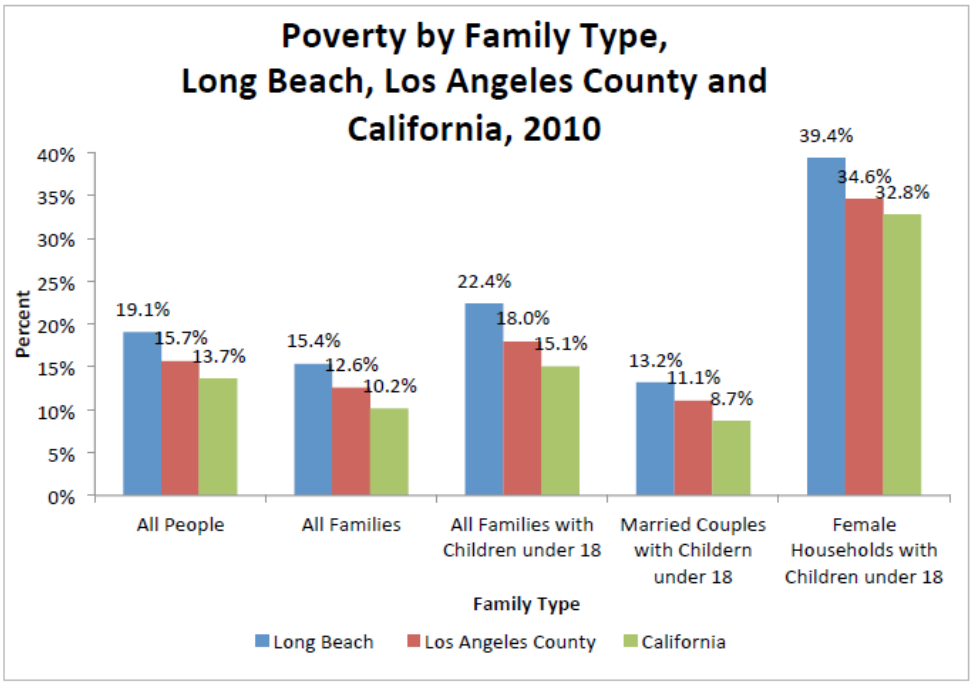
According to the 2010 U.S. Census, the population of Long Beach was 462,257, only a 0.2% increase from the 2000 U.S. Census. The estimated median family income in 2010 was $51,173 and the percentage of families below the poverty line was reported at 19.1% compared to the state rate of 13.7% and national rate of 15.1% (De Navas-Walt, Proctor & Smith, 2011). Table 1 identifies household incomes in the city of Long Beach and Figure 1 identifies the poverty rate by family and family type. The unemployment rate in Long Beach for November 2010 was reported as 12.2 %, slightly higher than Los Angeles County's 11.1% and the state's average of 10.9% (State of California, 2012). Overall, Los Angeles County ranks number 28 out of 58 California counties according to the County Health Outcomes and Ranking data, which includes socioeconomic, health, education and welfare statistics (Robert Wood Johnson Foundation, 2013).

Table 1: Long Beach Household Income

Income	Percent of Population
Less than 10,000 to 14,999	12.9%
15,000 – 24,999	11.2%
25,000 – 34,999	10.9%
35,000 – 49,999	13.7%
50,000 – 99,999	29.4%
100,000+	21.9%

Source: American Community Survey 2006 – 2010 (www.healthycities.org)

Figure 1: Family Poverty Rates

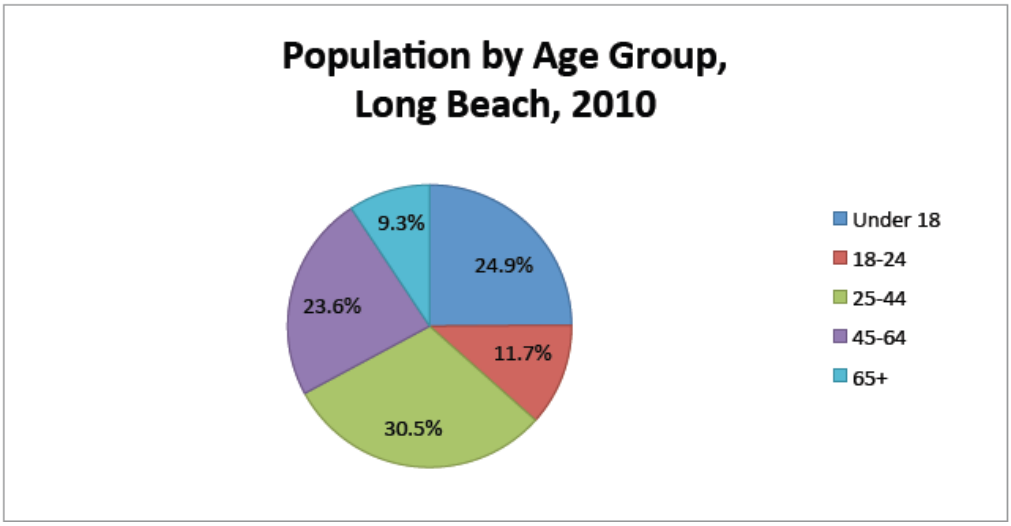


Source: City of Long Beach, Department of Health and Human Services, 2012 (ACS 2010)

Population (age & gender)

According to the 2010 Census and reported in the Community Health Assessment conducted by the City of Long Beach, Department of Health and Human Services in 2012, the population of Long Beach is evenly split along gender lines, 51% female and 49% male and the average age is 33.2 years. The largest segment of the population is within the age group 25-44 (30.5% of the population) followed by those aged 18 and under with 24.9%. The elderly aged 65 and over make up 9.3% of the city's population, which is reported to be slightly lower than the county and state averages of those in this age group (10.9 % for County of Los Angeles and 11.4% for the state of California) with 7% of the population under the age of five and 9.3% of the population 65-years and older (U.S. Census Bureau, 2011).

Figure 2: City of Long Beach Population by Figure 2: Age Group based on 2010 Census



Source: City of Long Beach, Department of Health and Human Services, 2012

Service Area

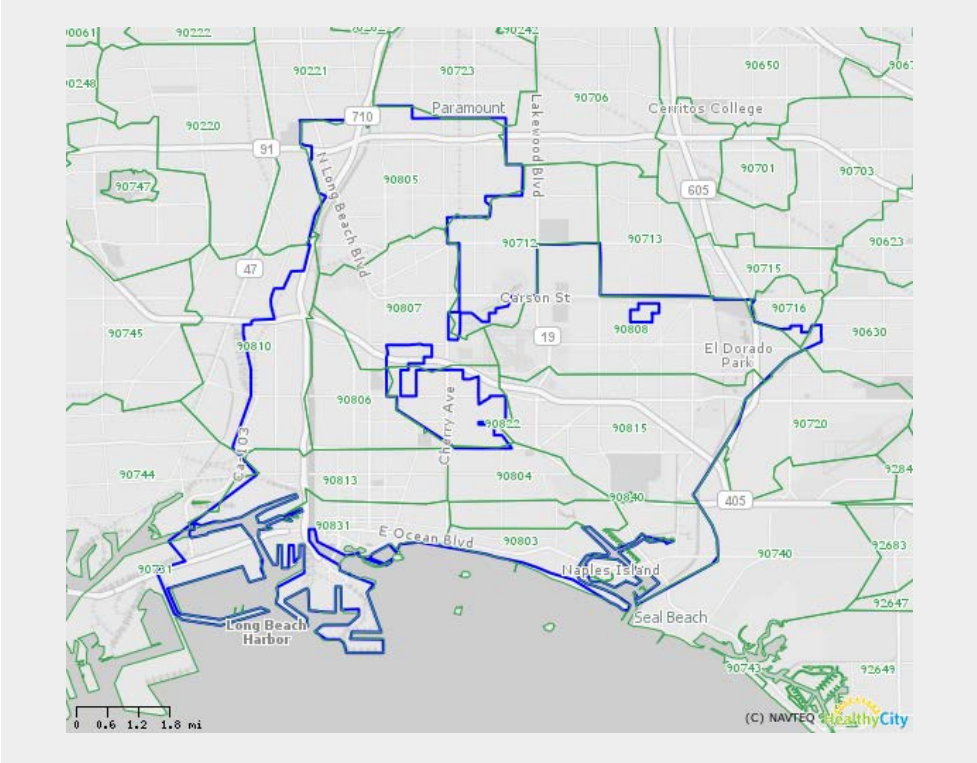
Long Beach Memorial Medical Center (LBMMC) is comprised of three separately licensed hospitals, Long Beach Memorial, Miller Children's Hospital Long Beach and Community Hospital Long Beach and is part of the MemorialCare Health System based in Fountain Valley, California. The three MemorialCare Long Beach hospitals together serve the greater Long Beach area and the zip codes related to the primary and secondary service areas are delineated in Table 2 below. Long Beach has its own health jurisdiction, one of only three cities in the state, and is also considered a part of service planning area eight (SPA8) within Los Angeles County. All three hospitals are in SPA8.

Table 2: Long Beach Memorial Medical Center Primary and Secondary Service Areas by Zip Code

LBMMMC Primary Service Area*	
City	**Zip Code(s)**
Long Beach	**90805**, **90806**, **90807**, 90810, 90808, **90813**, 90815, 90802, 90804, 90803, 90814
LBMMC Secondary Service Area*	
City	**Zip Code(s)**
Lakewood	90712, 90713
Seal Beach	90740
Compton	90221, 90220
Bellflower	90706
Carson	90745, 90746
Cerritos	90703
Paramount	90723
Los Alamitos	90720
Signal Hill	90755
Cypress	90630
Norwalk	90650
Lynwood	90262
Wilmington	90744

**Based on calendar year 2008 OSHPD data*

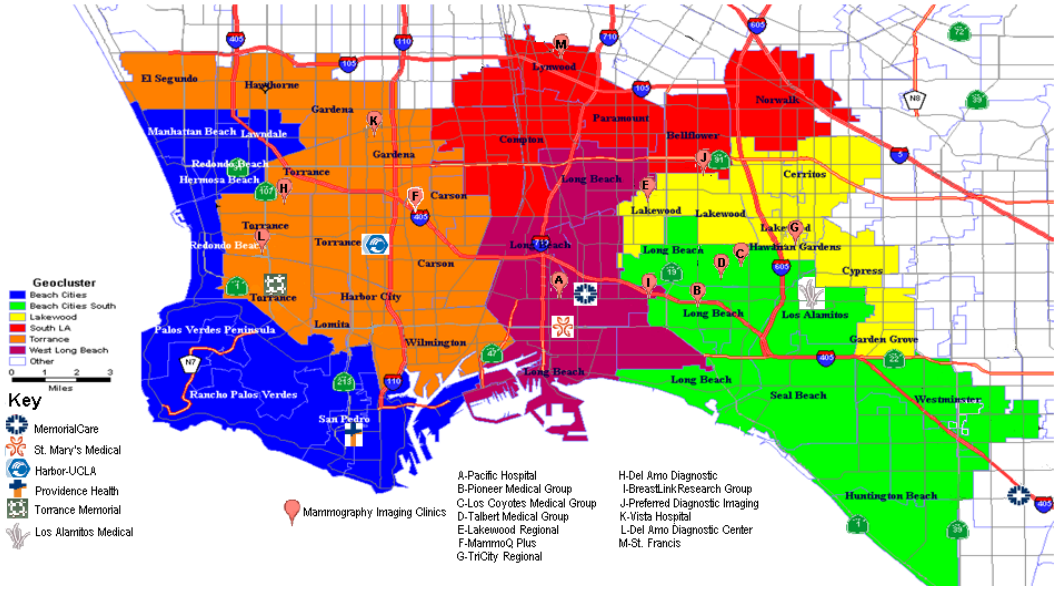
Figure 3: City of Long Beach Zip Code Map



Map created on December 19, 2012 at HealthyCity.org

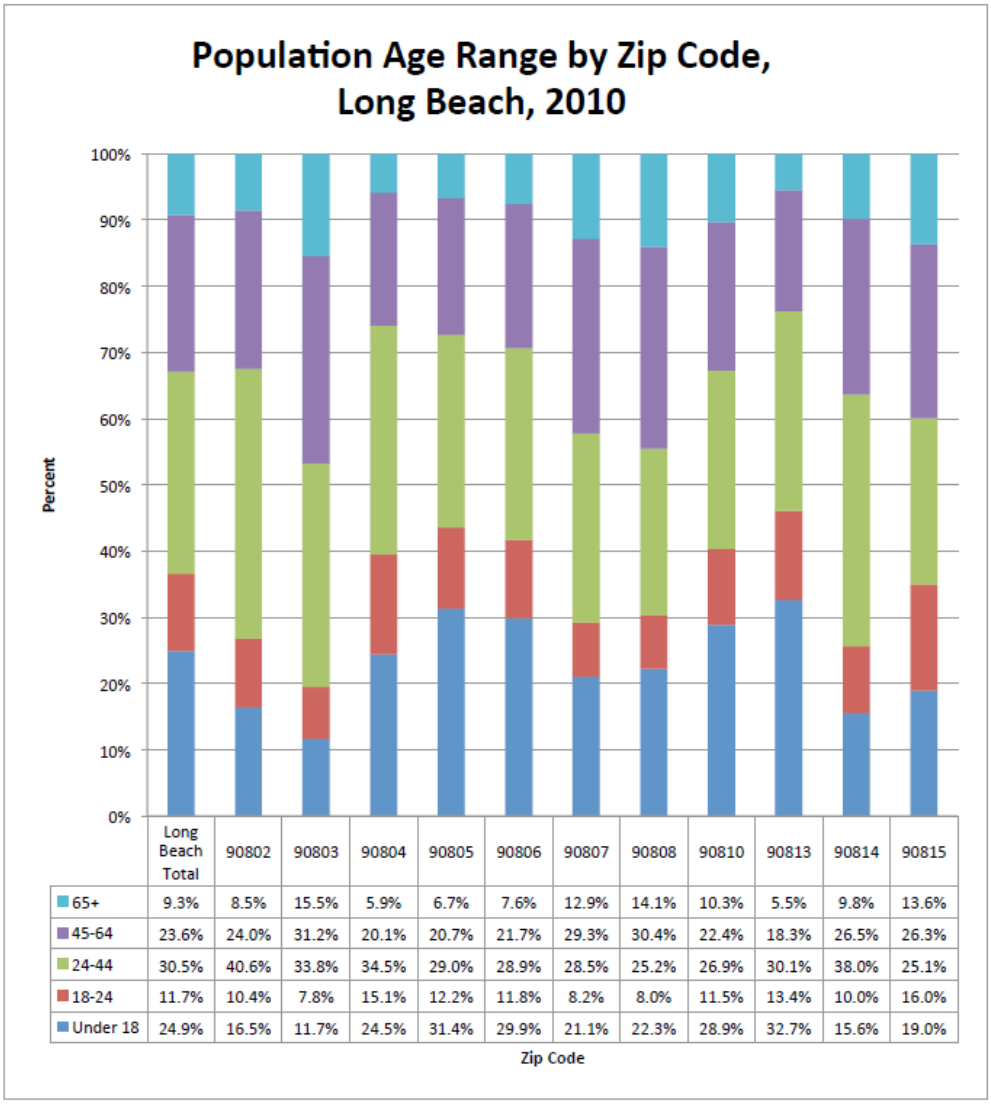
The community benefit service area of Long Beach Memorial is depicted in Figure 4 and is comprised of where our patients originate based on discharge data; 27 zip codes in 6 geocoded regions. We provide service to greater Long Beach, South Bay, both a part of Los Angeles County, and northern sections of Orange County.

Figure 4: Hospital Service Area by Geocode



When comparing all the zip codes in Long Beach by age distribution there are pockets of the City, which look very different with a larger percentage of those under the age of 18 predominately residing in 90805, 90806, 90810 and 90813 zip codes. Additionally, the areas with higher percentages of older adults (age 45 and older) are found in the 90803, 90807, 90808 and 90815 zip codes.

Figure 5: Long Beach Population by Age Range and Zip Code, 2010



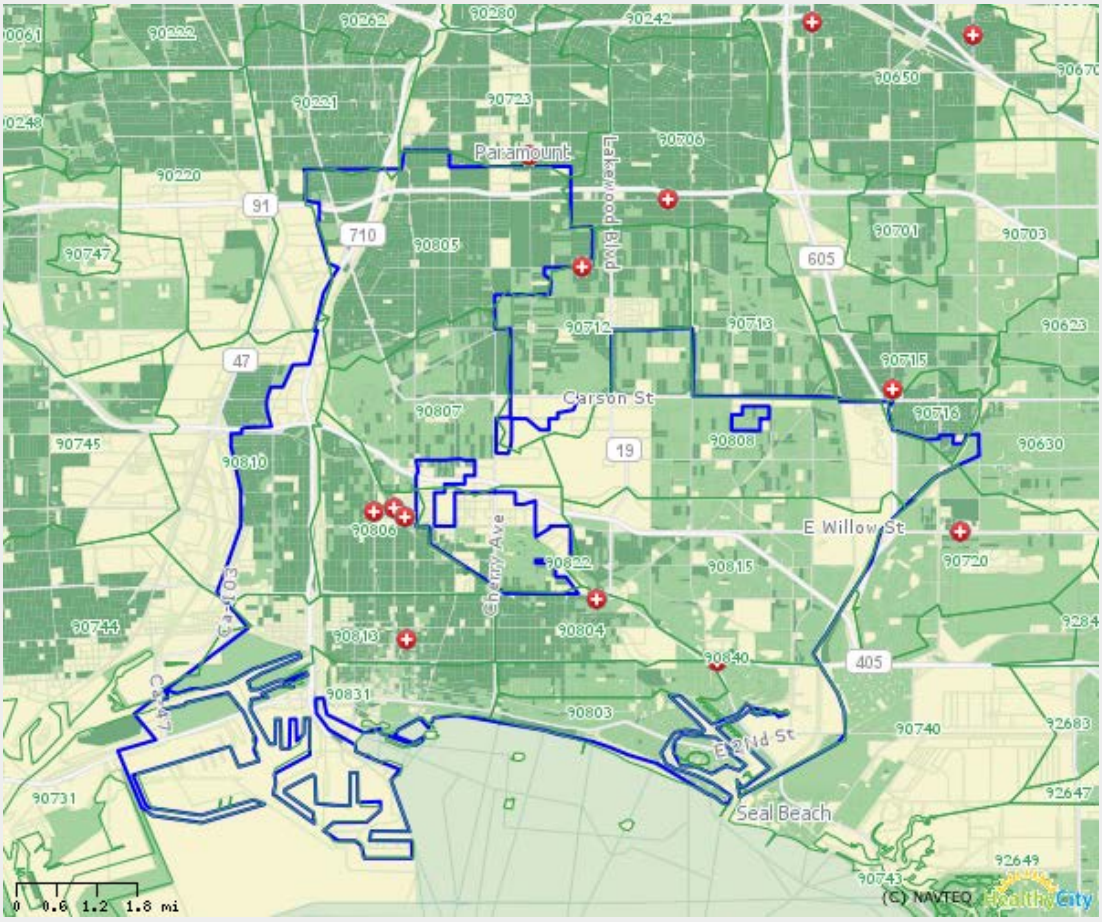
	Long Beach Total	90802	90803	90804	90805	90806	90807	90808	90810	90813	90814	90815
65+	9.3%	8.5%	15.5%	5.9%	6.7%	7.6%	12.9%	14.1%	10.3%	5.5%	9.8%	13.6%
45-64	23.6%	24.0%	31.2%	20.1%	20.7%	21.7%	29.3%	30.4%	22.4%	18.3%	26.5%	26.3%
24-44	30.5%	40.6%	33.8%	34.5%	29.0%	28.9%	28.5%	25.2%	26.9%	30.1%	38.0%	25.1%
18-24	11.7%	10.4%	7.8%	15.1%	12.2%	11.8%	8.2%	8.0%	11.5%	13.4%	10.0%	16.0%
Under 18	24.9%	16.5%	11.7%	24.5%	31.4%	29.9%	21.1%	22.3%	28.9%	32.7%	15.6%	19.0%

Source: City of Long Beach, Department of Health and Human Services, 2012

Race and Ethnic Composition

The City of Long Beach is often referred to as one of the most diverse cities in the nation. Over 40% of the population is Hispanic followed by White (29%), African American (13%) and Asian (over 12%) and other ethnic or race identifiers (4.3%) according to the 2010 Census. The City of Long Beach, Department of Health and Human Services report Hispanic's make up 50% or more of the population in the following zip codes; 90805, 90806, 90810 and 90813 whereas Whites make up the majority in 90814, 90803, 90808 and 90815. The highest concentration of African Americans is found in 90805, 90806, 90807, 90810, 90802, 90804 and 90813 and Asians are found in 90806, 90807, 90810, 90804, and 90813.

Figure 6: : Long Beach Hispanic/Latino Population by Zip Code



Resources

Health Care

Ethnicity / Race: Latino Population (DOJ Tabulation)

0 - 0.0

0 - 0.1

0 - 26.4

27 – 100

Universe: Total Population. Datasource: U.S. Census Bureau Decennial Census. Data Year: 2010. Data Level: Census Block (2010). Map created on December 19, 2012 at HealthyCity.org

Along with the diversity in the population comes language diversity. The majority of the population in Long Beach speak English (53.2%) followed by Spanish (34%). About 10% of the population reports speaking an Asian or Pacific Islander language e.g., Khmer.

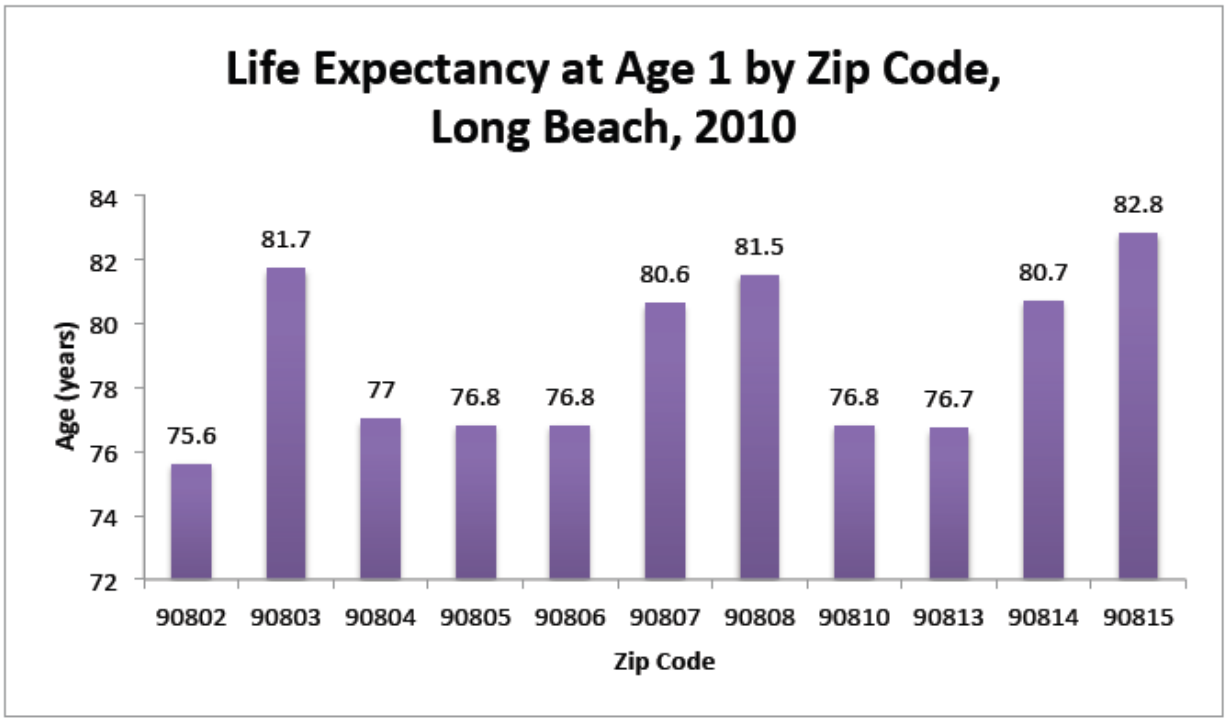
During the 2010-2011 school year, the number of English language learners in grades K-12 in the Long Beach School District totaled 19,774,out of the 84,816 students enrolled or 23.3% (California Department of Education, 2011). The Long Beach Unified School District is very diverse with a total of

30 different languages spoken including Spanish, Khmer, Tagalog, Vietnamese and Samoan (California Department of Education, 2011).

Health Status

The City of Long Beach, Department of Health and Human Services (LBDHHS) reports a disconnect between reported health status and life expectancy for residents of Long Beach as compared to the broader Los Angeles County service planning area eight (SPA 8) (South Bay area which includes Long Beach). The health status is reported as good, very good or excellent for SPA 8 according to the California Health Interview Survey (CHIS) 2009. However, the life expectancy is lower for Long Beach (78.6) than Los Angeles County (80.3) and the South Bay. Additionally the mortality and morbidity rates and causes vary geographically across the City. According to the LBDHHS, life expectancy by zip code analysis found those living in the 90802 zip code had the lowest life expectancy in the City, 75.6 years and 90815 had the highest life expectancy, 82.8 years. Life expectancy measures began at age 1.

Figure 7: Life Expectancy at Age 1 by Zip Code



Source: City of Long Beach, Department of Health and Human Services, 2012 and Rethinking Greater Long Beach

The leading causes of death in 2010, according to LBDHHS were 1) heart disease, 2) Cancer and tied for third place chronic lower respiratory diseases and cerebrovascular diseases. Alzheimer's, accidents or unintentional injuries, diabetes mellitus, influenza and pneumonia, chronic liver disease and cirrhosis, and intentional self-harm or suicide complete the top 10 leading causes of death accounting for four percent or less, individually.

<u>Heart Disease</u>

Heart disease affect men and women living in the City equally but African American residents, hospitalized for heart disease have a higher rate, 303/100,000, than the other ethnic groups, which together average about 150/100,000. Reviewing hospitalization by zip code related to heart disease,

LBDHHS found zip code 90813 was disproportionately affected with a rate of 234.7/100,000 the next highest rate was 185.4/100,000 in 90805.

Cancer

According to the LBDHHS, the mortality rate due to cancer is higher in Long Beach than Los Angeles County as a whole.

The cancer incidence rate for Los Angeles County in 2009, for all cancer sites, was 411.92 per 100,000 population (California Cancer Registry, 2009). The incidence rate in 2009 (most recent data) are listed by disease site in Table 3 and cancer mortality data by disease site is listed in Table 4 below.

Table 3: Cancer Incidence Rate* by Disease Site – 2009 (California Cancer Registry & SEER Database)

Cancer Site	Los Angeles County	California	U.S.
Breast	64.23	65.76	125.73
Prostate	127.96	130.88	144.97
Lung	43.97	50.55	60.22
Colon/Rectum	42.94	41.42	45.46
Uterus/Cervix/Ovary	49.4	47.29	49.21

Rates are per 100,000 and age-adjusted to the US Census 2000

Table 4: Cancer Mortality Rate* by Disease Site (California Cancer Registry & SEER Database)

Cancer Site	Los Angeles County	California	U.S.
Breast	22.8	22.2	22.2
Prostate	22.3	22.42	21.99
Lung	34.01	37.81	48.49
Colon/Rectum	15.3	14.5	15.7
Uterus/Cervix/Ovary	16.49	15.21	15.23

Rates are per 100,000 and age-adjusted to the US Census 2000

According to the Long Beach Community Health Assessment 2012, cancer mortality rates in 2007 were highest for the African American population (226.6 per 100,000 versus 132.8 – 158.7 per 100,000 for all other races/ethnicities combined). Additionally, the African American community has higher rates of mortality due to cancer than any other ethnicity; this is not only a city, county and state trend but a national one as well.

The California Health Interview Survey (CHIS) 2009 dataset was reviewed to determine adherence to cancer screening guidelines for breast, colon and prostate. Table 5 describes the percentage of adults living in the service planning area 8 within Los Angeles County who were screened.

Table 5: Cancer Screening: Adults Living in SPA8 According to CHIS 2009

	Breast (Mammogram) – Women age 40-85	Colon – (sigmoidoscopy) both genders age 50 – 85	Prostate – PSA Males age 50 – 85
2 years or less	81.7%	Not measured	41.8% (1 yr or less)
More than 2 years	11.3%	Not measured	13% (1 yr +)
Ever	Not measured	78.9%	Not measured
Never	7%	21.1%	45.2%

According to cancer registry data maintained by Long Beach Memorial, there were 1713 new cancer cases in 2010 at TCI, breast made up 23% of the cases and lung made up 7% of the cases (Table 6).

Table 6: Long Beach Memorial Cancer Registry (analytic cases)

SITE	Accession Year			
	2008	**2009**	**2010**	**2011**
Breast	**390**	**389**	**358**	**412**
Lung	**169**	**139**	**132**	**167**
Digestive	**157**	**154**	**170**	**166**
Female Genitalia	**178**	**160**	**154**	**159**
Urinary	**78**	**65**	**53**	**66**
Prostate	**96**	**77**	**75**	**74**
Lymphoma	**73**	**53**	**48**	**53**

As indicated in Table 7, the majority of breast cancer diagnoses in 2011 are in the 51-60 age range. However, the number of diagnoses in age groups 41-50 and 61-70, are not much lower.

Table 7: Breast Cancer Cases Diagnosed in the Breast Center at LBMMC 2007-2011 by Age

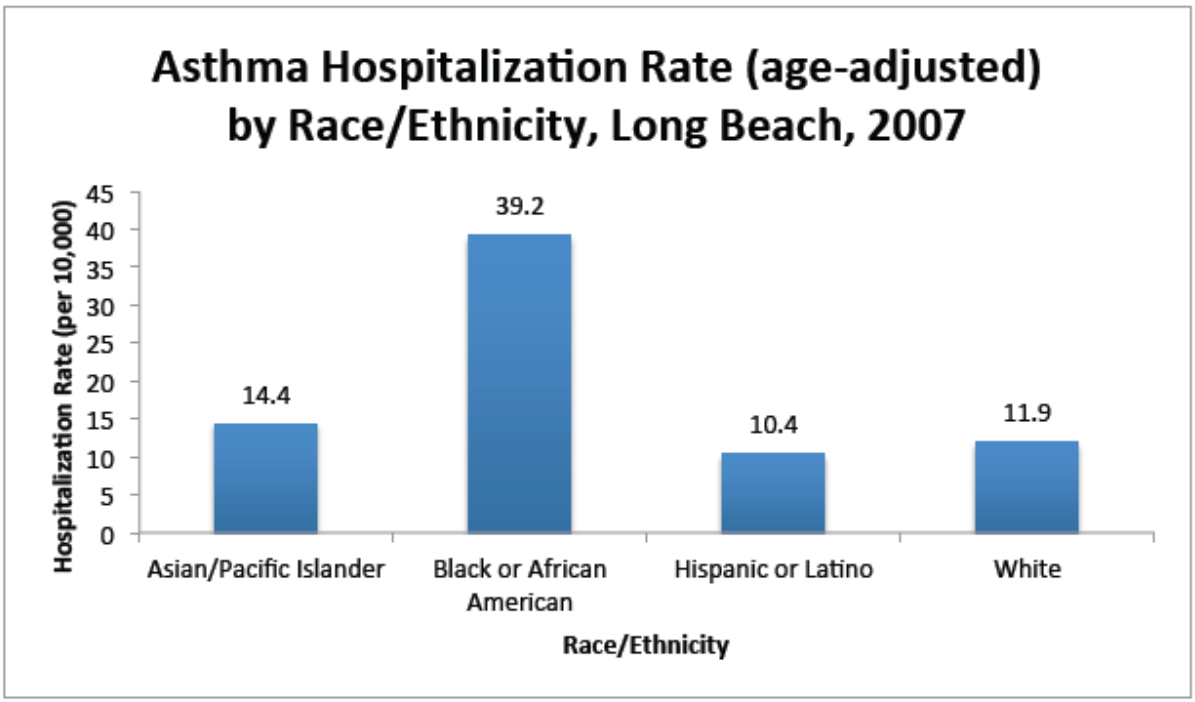
	2007	**2008**	**2009**	**2010**	**2011**
30 yr or less	0	3	3	1	2
31-40	18	19	11	21	14
41-50	56	48	40	40	49
51-60	74	64	60	50	73
61-70	64	59	76	53	64
71 - 80	43	43	44	44	38
80 and above	20	33	25	34	27
	275	269	259	243	267

Lung cancer is the leading cause of cancer death in every ethnic group and the second leading cause of all deaths in the U.S. New cases of lung cancer are predominately found in former smokers or never smokers, 80% combined, according to the CDC (2007). Lung cancer made up 15% of the new cancer cases at TCI in 2011.

Asthma

Asthma is a respiratory disease that is on the rise not only nationally but locally as well. According to the LBDHHS, there are more than 55,000 adults living with asthma in Long Beach and those diagnosed with asthma in the City are higher than county and state levels (except one zip code, 90813 is slightly below the state level 13.7% - but has the highest hospitalization rate more than 28%). Hospitalization rates for asthma which is not well controlled are highest in the African American community (3 to 4 times higher than other ethnicities) within the City. The age range for those most hospitalized for asthma related complications were 0-14 and over age 45.

Figure 8: Asthma Hospitalization Rate

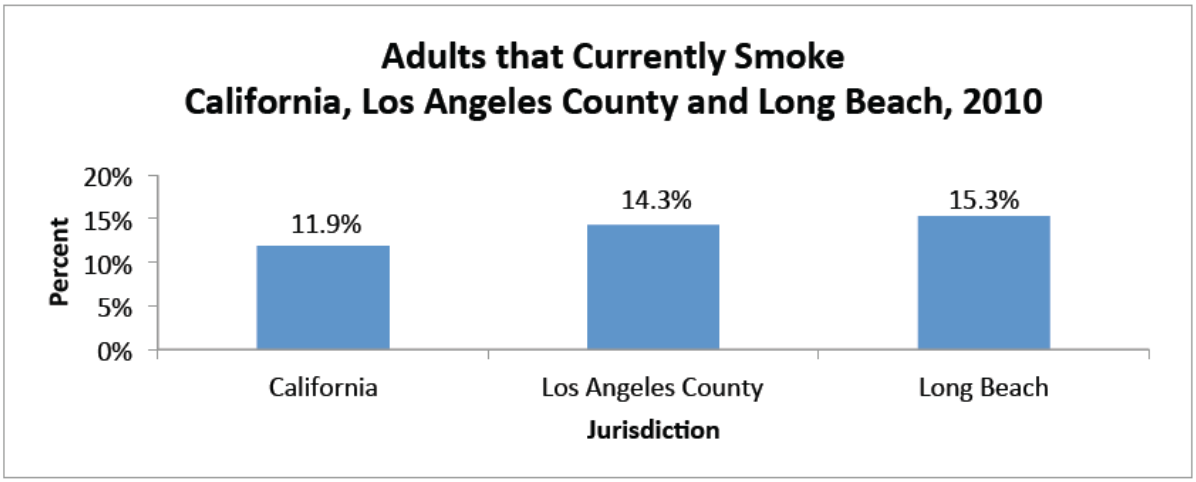


Source: City of Long Beach, Department of Health and Human Services, 2012 (OSHPD 2007 Data)

Tobacco Use

In California, 13.1% of adults report using tobacco according to the California Dialog on Cancer (CDOC), California's comprehensive cancer control plan 2011-2015. The participants responding to the CHIS survey (2009), who answered questions related to health behavior and tobacco use, 12% of adults living in service planning area 8 reports having smoked. Additionally, the Los Angeles County report on cigarette smoking in 2010 found over 15% of Long Beach residents report smoking. The American Cancer Society estimates that 16,000 Californians will lose their life in 2012 due to tobacco (2011).

Figure 9: Adult Smoking by State, County and City Jurisdictions

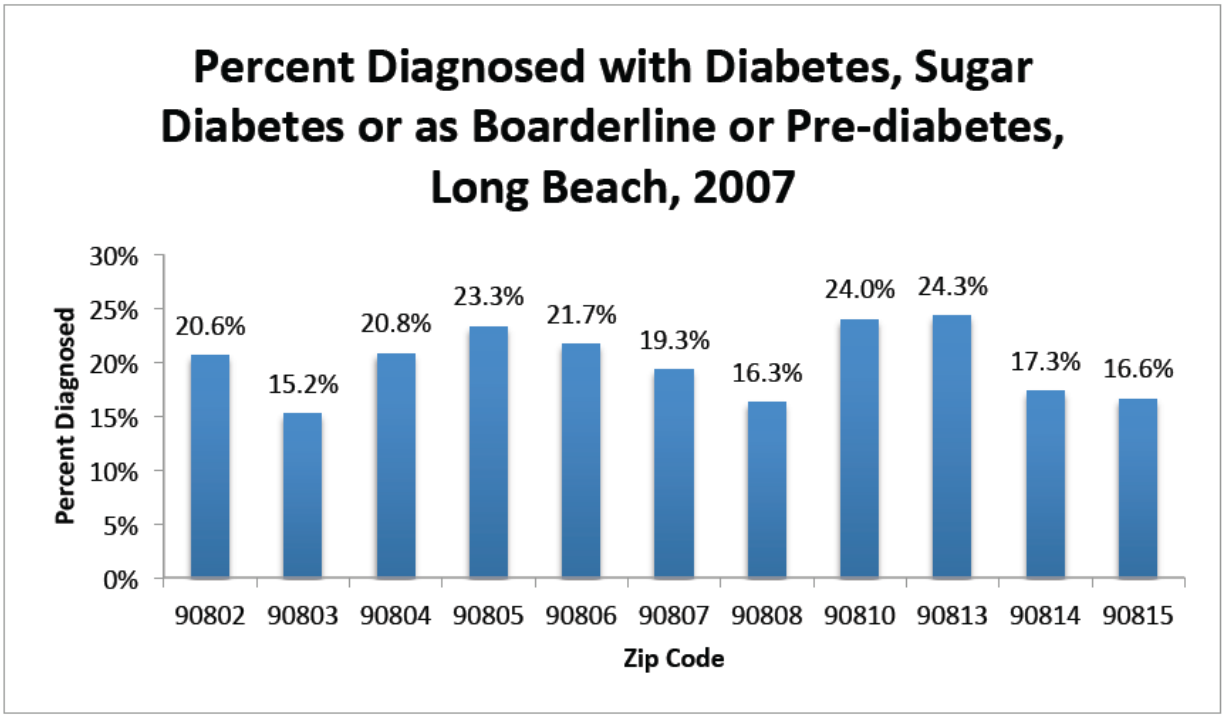


Source: City of Long Beach, Department of Health and Human Services, 2012 (LACPH 2010 Data)

Diabetes

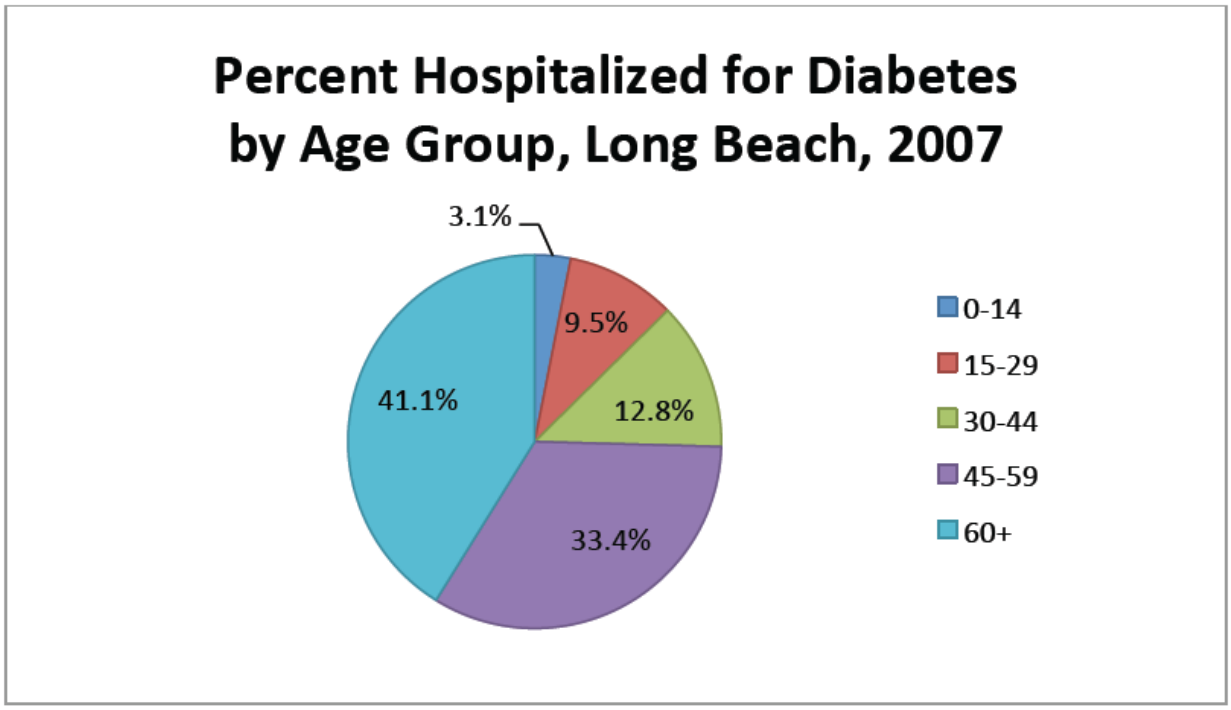
Diabetes is a growing national issue and the city of Long Beach is no exception. According to the California Diabetes Program, over half a million adults living in Los Angeles County have diabetes (2009). In Long Beach specifically, those adults diagnosed with diabetes or pre-diabetes range from 15% to more than 24% as identified in Figure 7.

Figure 10: Adult Diagnosis of Diabetes or Pre-diabetes



Source: City of Long Beach, Department of Health and Human Services, 2012 (Healthycity.org and CHIS 2009 datasets)

Figure 11: Hospitalization for Diabetes by Age Group



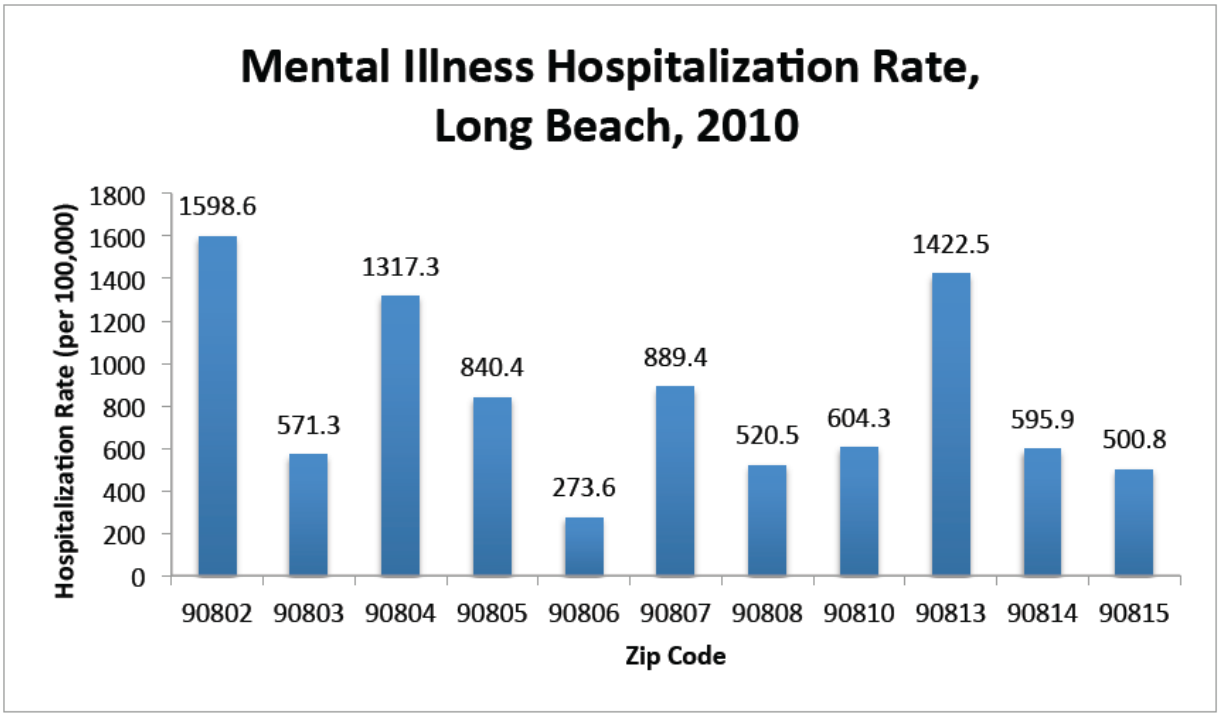
Source: City of Long Beach, Department of Health and Human Services, 2012 (OSHPD 2007 dataset)

As age increases so does the risk of hospitalization from complications associated with diabetes. LBDHHS reports those adults aged 45 and older made up nearly 75% of the hospitalizations due to diabetes in 2007.

Mental Health

Mental health can be characterized as emotional, psychological distress. Severe stress, abuse of alcohol and/or drugs can also impact a person's mental state and quality of life. Access to mental health services is increasingly important. Identified in the 2009 and 2012 Long Beach Community Health Needs Assessments, conducted by area hospitals, mental health was indicated as a high need for all age groups. Reviewing the hospitalization rates for mental health related issues (schizophrenia, psychoses, neuroses, paranoia or senility) Long Beach hospitalization rates per 100,000 range from 273 to 1598 (the state rate is 551.7).

Figure 12: Adult Mental Illness Hospitalization Rate



Source: City of Long Beach, Department of Health and Human Services, 2012 (Healthycity.org and OSHPD 2010 datasets)

According to the Centers for Disease Control and Prevention (CDC) one in four U.S. adults is living with a mental illness and the burden of mental health issues impacts the disability rates (2011). Mental illness ranks as the highest collective cause of disability in developed nations (CDC, 2011).

Table 8: Mental Health Indicators

	SPA 8	California
Adults who had serious psychological distress during the past year	7.1%	6.5%
Adults who needed help for emotional –mental and/or alcohol-drug issues in past year	13.5%	14.3%
Adults who saw a health care provider for emotional/mental health and/or alcohol-drug issues in past year	9.1%	10.9%
Has taken prescription medicine for emotional/mental health issue in past year	9.6%	9.7%
Sought/needed help but did not receive treatment	44.4%	44.5%

Source: California Health Interview Survey (CHIS), 2009 dataset

Table 8 provides indicators from the 2009 California Health Interview Survey (CHIS) on the mental health experience of those living in SPA 8, which includes Long Beach, compared to California as a whole. While SPA 8 is generally on par with California as a whole, there were more adults reporting a serious psychological distress in SPA8. In general, the most striking statistic is related to a lack of treatment received for a mental health condition, more than 44%.

LITERATURE REVIEW

The Patient Protection and Affordable Care Act of 2010 require that all non-profit hospitals conduct a Community Health Need Assessment every three years. Community Health Needs Assessments (CHNA) provides the opportunity to help identify and prioritize the needs of a community and offer an implementation strategy to address these needs (Bilton, 2011). In addition to the community needs assessment, the U. S. Department of Health and Human Services released a National Strategy for Quality Improvement in Health Care, March 2011 in an effort to create national priorities to improve the quality of health care in the United States (USDHHS, 2011). The strategy lists three aims for the health care system: better care, healthy people and communities, and affordable care (USDHHS, 2011).

In order to collect "community intelligence," local community-based organizations, advocacy groups and the entire community of health providers need to be engaged in the collection process and in determining the potential needs of the community. Community health partnerships are essential for community health improvements. Community partnerships can identify the gaps in services provided; leading to improvement in the health status and quality of life of the community through education, program development, increased access and availability of services (Somerville, et al., 2012).

When unmet health needs are identified through the process, the community partnership can help develop initiatives to address the needs brought forth by the assessment process. Hospitals have been entrusted to address the acute needs of patients walking through their doors. In addition, they are entrusted with improving the lives of community residents which they serve. This includes: conducting health fairs, providing community clinics and leading health education classes. Hospitals are expected to be accessible and provide cost effective services to all community members equally. By conducting a community health needs assessment, hospitals are viewed by their respective service area constituents as being concerned, focused and responsive to the community's health (Proenca, Rosko & Zinn, 2000). Through the use of health needs assessments, the community is included in the overall process of needs identification (Holt, 2008).

The purpose of a community health assessment is to determine if the community has access to quality, affordable and effective health services and to implement a plan to address the needs brought forth by the assessment process. The vision of Healthy People 2020 is to create a society in which all people live long healthy lives. In order to reach this vision, communities need to achieve health equity, eliminate disparities, and improve the health of all groups (USDHHS, 2010a). CHNAs assist the community in maintaining a long term strategic view of the community's health status and the associated influencing factors. A CHNA can be instrumental in determining not only the current health status of a defined population, but also uncover the capacity for addressing the needs. Communities who completed an assessment found that health problems were prioritized, 100% of the time. Additionally, a CHNA improved communications between community groups, and problems were better understood within the community. "Motivating communities to take responsibility for their own health problems is very much the point of community assessment and may represent a more important outcome than the community benefit derived from an assessment alone" (Curtis, 2002, p.21).

The main reason hospitals are putting resources into community engagement is "health is our mission." Only ten percent of health production is contributed by medical care, the other 90% has to do with genetics, behavior, and the environment in which a person lives. In the United States, seven of the ten leading causes of death are linked to preventable lifestyle behaviors (CDC, 2009). In order to improve health, hospitals (especially not-for-profit hospitals) must focus on the community, which is made up of the social network, environment and behaviors of its constituents. Designing an environment through

active engagement and fostering healthy lifestyles, is imperative to the creation of health (Health Research & Educational Trust, n.d). In addition, psychosocial health contributes greatly to a person's quality of life (Donatella, 2010). When developing programs, psychosocial health needs must be considered as an aspect of wellness. "Comprehensive community needs surveys should include assessment of environmental, psychosocial, and physiological aspects of health as well as indicators of health-related behaviors in the population" (Lundeen, 1992, p. 243).

All communities should collect data on the health related problems of its residents at regular intervals. The use of the assessment data can assist in health program planning and evaluation, which is sensitive to identified issues and needs of the population or subgroups. Once the health needs are identified, the process of meeting those needs through clinical and health promotion or education interventions need to be put in place and executed (Clegg & Doherty, 2001). The assessment process allows for identification of health problems that need to be addressed along with any changes that need to occur since the last health needs assessment in the community (McKenzie, Pinger & Kotecki, 2008).

In order to assess the needs of the city of Long Beach, Community Hospital Long Beach, Long Beach Memorial, Miller Children's Hospital Long Beach and St. Mary Medical Center came together in a community partnership to conduct an assessment. The last three assessments were conducted in 2005, 2007 and 2009. A newly revised needs assessment survey and a key informant questionnaire were used to collect primary data for the 2012 report, which aimed to gather information regarding the health status, access and issues related to all segments of the population living in Long Beach. The next section discusses Methodology used in the study followed by the "Results" section. The "Conclusion" and "Specific Findings and Recommendations" sections summarize findings and offer recommendations for hospitals to consider.

METHODOLOGY

A literature review was conducted to ascertain the use of community health surveys and assessments within the published texts. Peer reviewed journals were consulted and several articles were selected. The Community Health Needs Assessment of the city of Long Beach consisted of two parts. In the first part of the study, the Long Beach Community Health Needs Assessment Survey was used to collect data related to the health care needs within the Long Beach community. The community health survey instrument included 31 questions covering topics such as; population demographics, health concerns affecting children (ages 0 – 12), teens (ages 13 – 18), young adults (ages 19 – 25), adults (ages 26 – 65) and the elderly (ages 65 and over), and access to services and providers. The survey instrument was developed through an iterative process involving a literature review and analysis of previous surveys to determine types of questions and specific wording to generate information important to the process. The survey instrument was provided in both English and Spanish languages. Several meetings were held with community partners to obtain input in order to capture the unique needs of community partners, which resulted in several revisions of the survey instrument.

Surveys were collected from a convenience sample at community forums, health fairs and events within the city of Long Beach from September 2011 until March 2012 using SurveyMonkey. In an effort to control costs, the surveys were either self-administered or interns helped in completing surveys to a convenience sample at these events. The survey was also posted on the hospitals' web sites along with the Long Beach Department of Public Health web site so other participants could have easy access to the survey. Respondents were residents of the greater Long Beach area, which included; Long Beach, Lakewood, Compton, Carson, Lynwood, Torrance, Wilmington, Signal Hill, Seal Beach and Bellflower. A total of 1,309 surveys were collected; however, only 1,066 surveys were accurately completed and used for analysis. Data were transformed into Statistical Package for the Social Sciences (SPSS) Program and descriptive statistics were computer for each question.

The second part of the study employed a key informant survey. The main reason for surveying key informants was to enhance the data collection activity with input from individuals who have access to special segments of the population. The key informant survey was developed the same way the community health survey instrument was developed. Through an iterative process involving a literature review, examination of previous surveys and community partnerships input from several meetings helped finalize the key informant survey. Each hospital included in the study used key informants for community outreach and community benefit activities. Key informant lists were combined into a master list, which resulted in 433 key informants. Using web technology (SurveyMonkey), informants were asked to complete and submit surveys in order to share their valuable input in this project. E-mail reminders were sent to key informants twice in order to increase the response rate.

Descriptive statistics were used to analyze primary data from both the community and key informant surveys. Health priorities identified in both surveys were then consolidated and ranked according to an aggregate score. Presentation of all the health indicators and survey results data were presented at a community forum. Prioritization of health needs was discussed in a small group breakout session and results were disseminated to all attendees.

RESULTS OF THE COMMUNITY HEALTH NEEDS ASSESSMENT SURVEY

Participant Demographics

The Long Beach Community Health Needs Assessment survey was developed to provide insight into the health needs of residents living in greater Long Beach. A total of 1,309 surveys were received from the public as a result of intense effort at community events. Survey data were transferred to SPSS and data cleaning was performed. The final data sample included 1,066 surveys because 243 surveys were removed from the data sample for two main reasons: (1) out of area zip codes and (2) blank surveys or those with a significant amount of missing information.

The Catholic Healthcare West (CHW) developed a Community Need Index (CNI) tool that provides a "picture" of the community's needs and access to care. The CNI collects five socioeconomic variables by zip codes, which have demonstrated a link to health disparities (income, language, and education, housing and insurance coverage). The scale is 1-5, the higher the score, the greater the need for services (St. Mary Medical Center, 2011). In Long Beach, six of the fourteen zip codes are in areas identified as greatest need for services.

Respondents living in the 90813 zip code had the highest percentage (12.6%) of participation in the survey followed by 90802 (9.6%), 90805 (6.4%) and 90806 (6.4%) and 90804 (5.5%). All of these zip codes fall into the highest need category, according to the Community Needs Index (CNI). The zip code 90815 acquired 5.8% of the survey responses; however this zip code falls in the moderate need according to the CNI.

The zip codes with the highest need included 90802, 90804, 90805, 90806, 90810 and 90813. A large number of survey respondents (490) live in 'Highest need' areas in Long Beach. The other half of the survey sample was drawn from the moderate to low need zip codes. The data sample properly represented the vulnerable neighborhoods of Long Beach.

Zip Codes with the Greatest Frequency of Responses

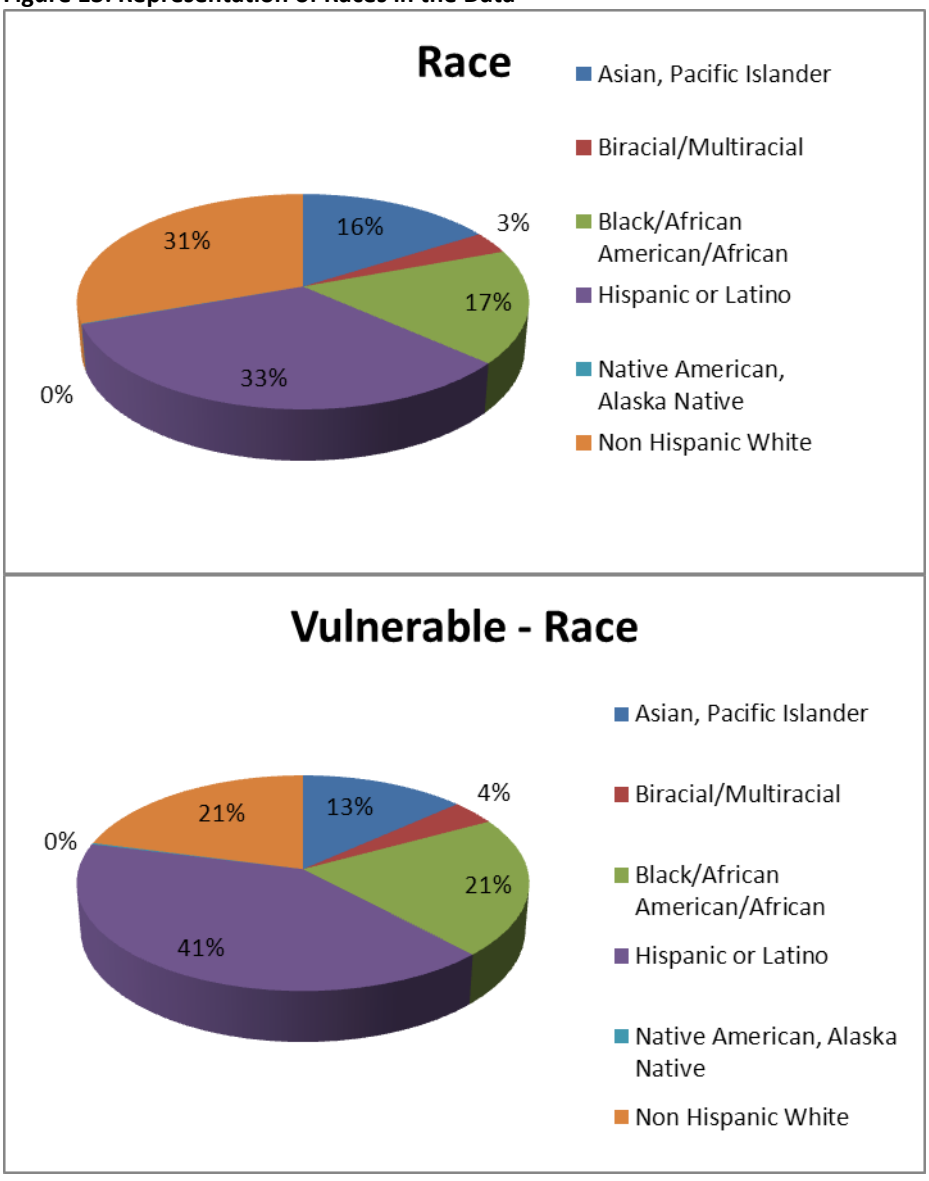
ZIP	COUNT
90813	134
90802	102
90805	68
90806	68
90815	62
90804	59
90807	47
90803	38
90808	35
90810	35
Others	418

Racial Composition

The majority of survey respondents were Hispanic/Latino (33.9%) and non-Hispanic Whites (31.3%) followed by Asian, Pacific Islander (16.5%), Black/African American/African (17.6%), Biracial/Multiracial (3.4%) and Native American, Alaska Native (.1%). When Asian and Pacific Islanders are split into discrete ethnic groups, the representation was Filipino (72.9%), Khmer (16.7%), Vietnamese (4.2%), Samoan and Chamorran (2.8%) and Tongan (.7%). Hispanic/Latino when split into discrete ethnic group included Mexican (82.3%), South or Central American (15.3%), Puerto Rican (2.8%) and Cuban (1.2%).

According to the 2010 U. S. Census, the racial distribution in the city of Long Beach included Hispanic or Latino making up 40.8%, followed by White (29.4%), Black or African American (13.0%), Asian (12.6%), Native Hawaiian and Other Pacific Islander (1.1%), two or more races (2.7%) and 0.2% reporting some other race. The Black/African American and White population is slightly over represented; and the Hispanic/Latino and Asian and Pacific Islanders are slightly under represented (see Figure 10).

Figure 13: Representation of Races in the Data

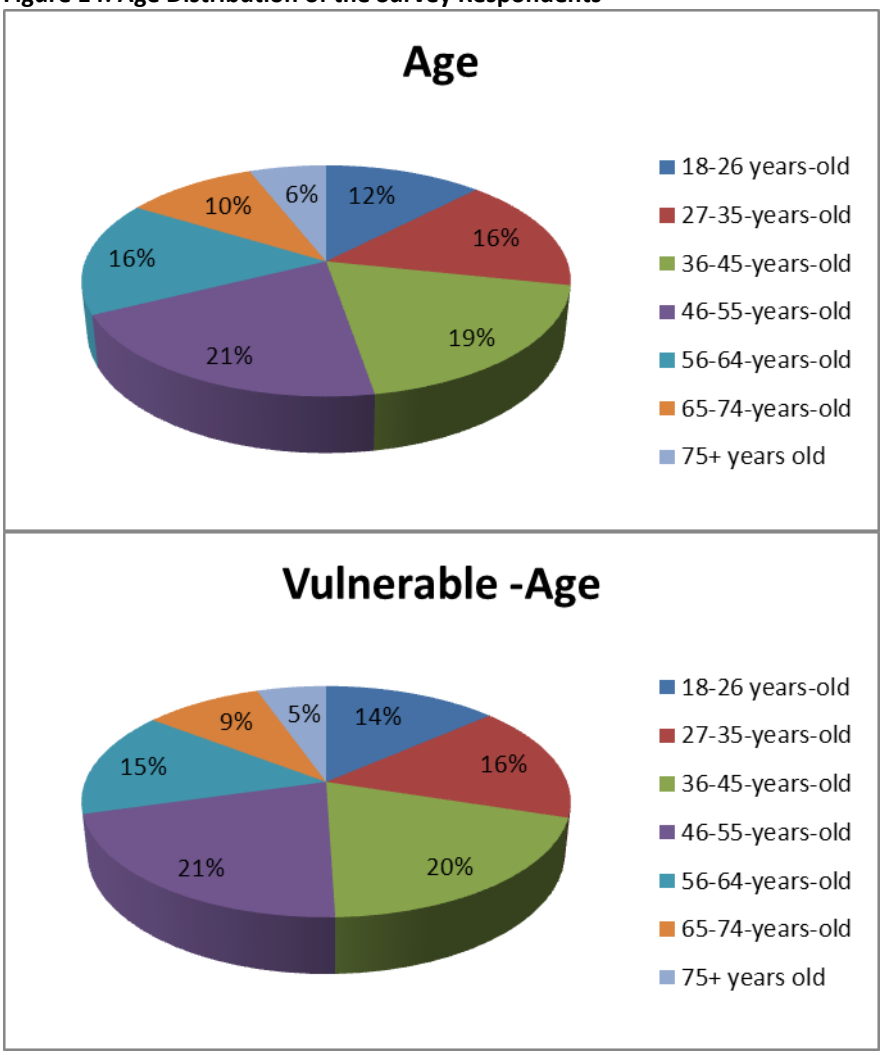


When the data sample was divided between most vulnerable and less vulnerable zip codes, Hispanic/Latino and Black/African American population in most vulnerable areas increased up to 41.1% and 21.2%, respectively. Further investigation of Hispanic/Latino data suggested that about 81.5% of the respondents have a Mexican origin and another 15.2% have a Cuban origin. This distribution stayed about the same when the data were analyzed for only vulnerable areas. The majority of the Asians are Filipinos in the data, about 69.7% in vulnerable areas.

Age Distribution of Survey Respondents

The age distribution from survey respondents were 46-64- years-old (35.7%) followed by 27-45-years old (34.4%), 65 and older (16%) and finally 18-26-years-old (12.1%). This age distribution translated to an average age of approximately 46 years. According to the 2010 U. S. Census, the median age of the Long Beach population was 33.2 years old, which is clearly significantly younger than the average person in the survey sample. That is why the results of the survey should be interpreted cautiously. When the smaller data sample for only vulnerable zip codes was used, the age distribution stayed about the same which means that results are more applicable for older individuals living in the most vulnerable sections of the city (see Figure 11).

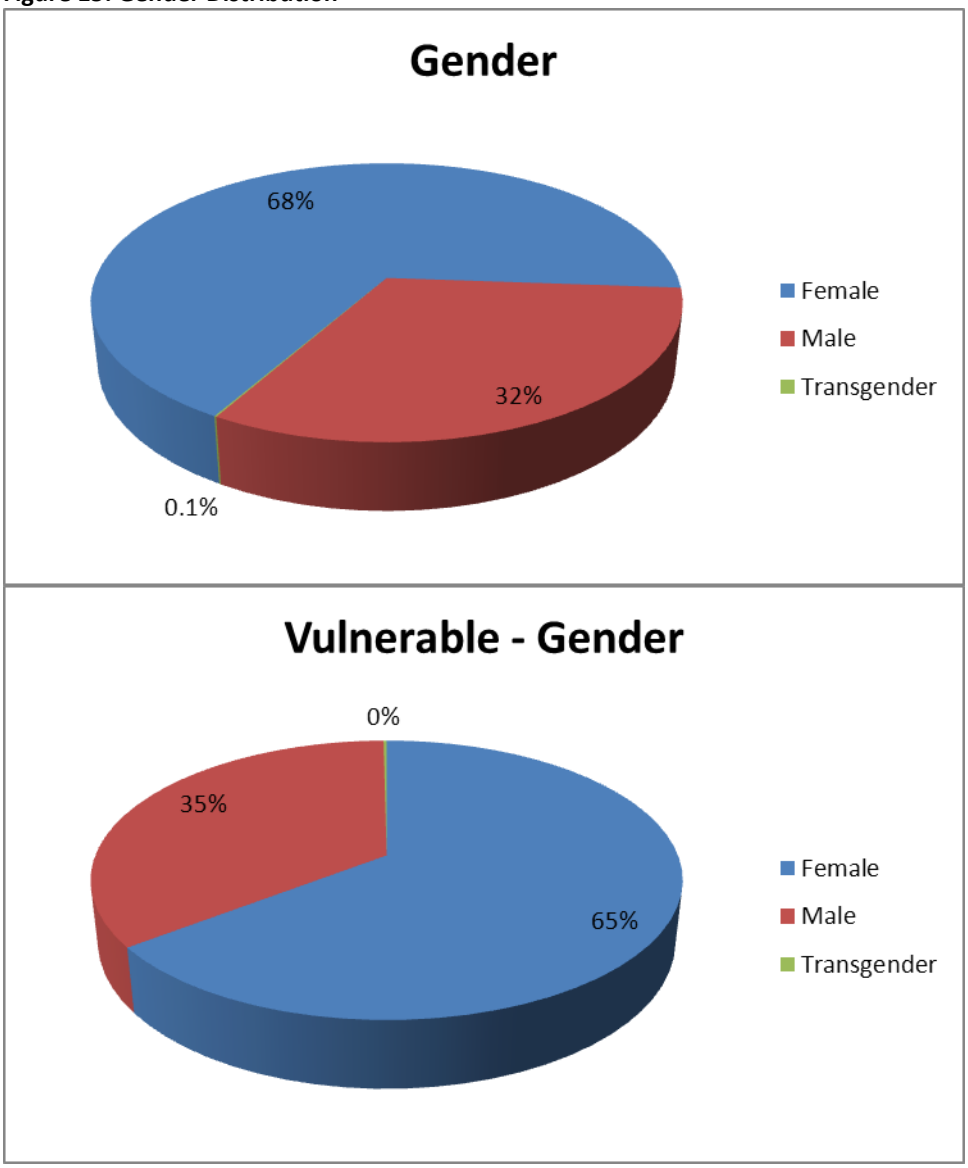
Figure 14: Age Distribution of the Survey Respondents



Gender and Gender Orientation

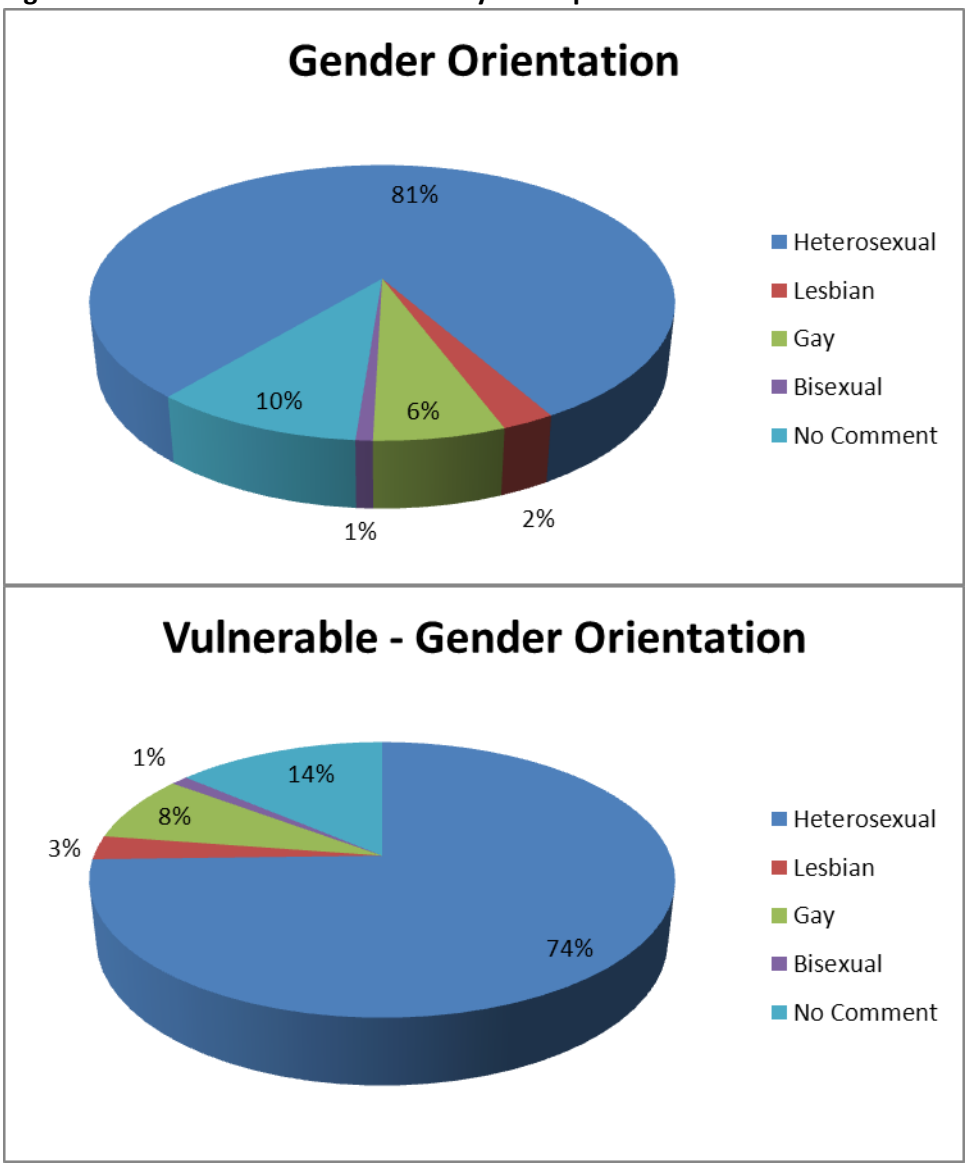
The majority of the survey respondents were females (67.8%) followed by males (32.1%) and transgender (.1%). In the 2009 Long Beach Needs Assessment Survey, approximately 60% percent of the respondents were females. According to the 2010 U. S. Census, 51% of the population living in Long Beach is female and 49% are male. Women were overrepresented in this study. When the data were analyzed for only vulnerable zip codes, the gender distribution stayed about the same.

Figure 15: Gender Distribution



Long Beach has one of the largest gay, lesbian, bisexual and transgender populations in Los Angeles County. Over eighty percent of respondents identified as heterosexual (80.7%) followed by no comment (9.9%), gay (6.2%), lesbian (2.3%) and bisexual (.8%). This distribution is very similar to the gender orientation obtained in the 2009 Long Beach Community Health Needs Assessment. When the data sample was analyzed for only vulnerable zip codes, the distribution of gender orientation stayed the same except for the "no comment" proportion, which increased to 14.2%.

Figure 13. Gender Orientation of Survey Participants

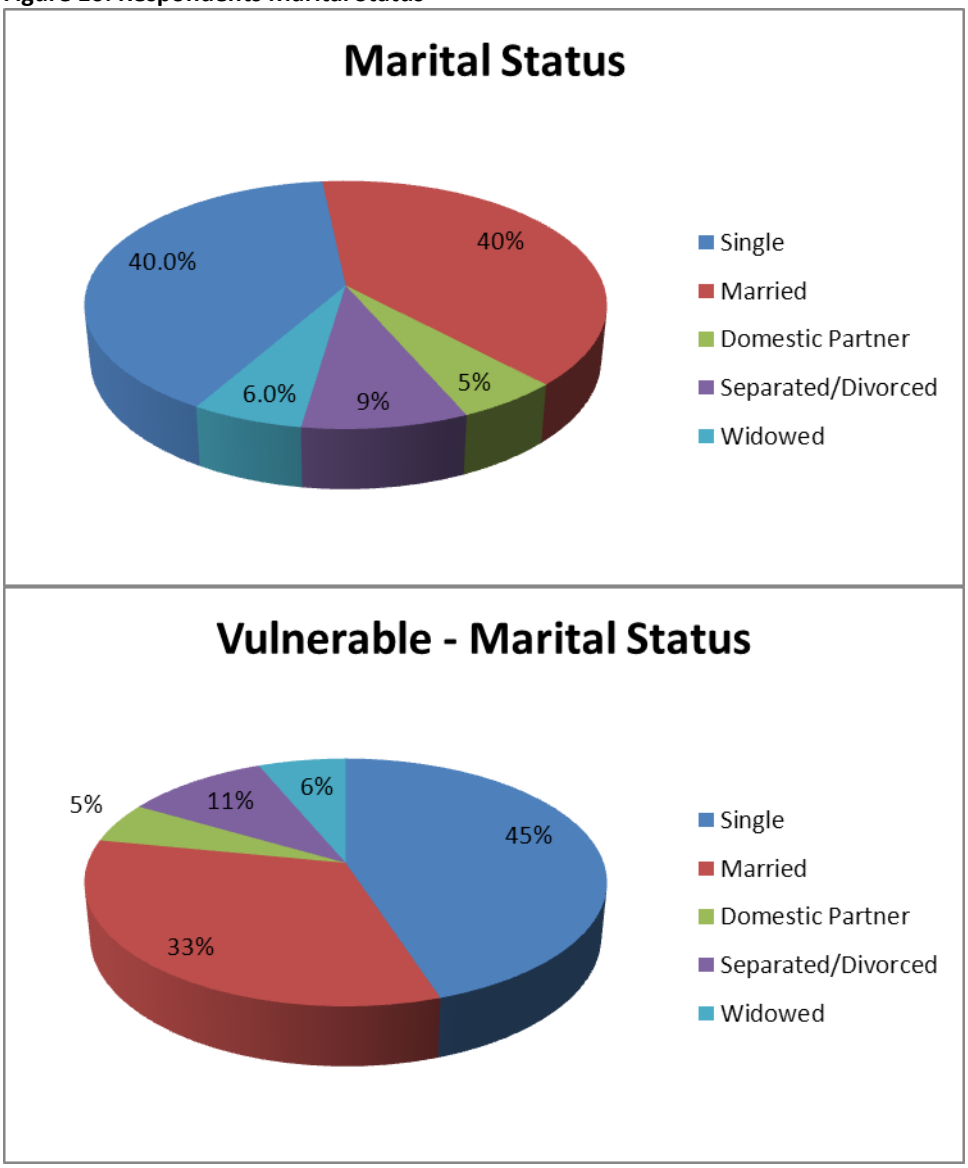


Marital Status

The breakdown of respondents based on marital status is identified in Figure 16. Almost equal numbers of respondents were married or single in the data, about 39.6% and 40.0%, respectively. According to the 2010 U. S. Census, 36.2% of residents of Long Beach were married and 46.1% have never been married. Our sample has slightly more married and more single individuals than the general population. This may be the result of overrepresentation of the older population in the study.

When the data sample was analyzed for only vulnerable zip codes, the proportion of married people in the sample decreased to 33.1% from 39.1%. In addition, the proportion of single individuals went up to 45.3% from 40.0%; about a 5 percent increase.

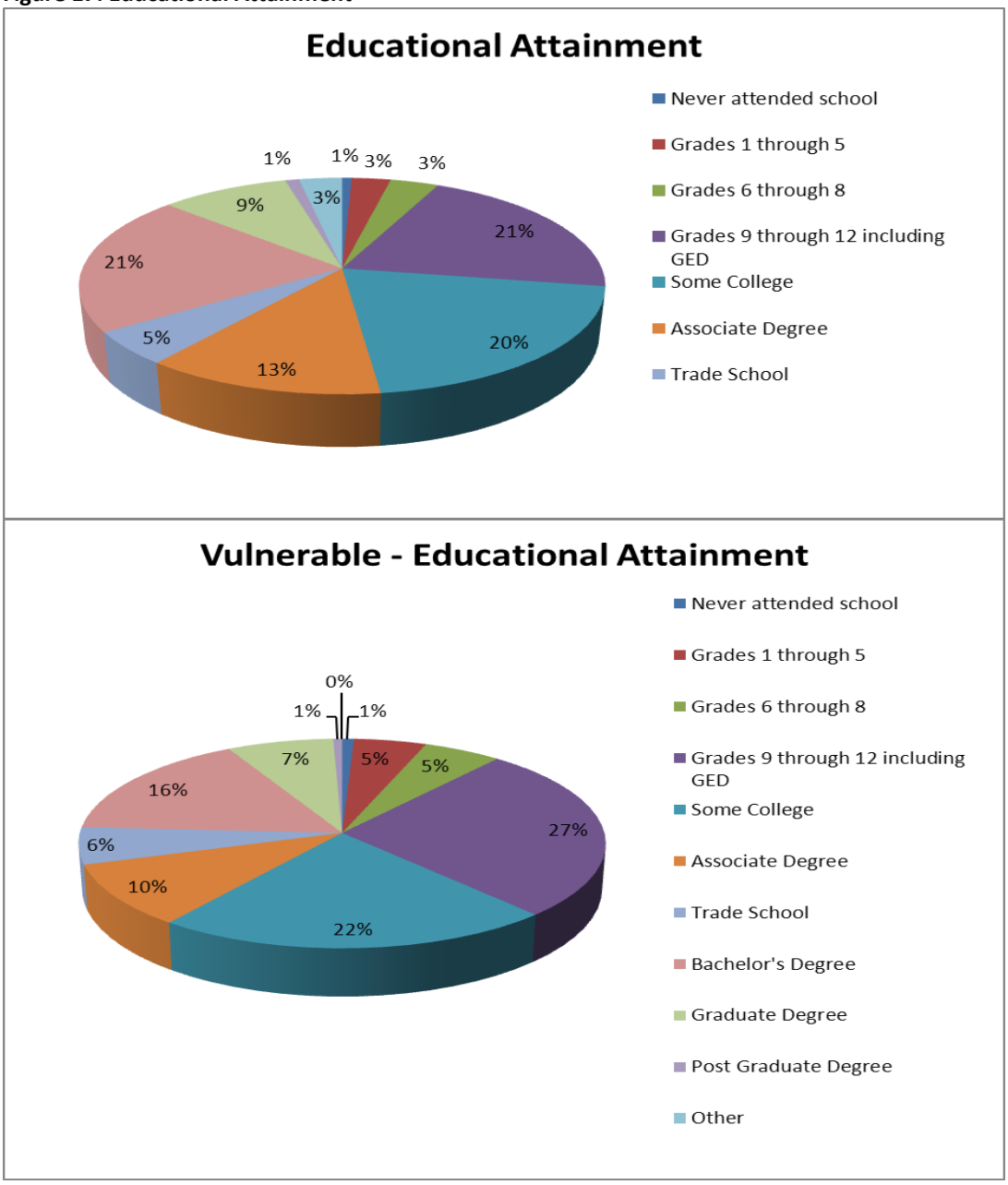
Figure 16: Respondents Marital Status



Educational Attainment

The majority of respondents have completed grade 12 or beyond, 93% overall when combining high school equivalency and college attendance categories. Only 7% of the respondents did not finish high school and .7% of the respondents never attended school. According to the 2010 American Community Survey, 83.2% of 18-24-year-olds living in Long Beach have a high school education and 78.5% of individuals over the age of 25 were high school graduates (see Figure 15). When the data was analyzed for only vulnerable zip codes, the proportion of the following categories, grades 1 through 5, 6 through 8, 9 through 12 (and GED) and some college, increased whereas the proportion of other categories representing more education attainment decreased.

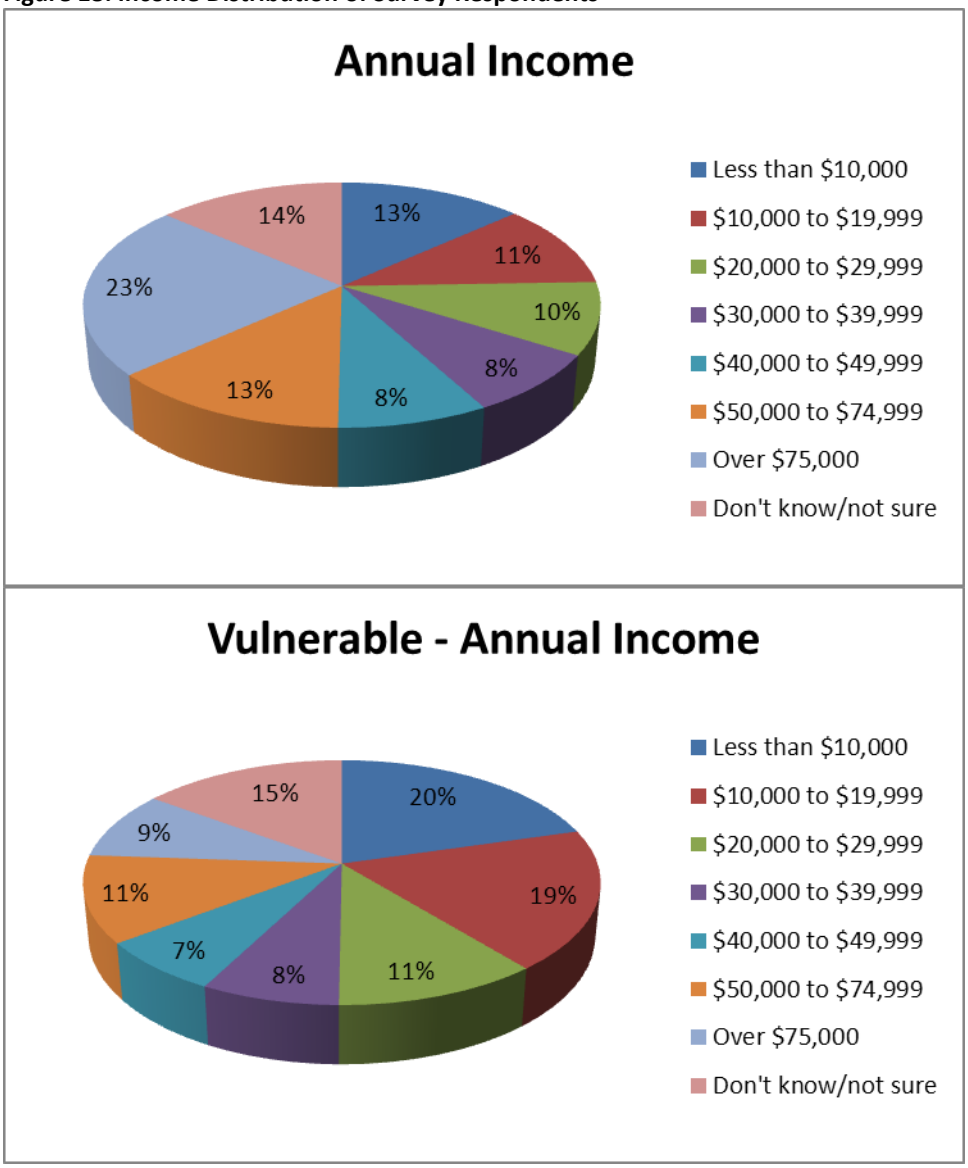
Figure 17: Educational Attainment



Annual Income

The survey indicated that 23.0% of respondents had an income over $75,000, which increased 10% from the Long Beach Community Health Needs Survey conducted in 2009. The income category most frequently reported was over $75,000 (23.1%), followed by don't know/not sure (13.7%) and less than $10,000 (13.4%). According to the 2010 U. S. Census Bureau, the mean family income for residents of Long Beach was $51,173; however, 19.1% of families were living below the poverty line. When the data sample was analyzed for only vulnerable zip codes, as expected, the percentages of higher income categories decreased and those of lower income categories increased.

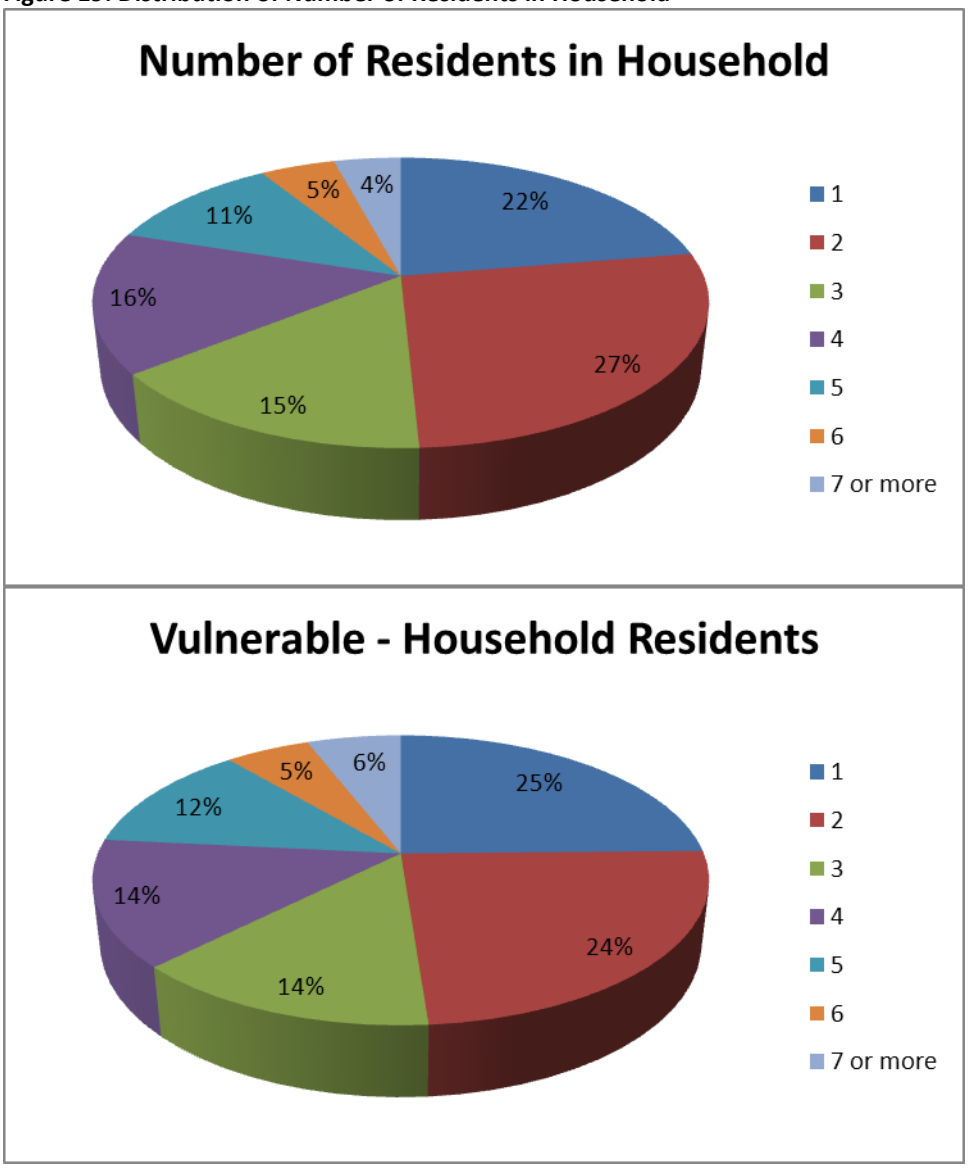
Figure 18: Income Distribution of Survey Respondents



Average Household Size

The majority (80.3%) of respondents reported between 1 and 4 people living in the households and 20.0% living with 5 or more individuals. According to the 2010 U. S. Census the average household size in Long Beach was 2.78 and the average family size was 3.52. Analyzing the data for vulnerable zip codes changed the distribution very minimally.

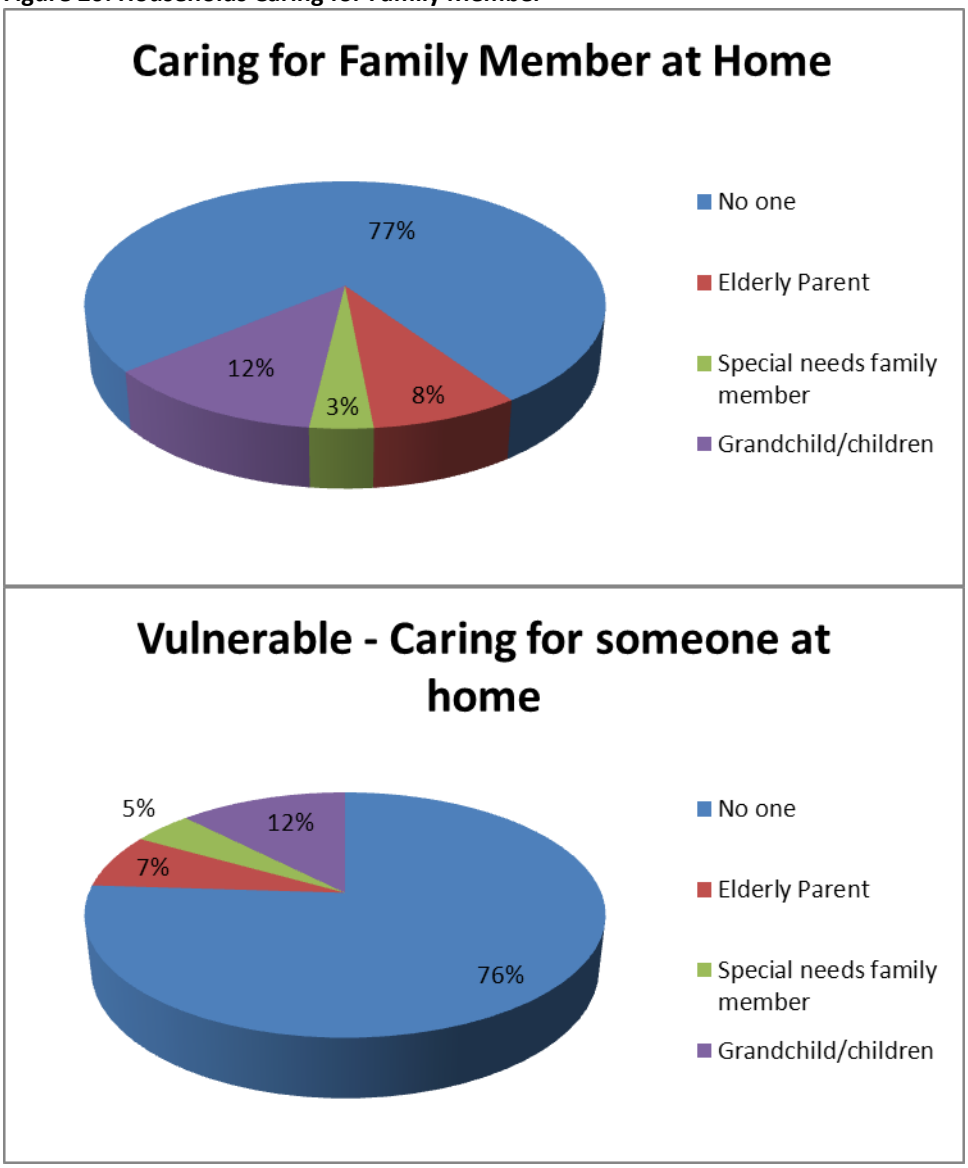
Figure 19: Distribution of Number of Residents in Household



Caring for Family Member at Home

One of the important findings of the study is related to caregivers at home, which previous needs assessment reports did not address (Figure 20). Twenty-three percent of respondents were caring for a family member at home. Individuals who need care at home included elderly parent (8.0%), family member with special needs (3.4%), and grandchild/children (12.0%). When the data of vulnerable zip codes was isolated, these findings did not change significantly.

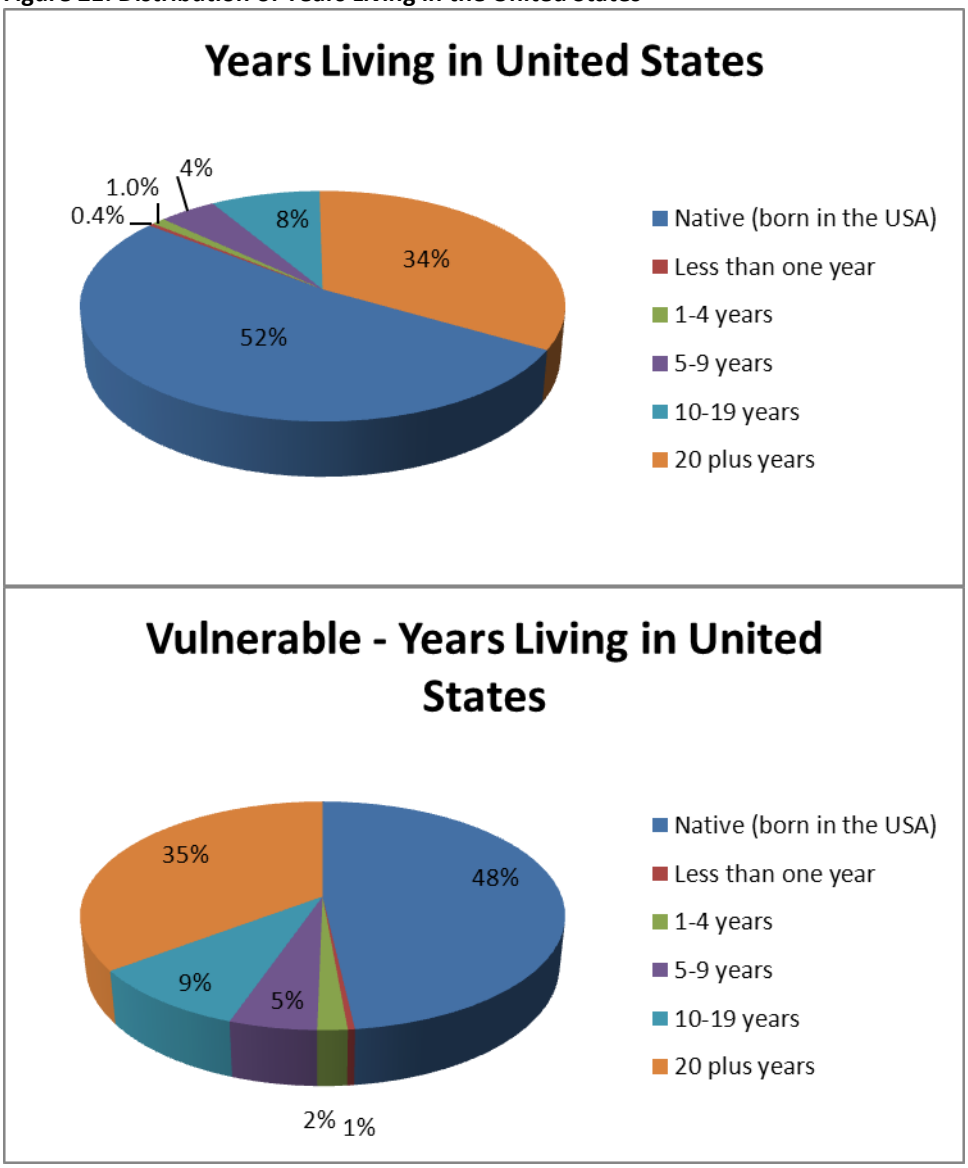
Figure 20: Households Caring for Family Member



Years Living in the United States

The majority of participants were born in the United States (52.2%) and only 5.8% have lived here for less than five years. Further analysis showed that only 0.4% of the survey respondents lived in Long Beach less than one year. When the data sample was analyzed for vulnerable zip codes, results stayed about the same. The proportion of individuals who lived in the United States less than one year increased to 1%. Socioeconomic factors and acculturation are closely related to health outcomes. Sometimes acculturation improved health outcomes, but many times, it increased risks for diseases such as diabetes and obesity (Fitzgerald, 2010).

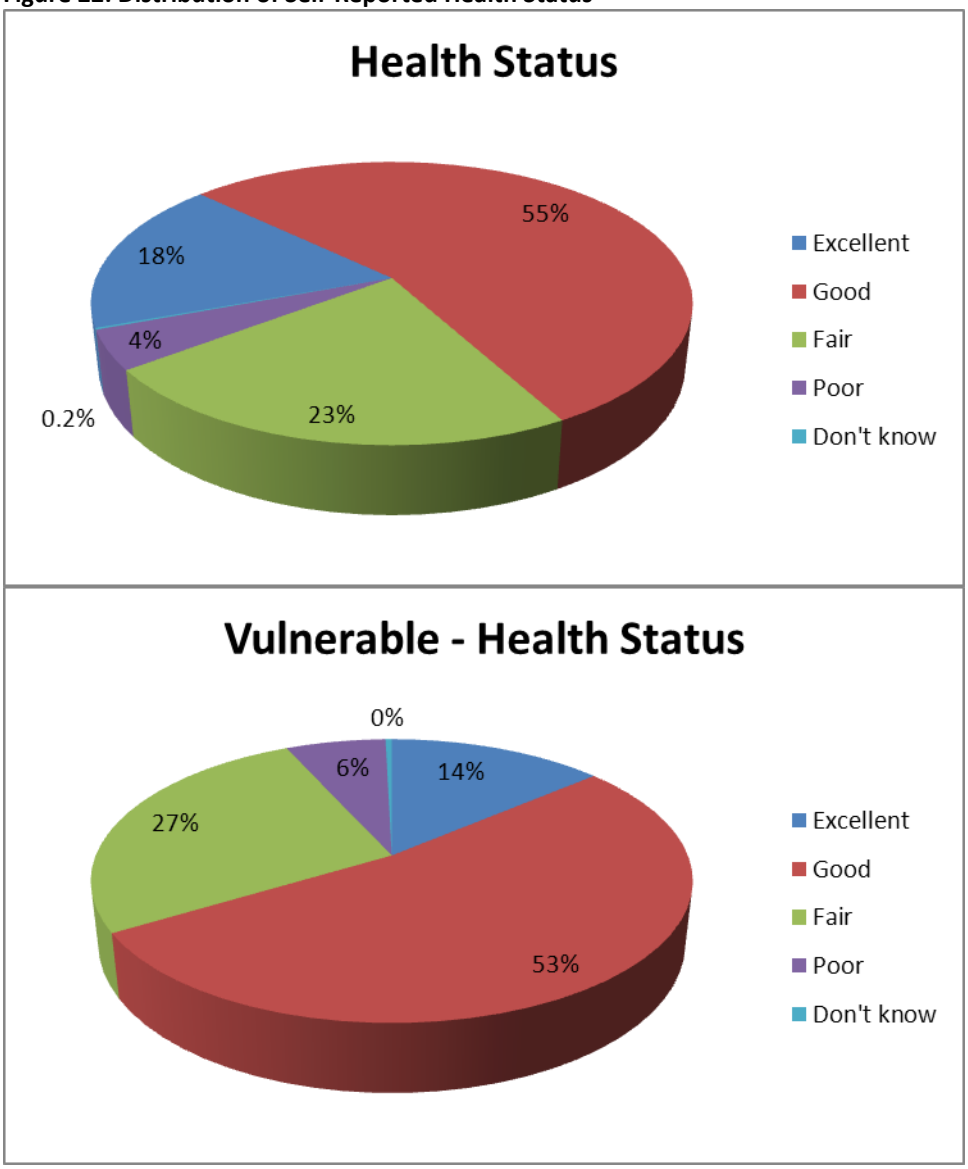
Figure 21: Distribution of Years Living in the United States



Health Status

Respondents to the Long Beach Community Health Needs Assessment Survey reported their health as excellent (18%), good (55%), fair (23%) and poor (4%). There were more people with excellent to good health status (74%) than there were with poor to fair health (36%). Sixty-seven percent of participants living in vulnerable zip codes viewed their overall health as excellent to good and 33% of participants viewed their health as fair to poor. According to the County Health Rankings 2012, those reporting poor to fair health in Los Angeles County was 22%, which was slightly lower than the survey respondents (University of Wisconsin, 2012). This may be attributed to the oversampling of older age groups in the data sample.

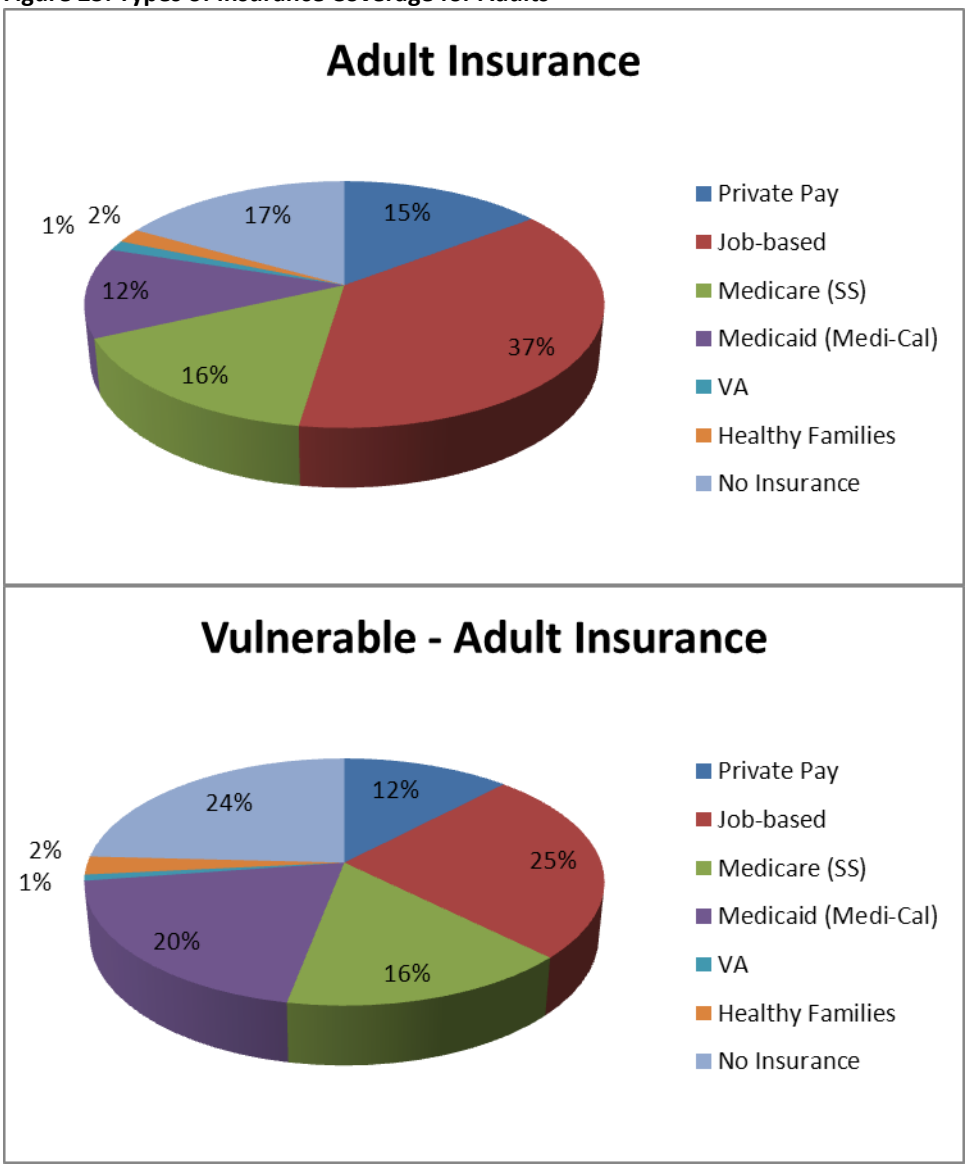
Figure 22: Distribution of Self-Reported Health Status



Adult Health Insurance Status

Participants were asked about their health care coverage, as well as the coverage for their children. About thirty-eight percent of respondents reported that they have employer job-based insurance, followed by no insurance (17%), Medicare (16%), Private Pay (15%), Medicaid (12%), Healthy families (2%) and VA (1%). Of those individuals reporting some type of private health care insurance coverage, 39% were also covered by dental insurance and 35% were covered by vision insurance. Los Angeles County reported an uninsured rate of 28.9% (Lavarreda, & et al., 2010). When the data were analyzed for vulnerable zip codes, uninsured population and the Medicaid coverage in the data sample increased to 24% and 20%, respectively.

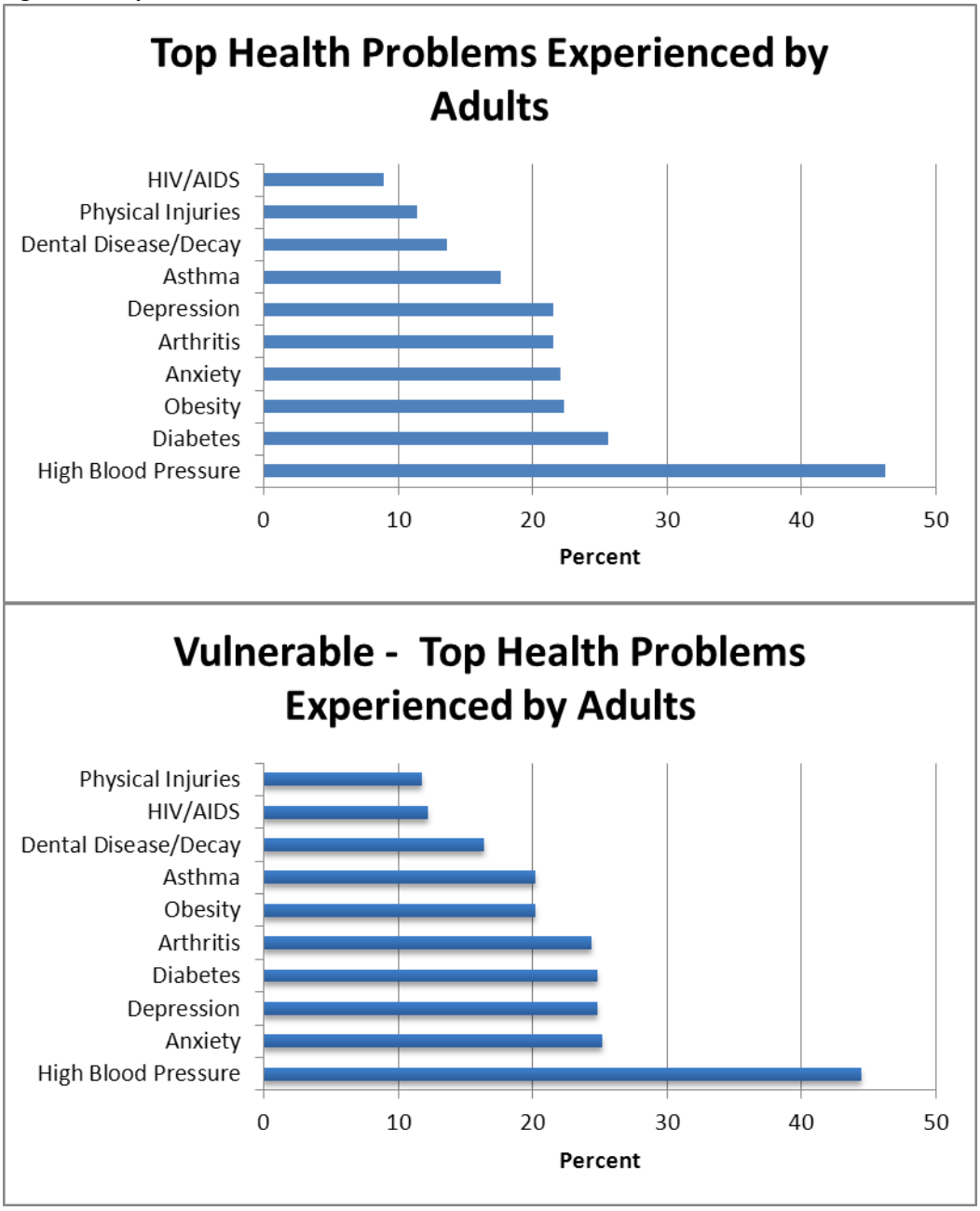
Figure 23: Types of Insurance Coverage for Adults



Top Adult Health Problems in Long Beach

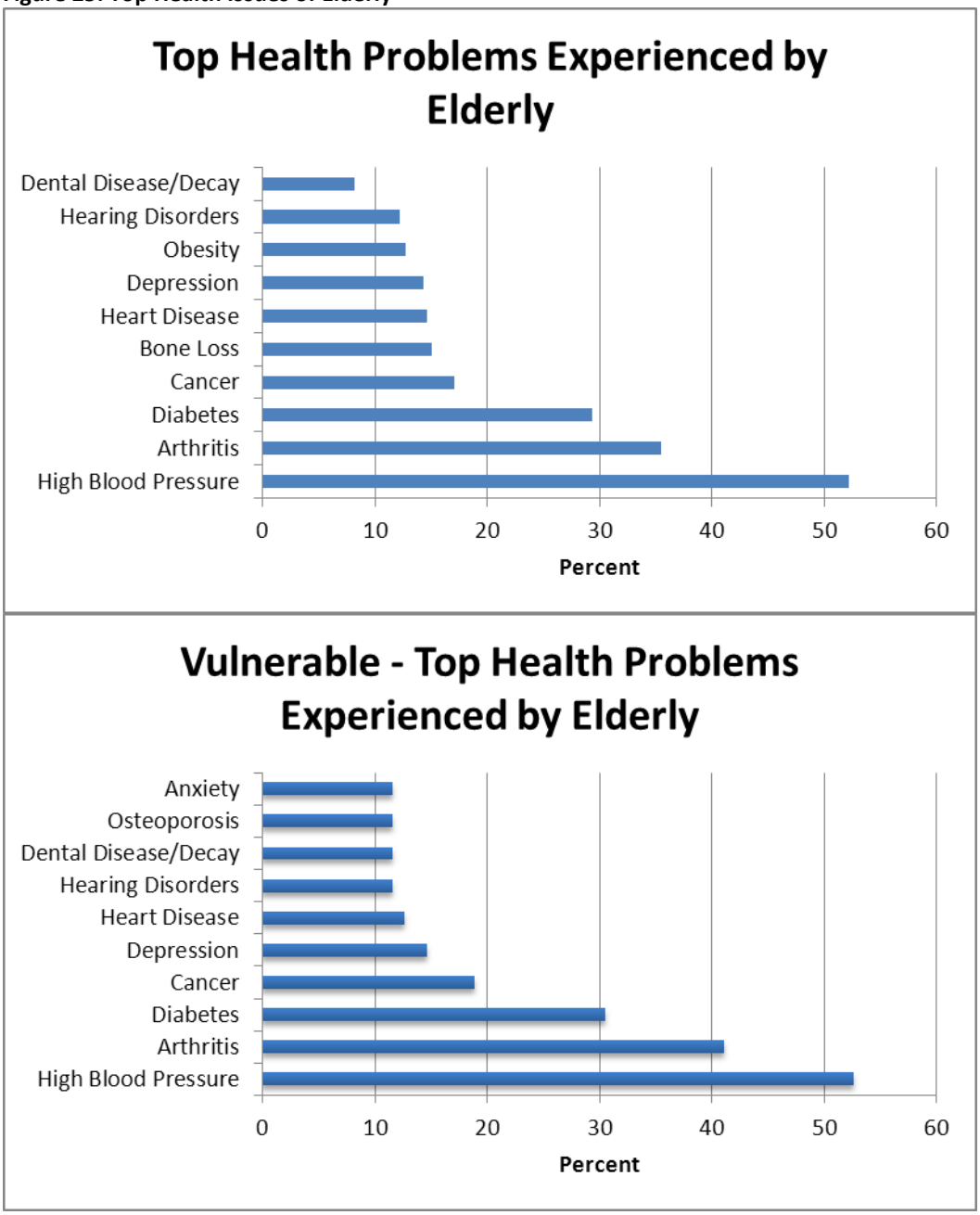
The top health issues and problems that currently affect the city of Long Beach residents are reported below for young adults, adults and elderly. Participants were allowed to check more than one single health problem so the total percentage of given answers exceeds 100%. In the case of adult health problems, responses were received from 493 individuals. Adults reported that high blood pressure was a major issue for this group (46% of the respondents), followed by diabetes (26%), anxiety (22%), obesity (22%), arthritis (22%) and depression (22%). Clearly, high blood pressure requires immediate attention but the other five major health problems for adults should be noted as well. When the data were analyzed for vulnerable neighborhoods, results stayed about the same.

Figure 24: Top Health Issues of Adults



The elderly segment of the data sample reported high blood pressure to be a major issue followed by arthritis and diabetes. Two other health issues mentioned by the elderly were cancer and depression when the data were analyzed just for vulnerable groups. About 245 respondents provided input into this question and an overwhelming majority (52%) marked high blood pressure as a health issue to be addressed.

Figure 25: Top Health Issues of Elderly



Barriers to Care, Lack of Health Services, Alternative Health Methods and Health Education Sources

In the 2012 Long Beach Community Health Needs Assessment, participants were asked if their family needed medical care but did not receive the care, only 14% of the respondents needed care but did not get care. This rate went up to 17% when only vulnerable zip codes were included in the analysis. Participants were also asked about barriers to receiving proper medical care over the previous 12 months as a follow-up question. The majority of participants (60%) reported that they did not receive the health care needed due to lack of insurance (60%) followed by co-payment being too high (23%). Two other reasons included, did not have time (11%) and took care of it at home (10%), respectively. All other reasons for not receiving proper medical care had single digit percentages, with the highest being- did not know where to get care (8%), providers did not take my insurance (8%) and lack of transportation (8%). When the data were analyzed for vulnerable zip codes, statistics remained almost unchanged.

Figure 26: Proportion of Barriers to Care

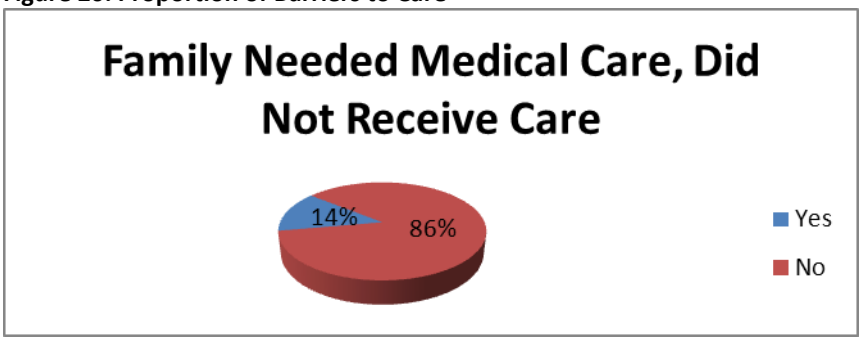
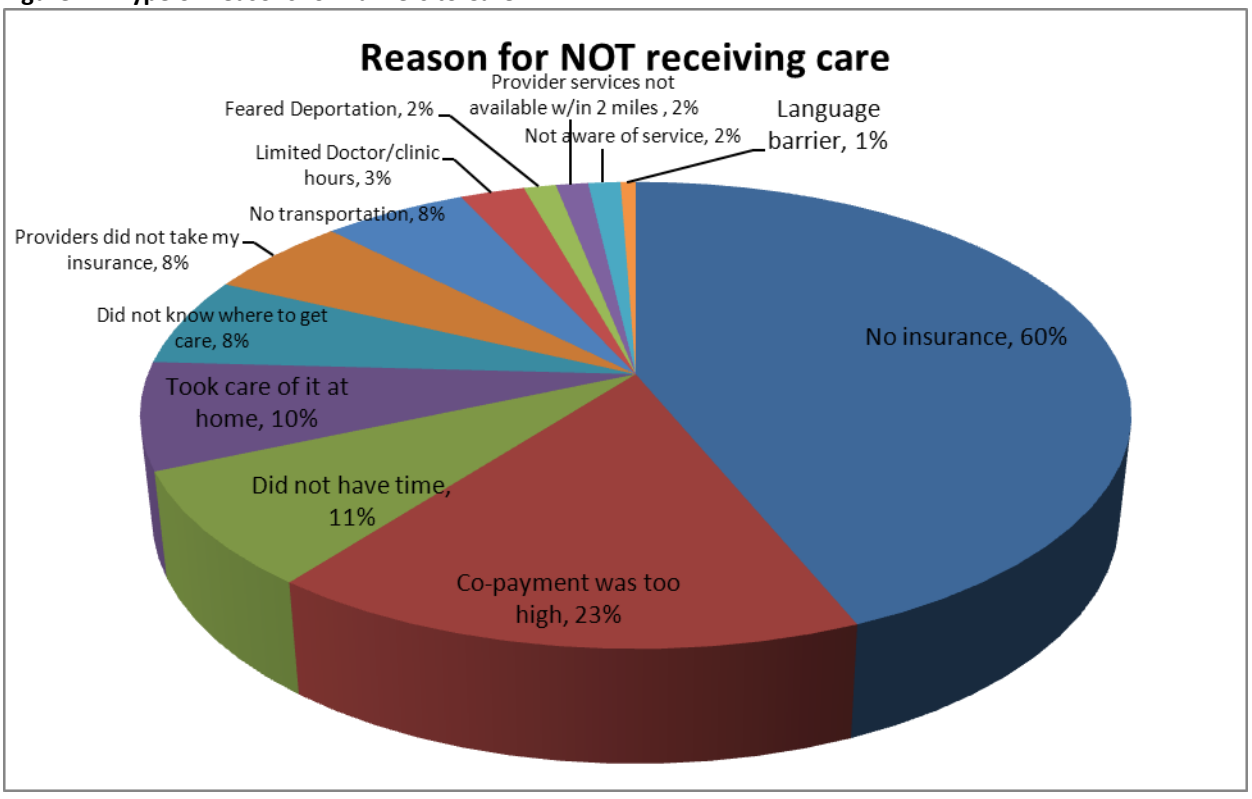
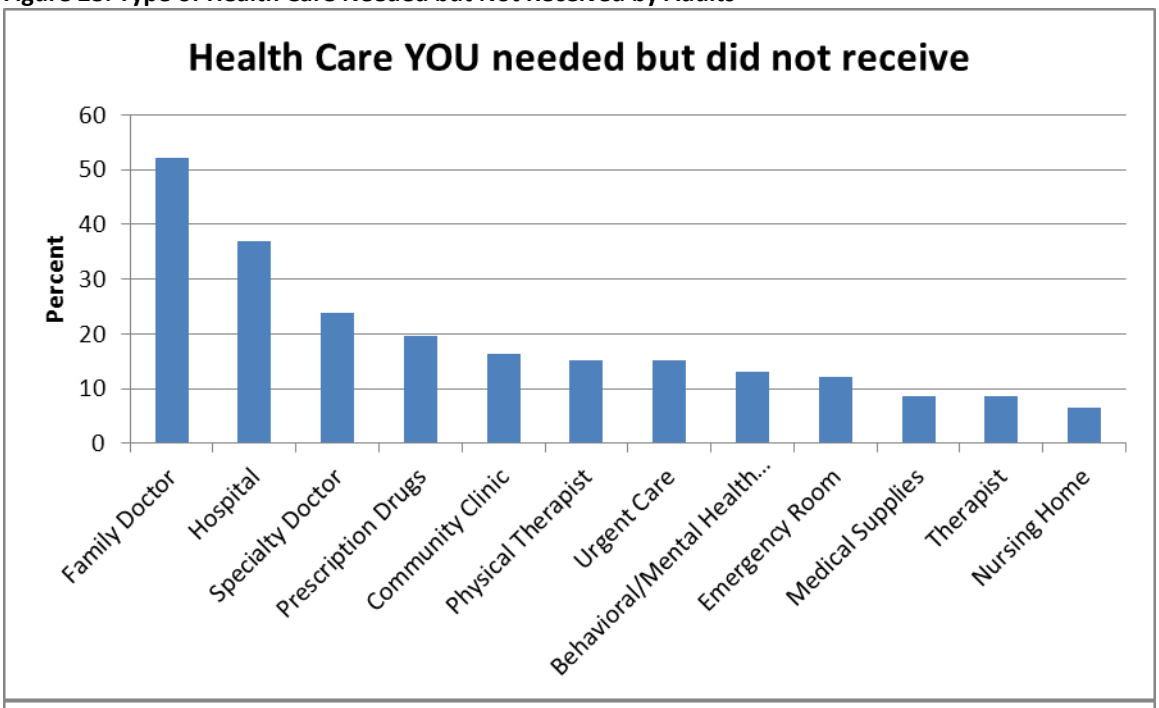


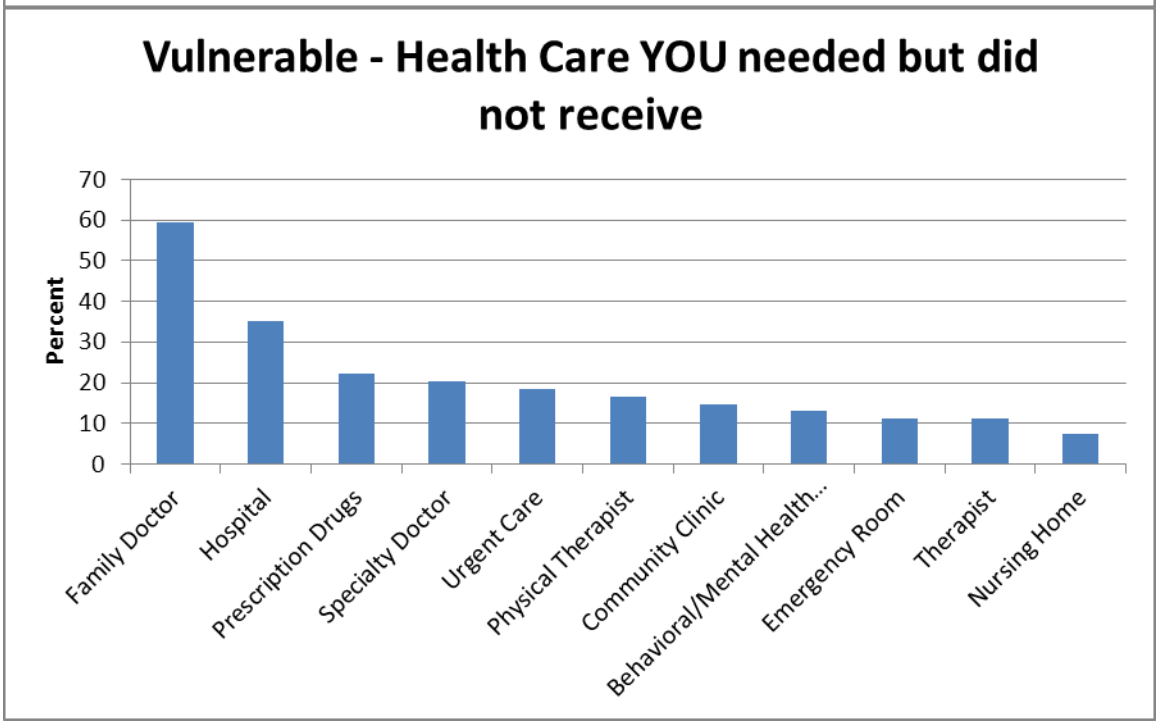
Figure 27: Type of Reasons for Barriers to Care



Participants were asked to identify the type of health care needed but did not receive for themselves, their teenagers and children. Ninety-two survey respondents answered this question; 37% needed hospital services, 24% needed specialists, 20% needed prescription drugs, and 16% needed access to a community clinic, but did not receive these services. When the data sample was analyzed for only vulnerable zip codes, results stayed about the same.

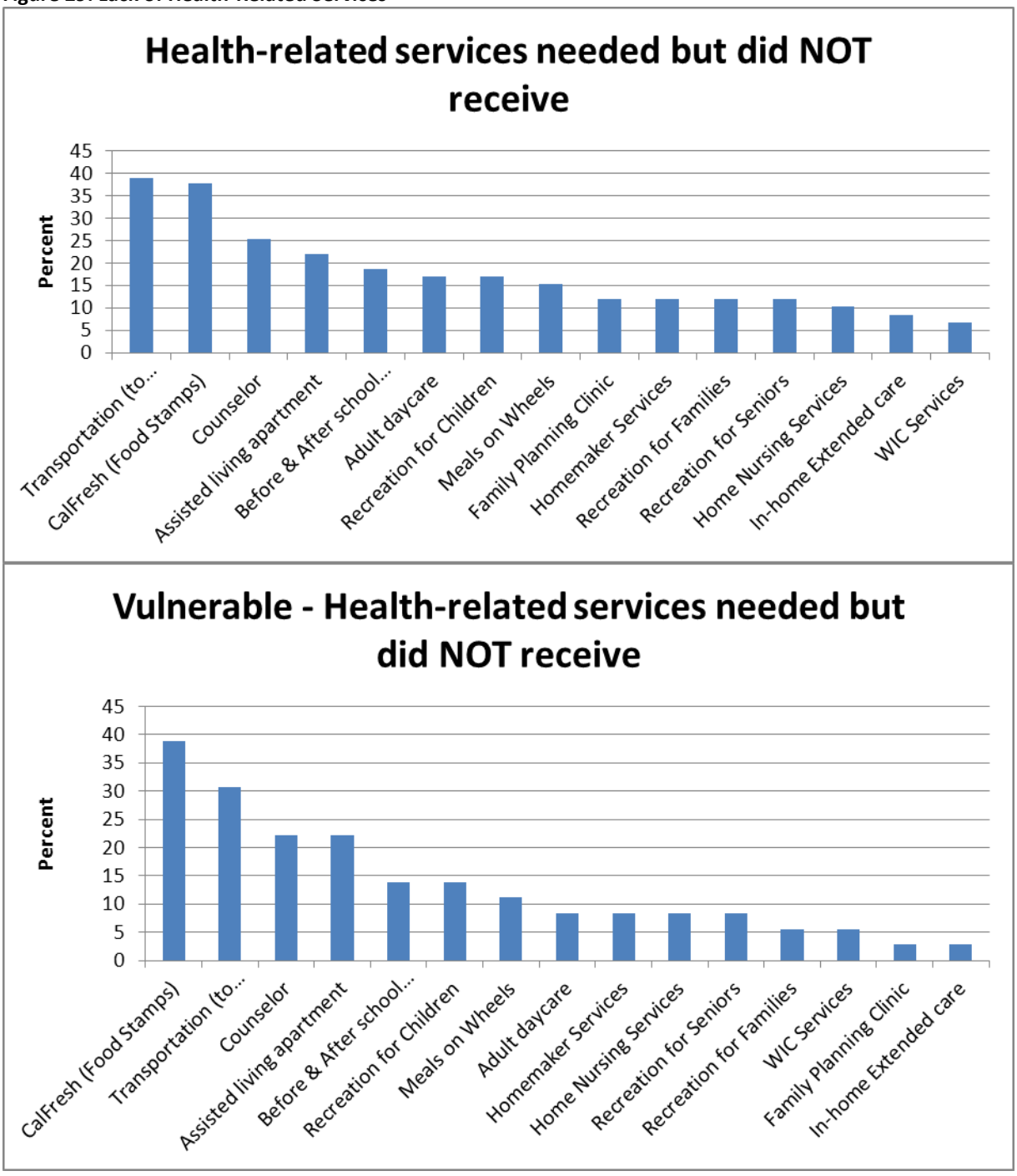
Figure 28: Type of Health Care Needed but Not Received by Adults





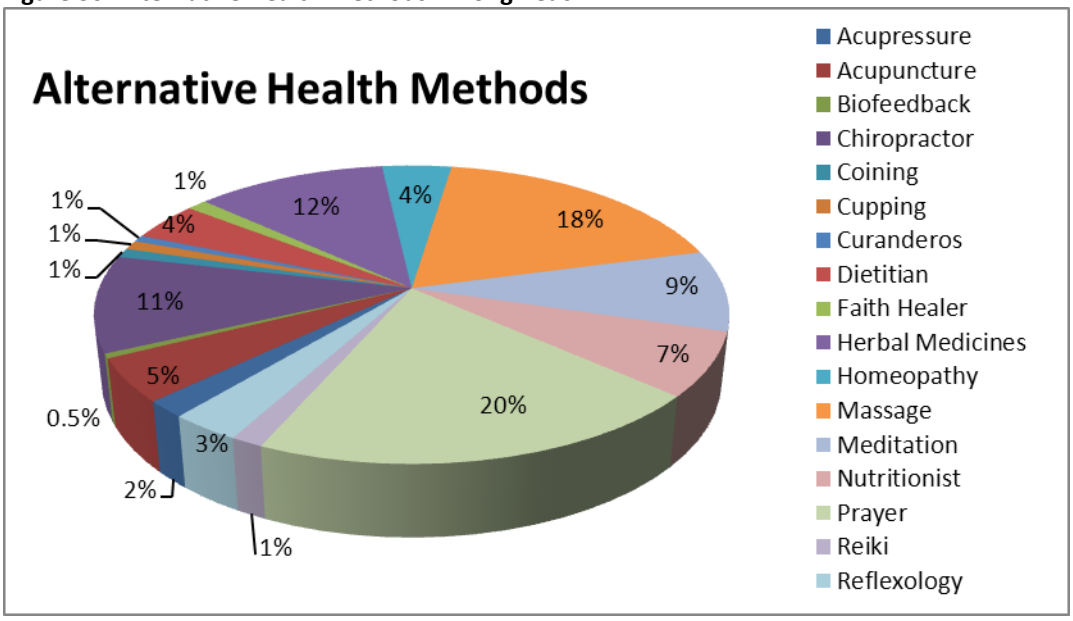
The next area the survey explored was the top health-related services needed by participants but were not received. Fifty-nine individuals responded to this question. The most needed services were transportation (39%) and CalFresh (food stamps) program (37%), followed by counseling services (25%).

Figure 29: Lack of Health-Related Services



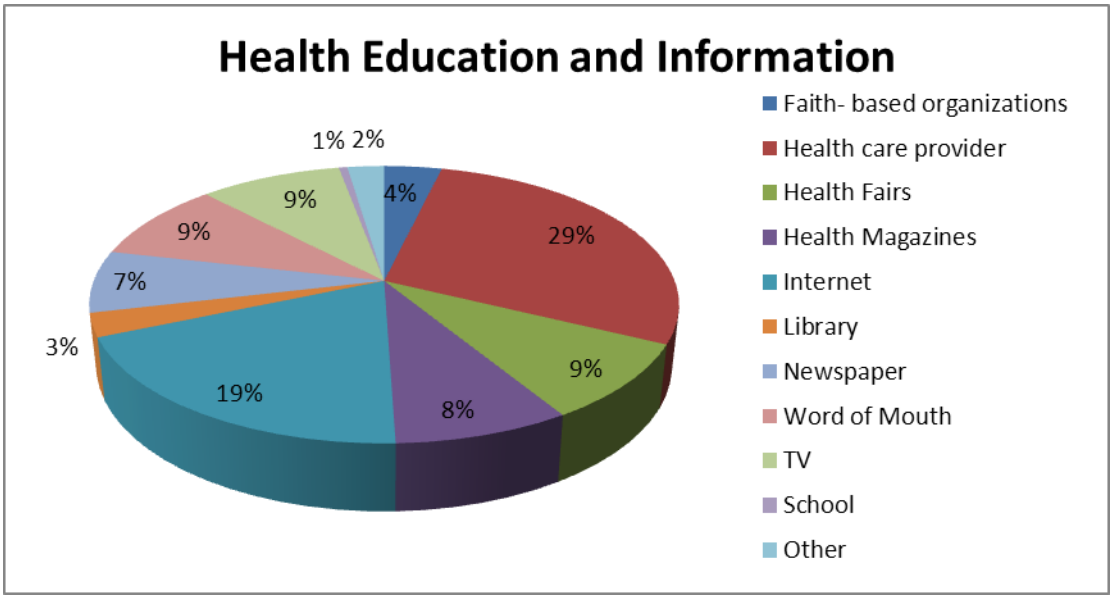
Respondents reported alternative health methods used in the last 12 months. Over 20% reported using prayer, down from 30% in the last survey. Over 18% utilized massage as a form of health care and about 12% used herbal medicines. These results are consistent with the results of previous surveys.

Figure 30: Alternative Health Methods in Long Beach



The Health Needs Assessment Survey included a specific question about where the residents of the city of Long Beach receive health education and health-related information. The majority of the respondents received this information from their health care providers (29%) and the Internet (19%). Word of mouth (9%), health fairs (9%), TV (9%) and newspaper (7%) are the other outlets for health information.

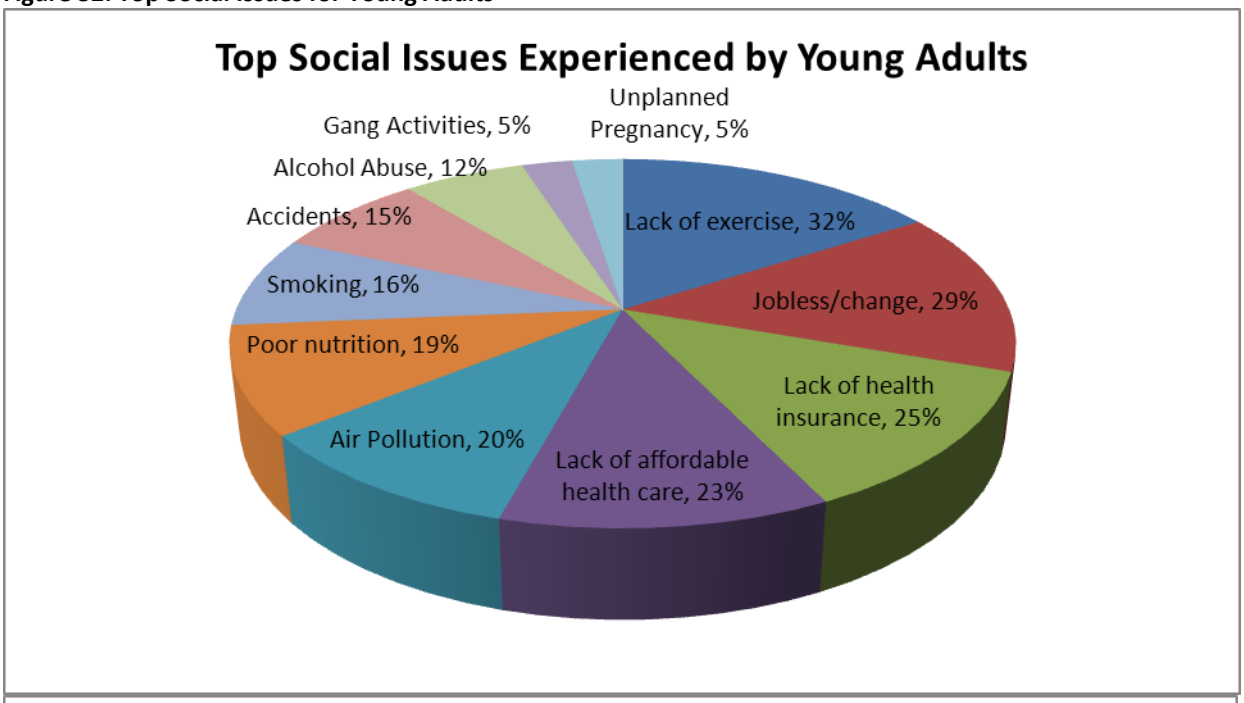
Figure 31: Sources of Health Education and Health-Related Information

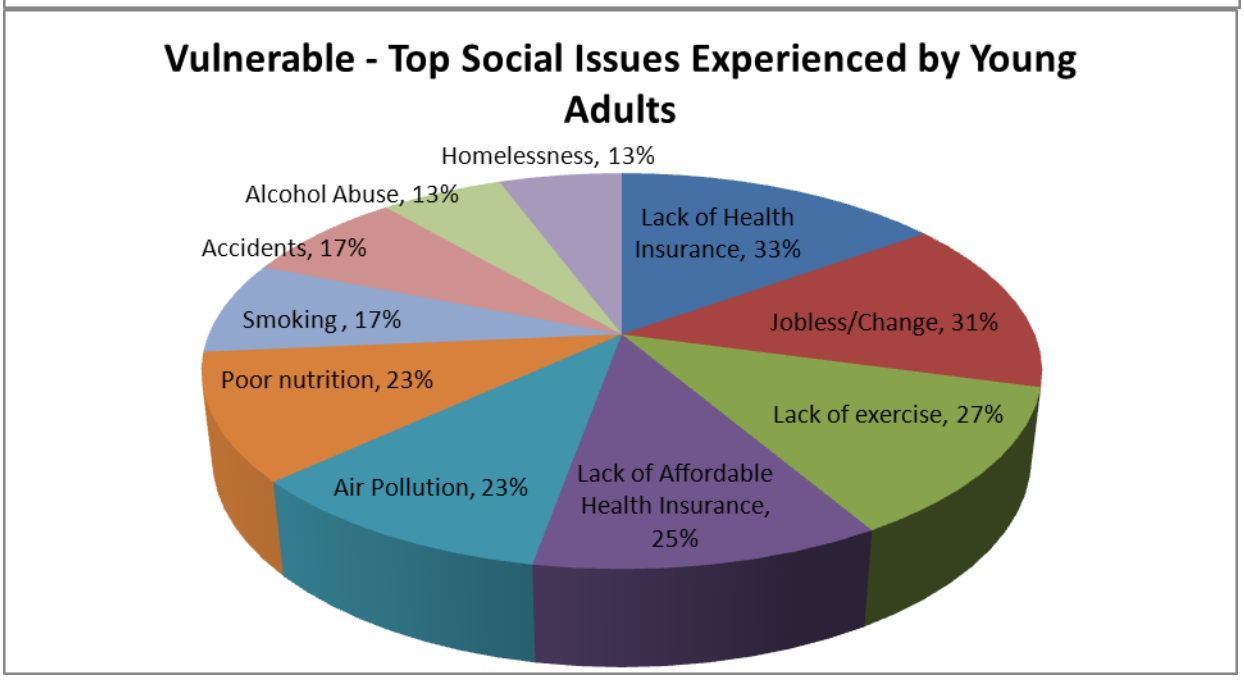


Social Issues Experienced by Young Adults, Adults and Elderly

The LBCHNA survey also examined the social issues of the city's residents and identified areas for careful consideration. When the data were analyzed for young adults, similar social issues remained as concerned areas - lack of exercise, lack of health insurance and affordable health care, air pollution and accidents. Smoking and unemployment (jobless/change) also became areas of concern in vulnerable zip codes.

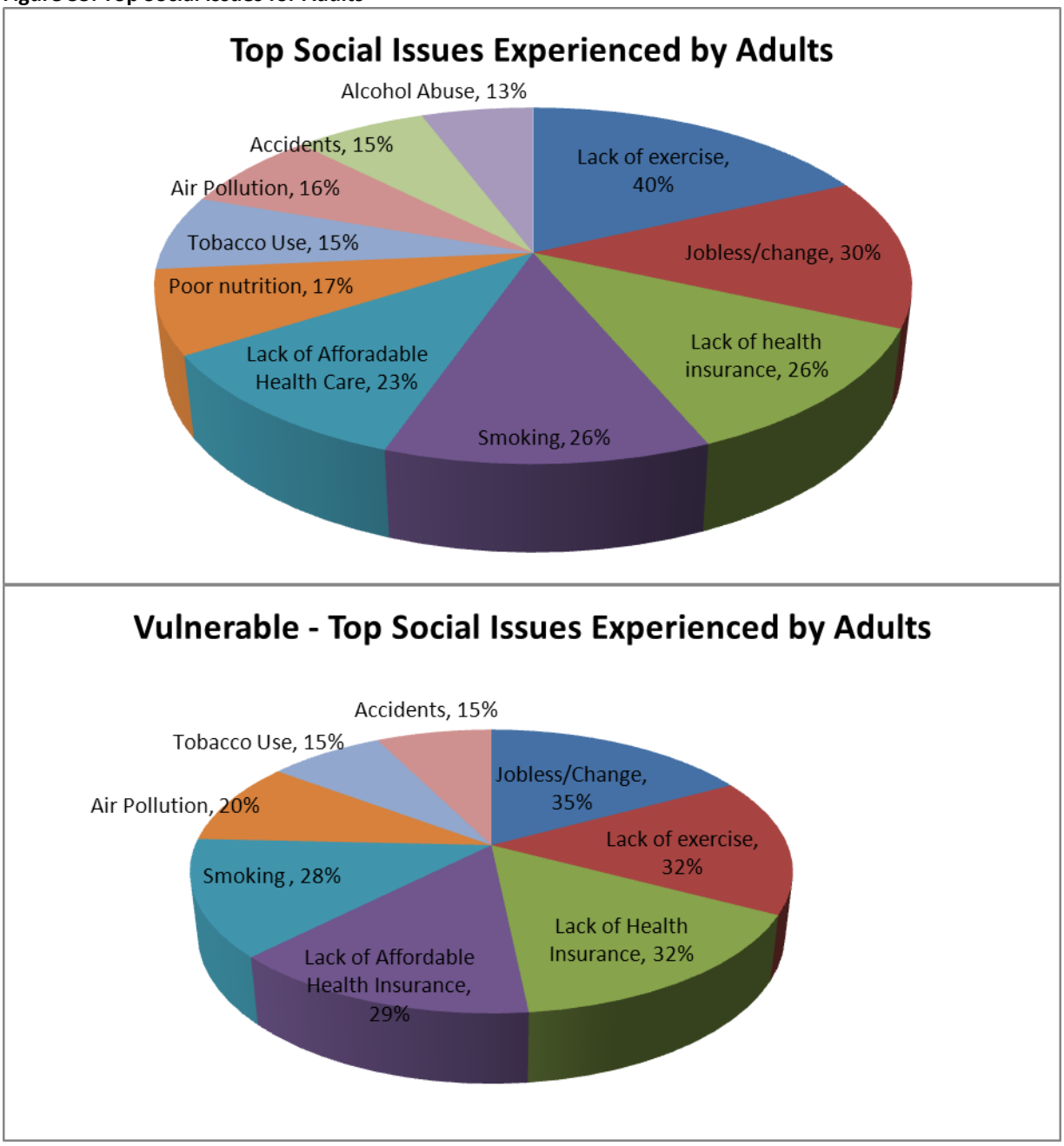
Figure 32: Top Social Issues for Young Adults





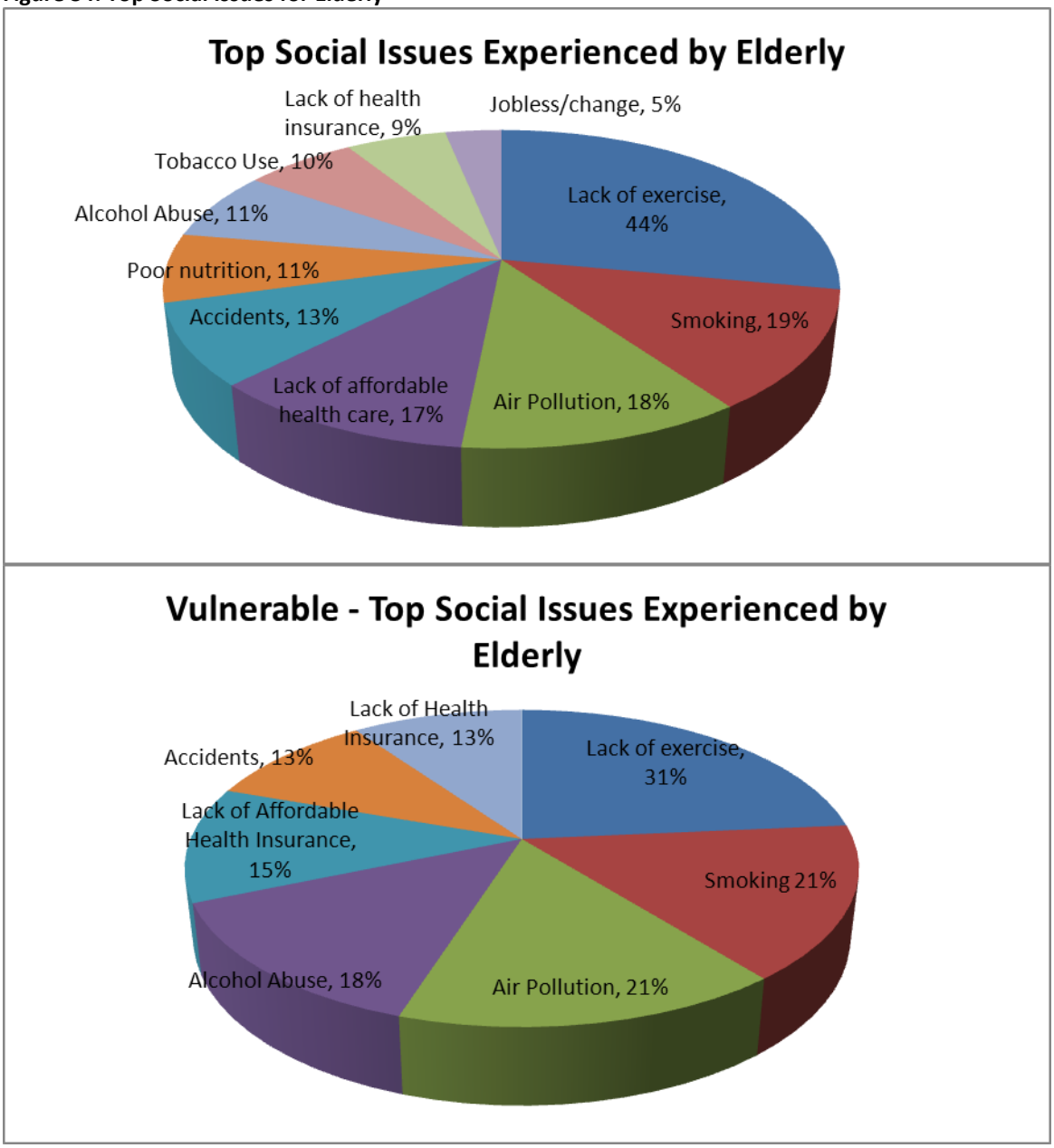
Three hundred and seventy-two individuals responded to the question related to social issues that are experienced by adults (some with multiple social concerns). The top five social problems identified were: lack of exercise (40%), jobless/change (30%), lack of health insurance (26%), smoking (26%), and lack of affordable health care (23%). When the data were analyzed for vulnerable zip codes, the above social problems became even stronger in the statistics.

Figure 33: Top Social Issues for Adults



For elderly, the most important problem was the lack of exercise (44%), followed by smoking (19%), air pollution (18%) and lack of affordable health care (17%). Results were about the same for vulnerable zip codes.

Figure 34: Top Social Issues for Elderly



Diabetes, Exercise, Fast Food Consumption and Pregnancy

Diabetes

Diabetes continues to be a problem in Long Beach as well as the United States. According Babey, Wolstein, Diamant, Bloom and Goldstein (2012), the obesity rate in Long Beach is 40.7%. Overweight and obesity are associated with increased risk for diabetes, cardiovascular disease, hypertension, stoke, certain types of cancer, and musculoskeletal conditions. Obesity is the second leading preventable cause of disease and death in the United States. According to the CDC (2012b), 1 in every 3 adults is obese and 1 in 5 youth between the ages of 6 and 19 is obese. Although only 18% of respondents reported that they were recently diagnosed with diabetes, diabetes was a common problem in all age categories surveyed. The majority of participants taking medication for diabetes received their medicine from a pharmacy (76%).

Figure 35: Family Member with Diabetes

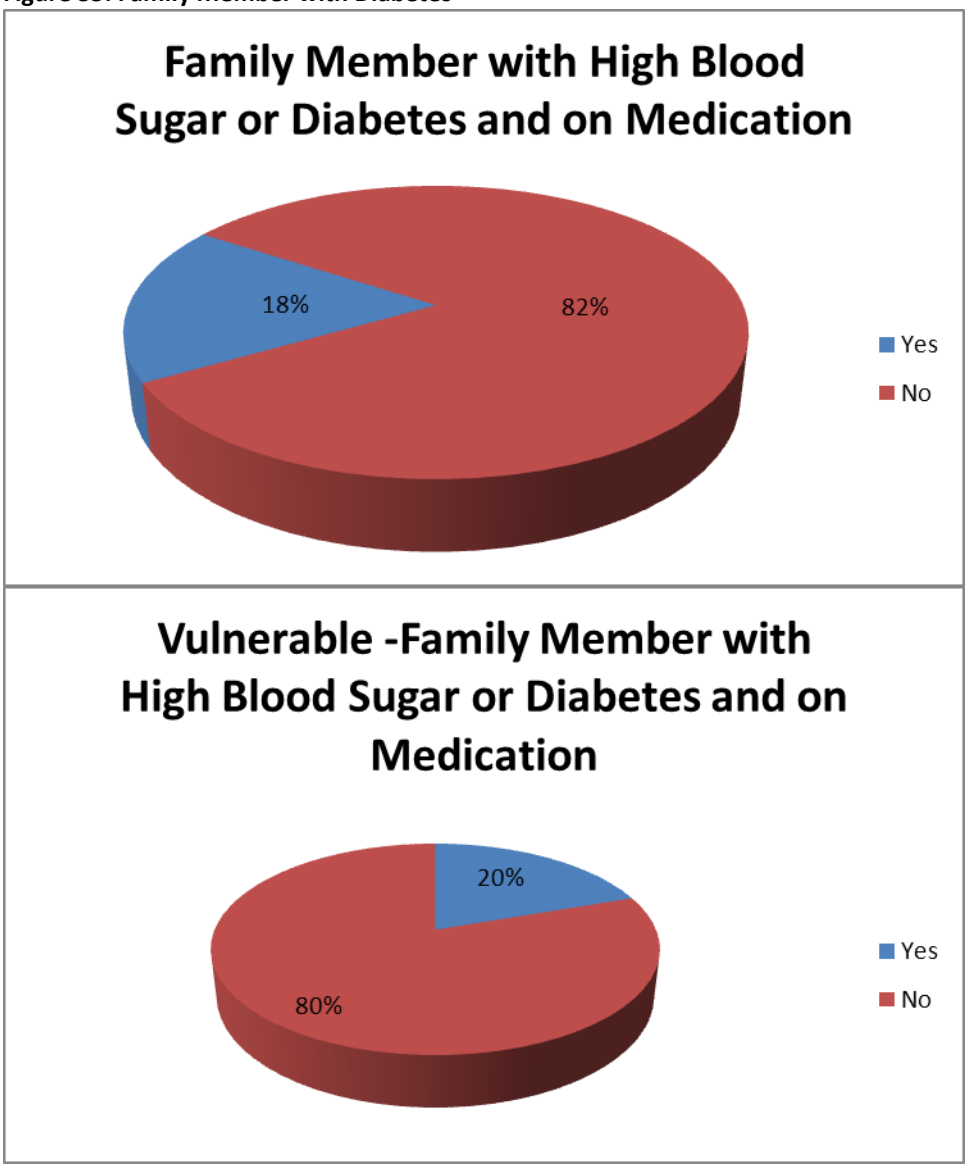
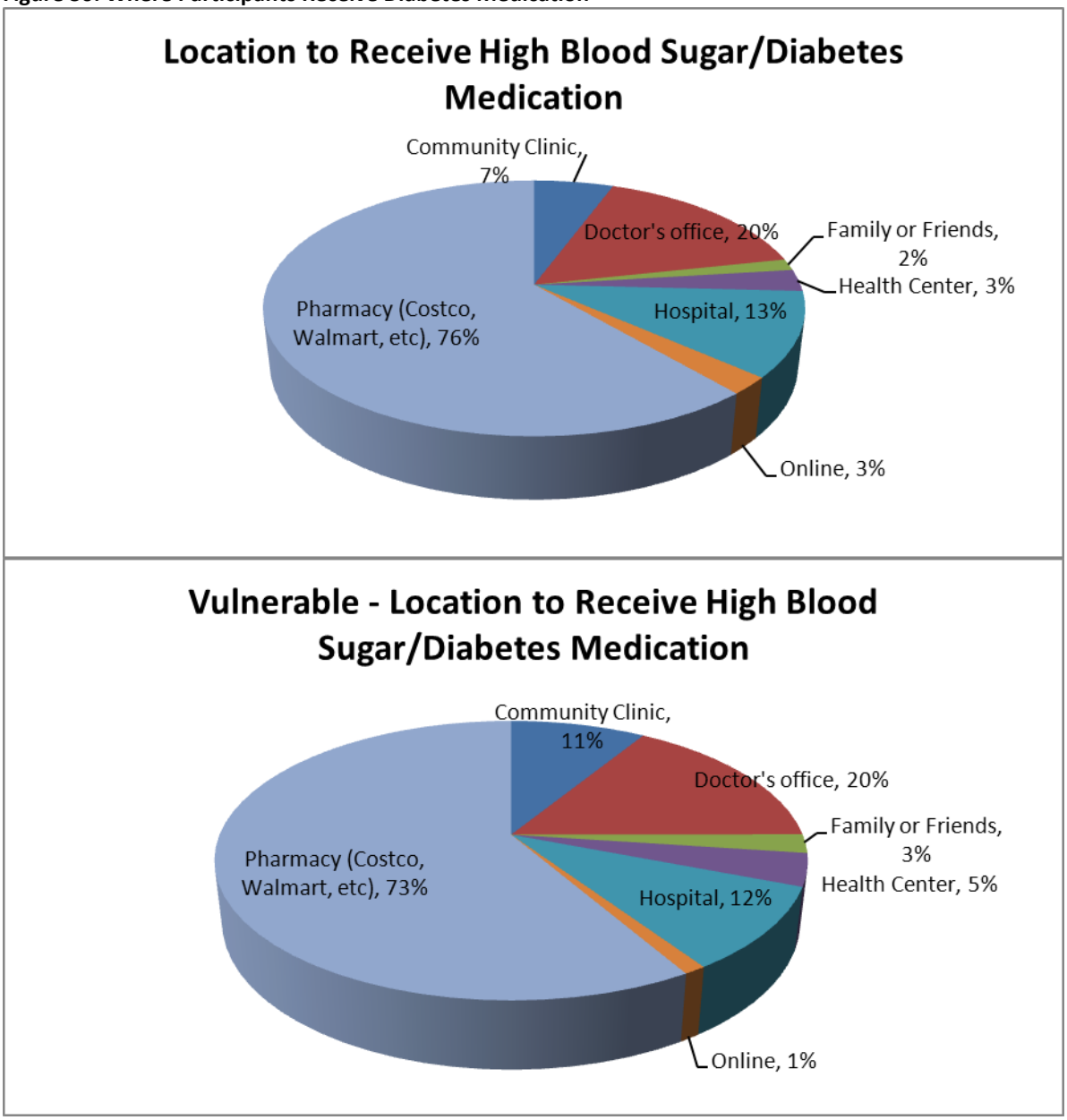


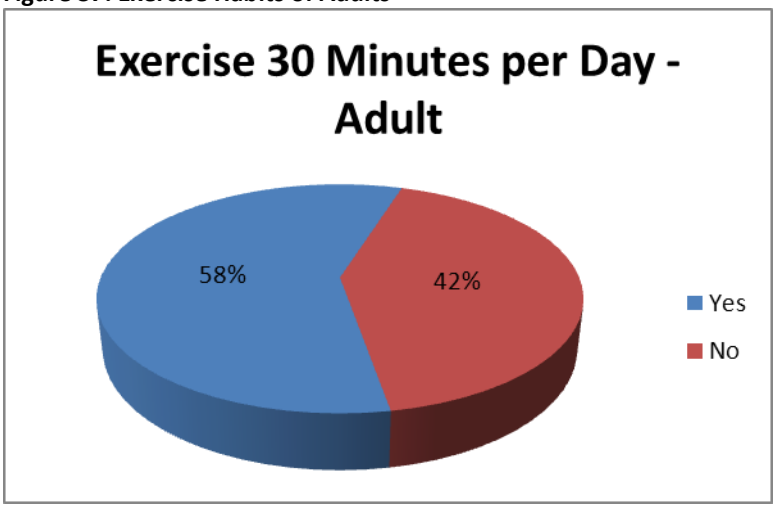
Figure 36: Where Participants Receive Diabetes Medication



Exercise

According to the Centers for Disease Control and Prevention more than one-third of all adults do not meet the recommendations for aerobic physical activity (2012b). Eighty percent of adults and adolescents do not get enough aerobic physical activity (USDHHS, 2010e). Regular physical activity can improve health, improve cardiorespiratory and muscular fitness, decrease body fat composition, reduce symptoms of depression, and reduce risk a certain types of cancer. The Community Health Needs Assessment survey included a specific question about exercising 30 minutes a day for children, teenagers, and adults. Figure 35 shows that approximately 58% of the adults surveyed exercised at least 30 minutes a day. Surprisingly, this ratio increased to 62% for individuals who live in vulnerable zip code areas.

Figure 37: Exercise Habits of Adults

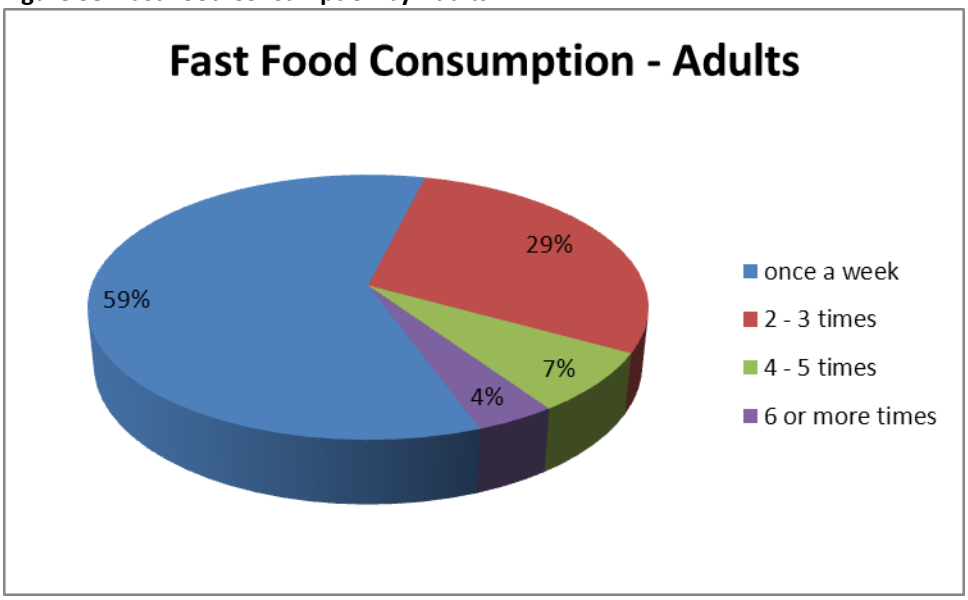


Fast Food

Americans are not consuming adequate amounts of fruits and vegetables per day, less than 22% of high school students and 24% of adults reported eating 5 or more servings of fruits and vegetables per day (CDC, 2012b). A healthy diet can reduce the risks for many health conditions including: diabetes, heart disease, high blood pressure, obesity, and certain types of cancers (USDHHS, 2012d).

Approximately sixty-percent of adults who responded to the survey acknowledged that they ate fast food once a week. Twenty-nine percent of the adult respondents consumed fast food 2-3 times a week. Eleven percent of adults consumed fast food 4 or more times per week. For vulnerable zip codes these statistics were slightly higher (62% and 26%), respectively.

Figure 38: Fast Food Consumption by Adults

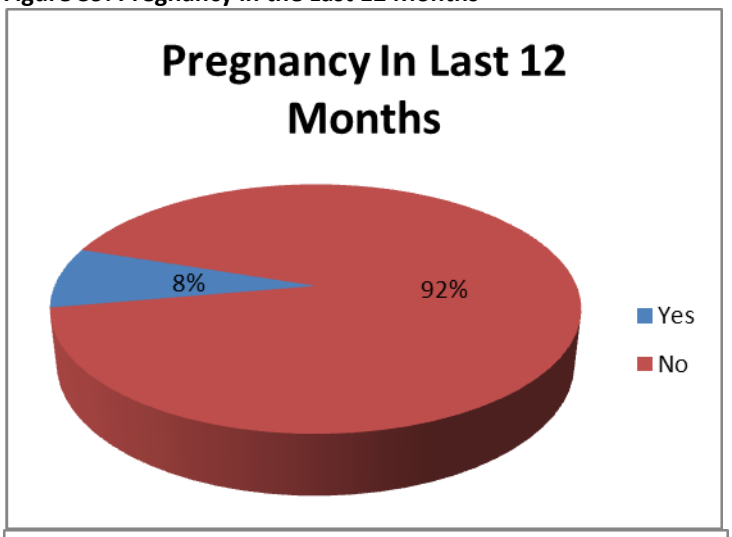


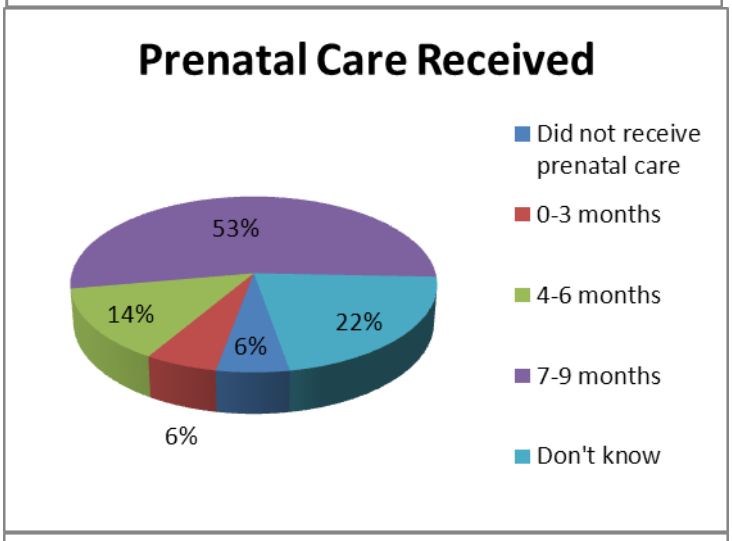
Pregnancy

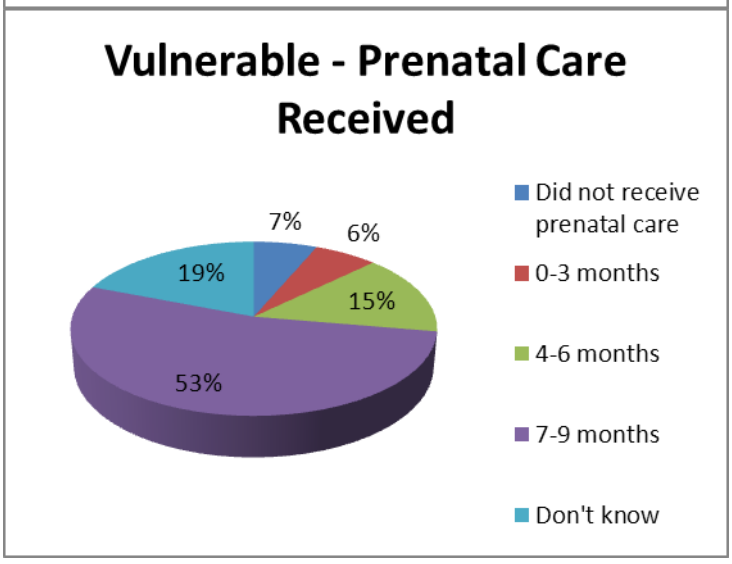
A couple of questions were asked regarding pregnancy; if someone in the respondent's family was currently pregnant, and if so, when did she begin to receive prenatal care. Eighty respondents answered this question with someone in their family currently pregnant (8%), and 47 began prenatal care within the last 3 months of pregnancy (53%). Interestingly, only 6% of the pregnant women received prenatal

care in the first trimester and another 6% did not receive any prenatal care. Clearly, this should be a concern for local hospitals and public health authorities. Although 80 individuals answered this question, which provides somewhat weak results, there should be enough concern to intensify efforts to reach pregnant women who are lacking prenatal care.

Figure 39: Pregnancy in the Last 12 Months







RESULTS OF THE KEY INFORMANT SURVEY

The 2012 Key Informant survey was conducted to understand the health needs of Long Beach residents and surrounding communities, as well as the barriers faced by patients accessing health services. A total of 122 of the 433 invited individuals completed the survey, for a response rate of 25%. The zip codes with the most key informant surveys included 90813 (32), 90815 (17), 90802 (9), 90803 (3), 90804 (2), 90805 (4), 90806 (9), 90807 (6), 90808 (5), and 90810 (3).

The majority of the key informants represented four groups: non-profit service organizations (24%), educational institutions (19%), hospital providers (17%), and public health employee (15%). The rest of the participating key informants and their role are in Figure 36. Key informants also reported about special target populations they represented as follows: general community (42%), the Hispanic or Latino community (15%), the Asian/Pacific Islander community (10%), the non-Hispanic/White community (5%), and Black/African American/African and LGBT communities (4% each).

Figure 40: Background of Key Informants

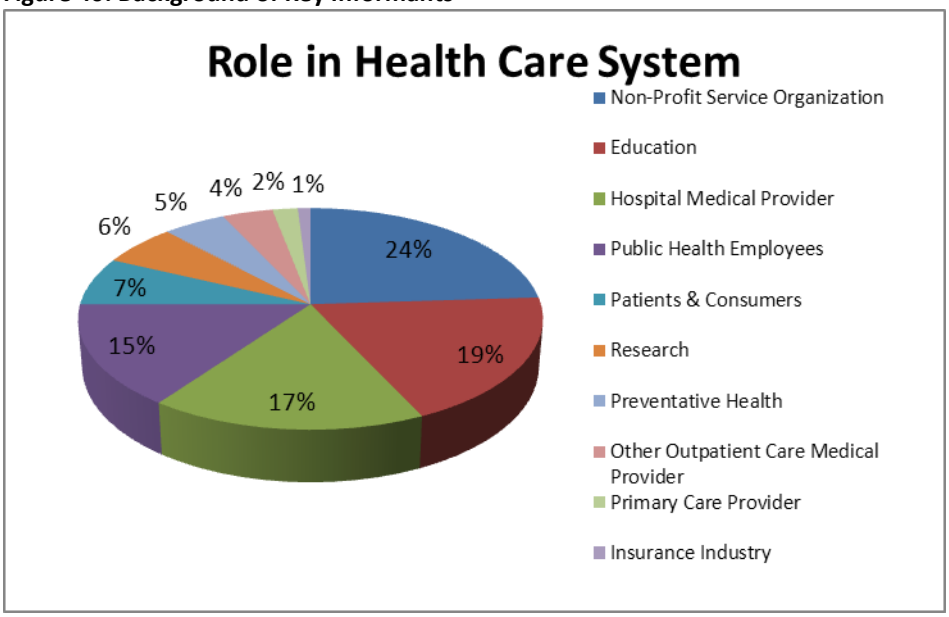
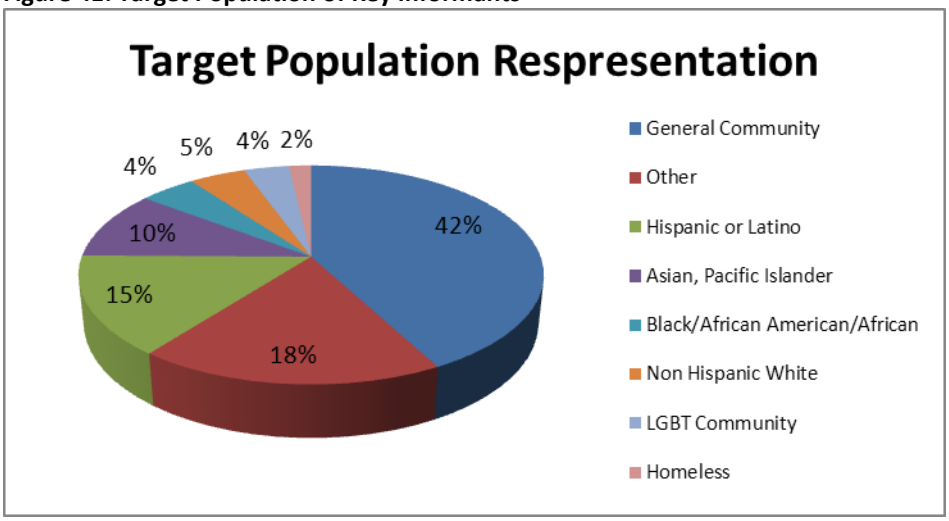


Figure 41: Target Population of Key Informants



Key informants were asked five major questions to provide their opinion for children, teenagers, young adults, adults and elderly. These five areas are: (1) health problems, (2) reasons for individuals not to receive needed care, (3) lack of health care providers in their service area, (4) lack of health related services (such as enabling services), and (5) social issues experienced by all groups. The main purpose of this part of the study is to identify the problem areas highlighted above and hopefully to support the findings of the Long Beach Community Health Needs Assessment.

Top Adult Health Problems in Long Beach

The top five health issues for young adults were depression, diabetes, obesity, mental health and high blood pressure. The top five health issues in adults were diabetes, high blood pressure, depression, mental health and obesity. For elderly, the top five health issues were diabetes, high blood pressure, depression, heart disease and mental health.

Figure 42: Top Health Problems for All Age Categories

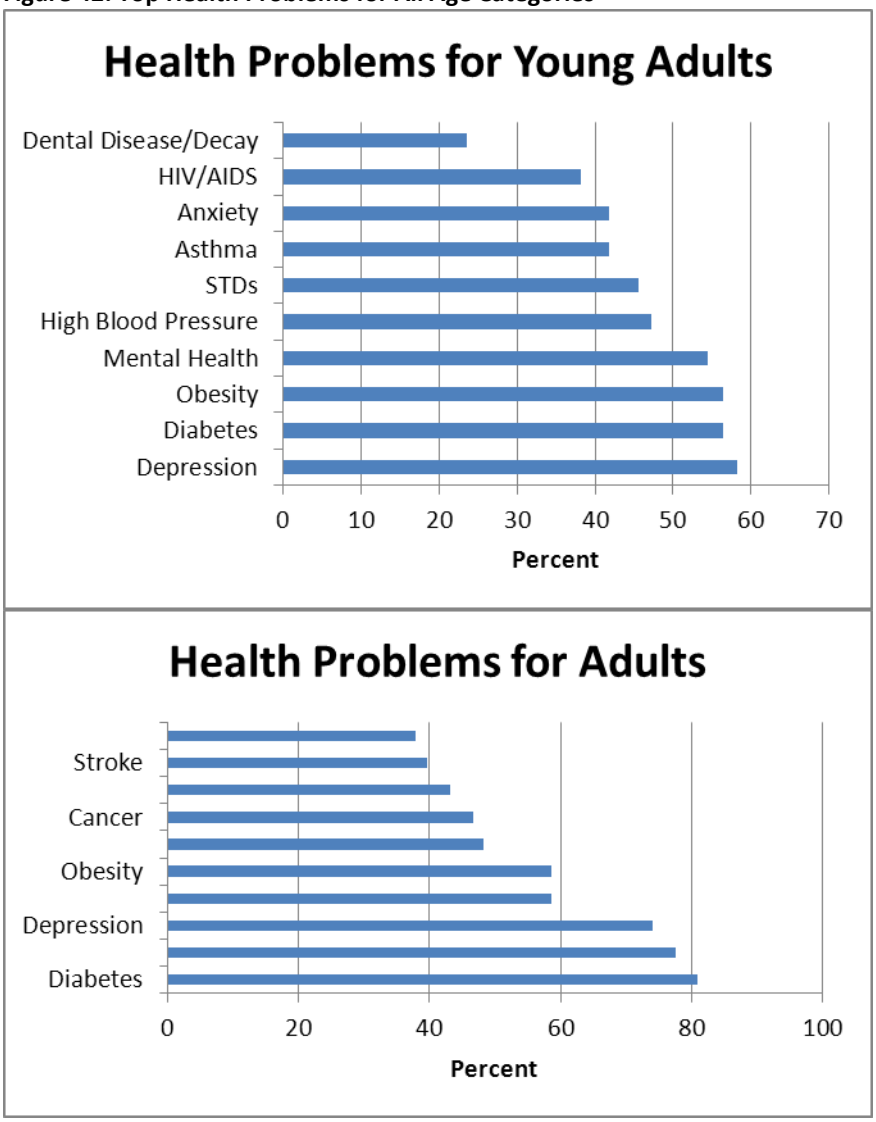
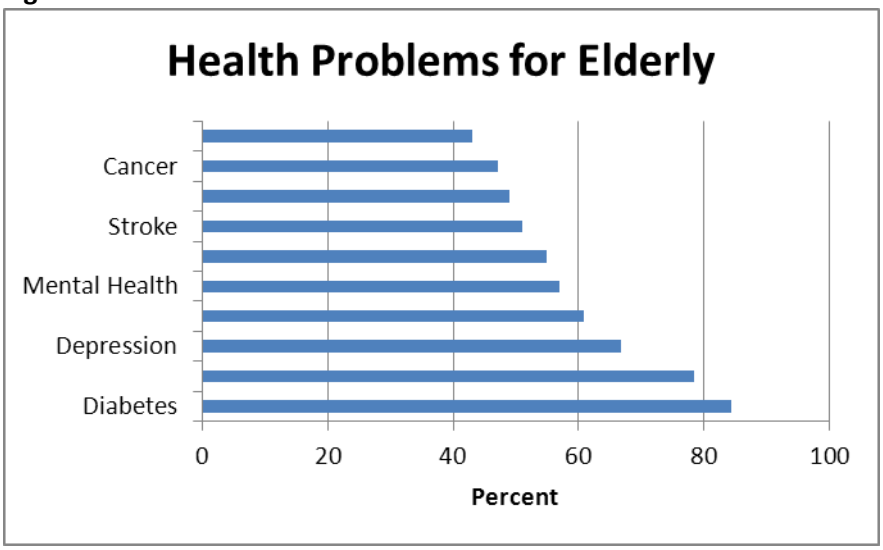


Figure 42 continued.



Top Reasons for Not Receiving Medical Care

In the next question, key informants reported top reasons why individuals in their community were not receiving needed medical care for each of the age categories (Young Adult, Adult and Elderly). The top three reasons young adults and adults were not receiving care included no health insurance coverage, no vision insurance coverage and did not know where to get care. The top reason the elderly were not receiving care was due to lack of transportation.

Figure 43: Top Reasons for Not Receiving Medical Care

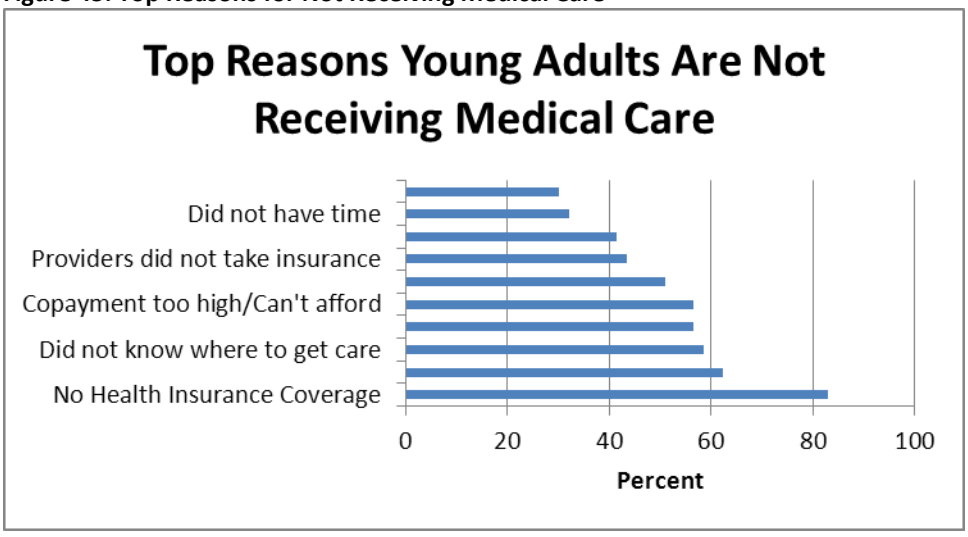
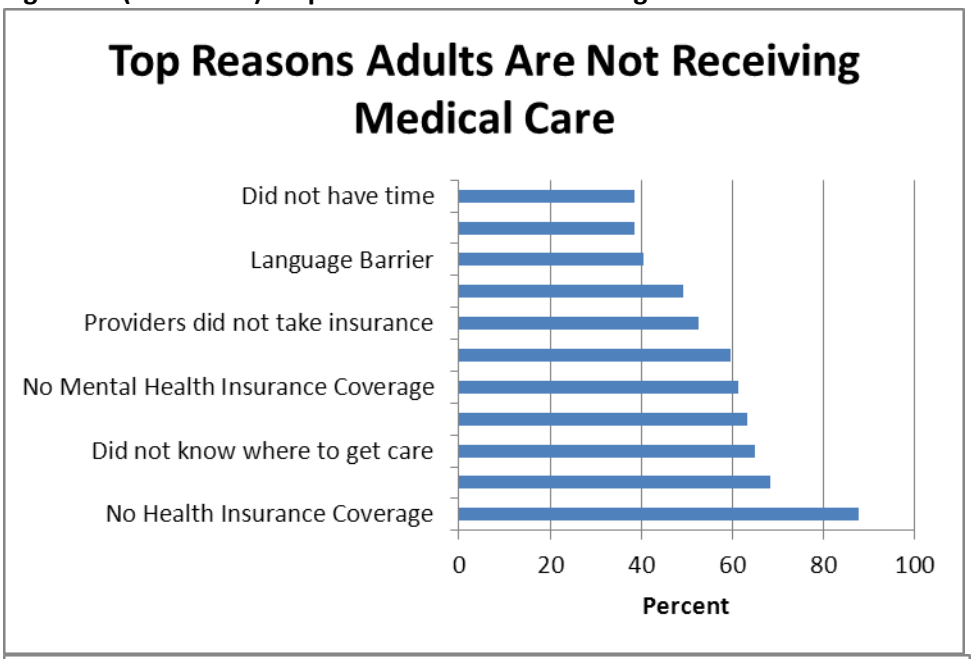
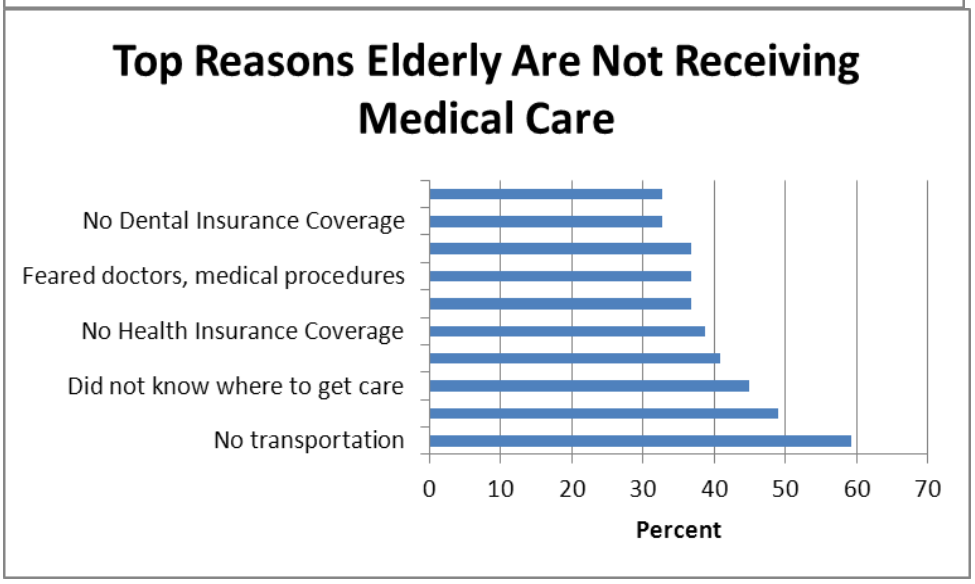


Figure 43 (continued). Top Reasons for Not Receiving Medical Care

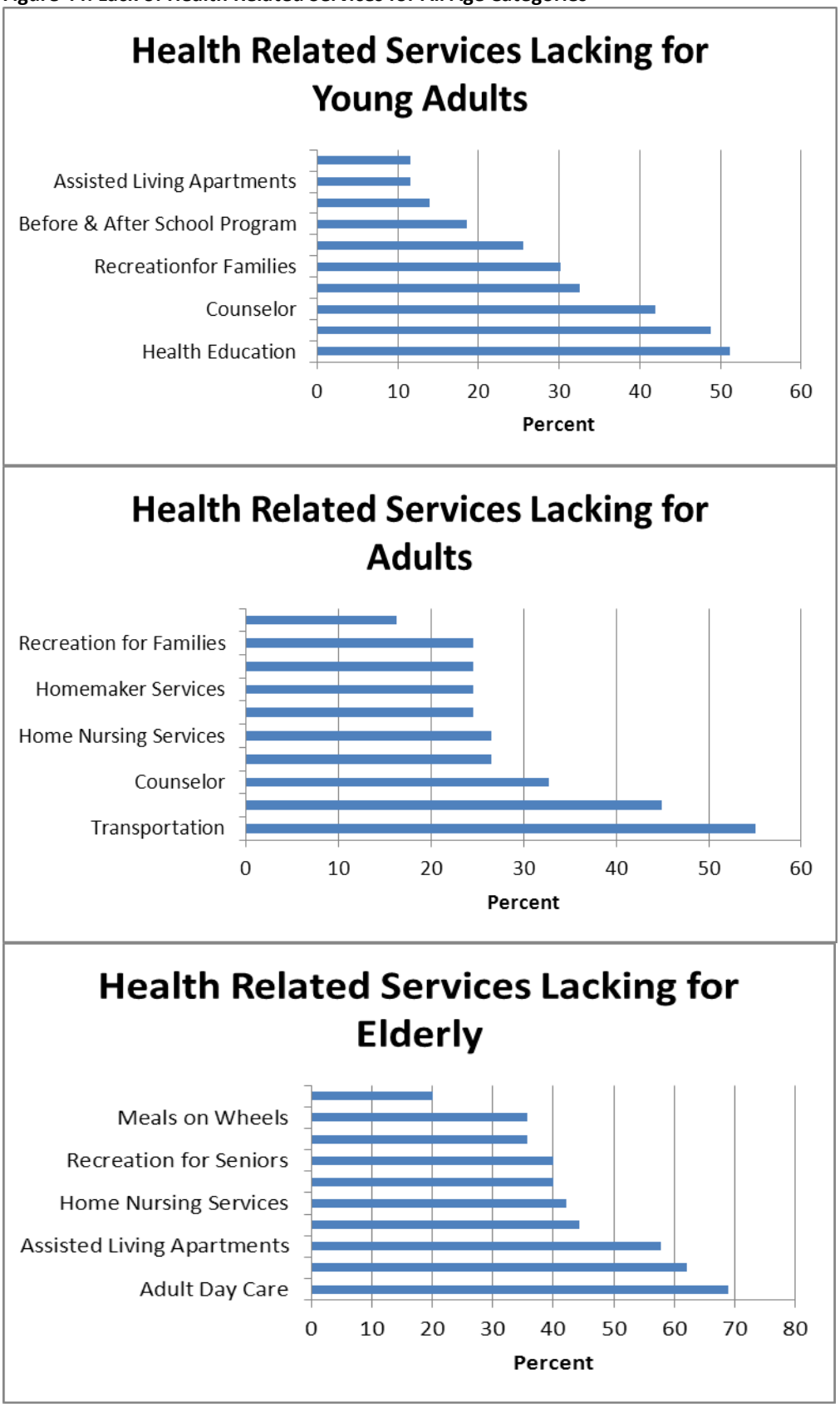




Lack of Health-Related Services

Key informants were also asked to identify the major problems in health-related services in their community for each age category. In the community, young adults and adult services that were lacking included health education, transportation and counseling. The services lacking for the elderly included adult day care, transportation and assisted living apartments.

Figure 44: Lack of Health Related Services for All Age Categories



Social Issues in the City of Long Beach

In addition, the top social issues by age group in the greater Long Beach area were identified by the key informants. The top five social issues for young adults were poor nutrition, jobless/change, lack of health insurance, lack of affordable health care and lack of exercise. The top five social issues for adults were jobless/change, lack of health insurance, lack of affordable health care, poor nutrition and lack of exercise. The top five social issues in the elderly were poor nutrition, lack of exercise, air pollution, lack of affordable health care and homelessness.

Figure 45: Social Issues for All Age Categories

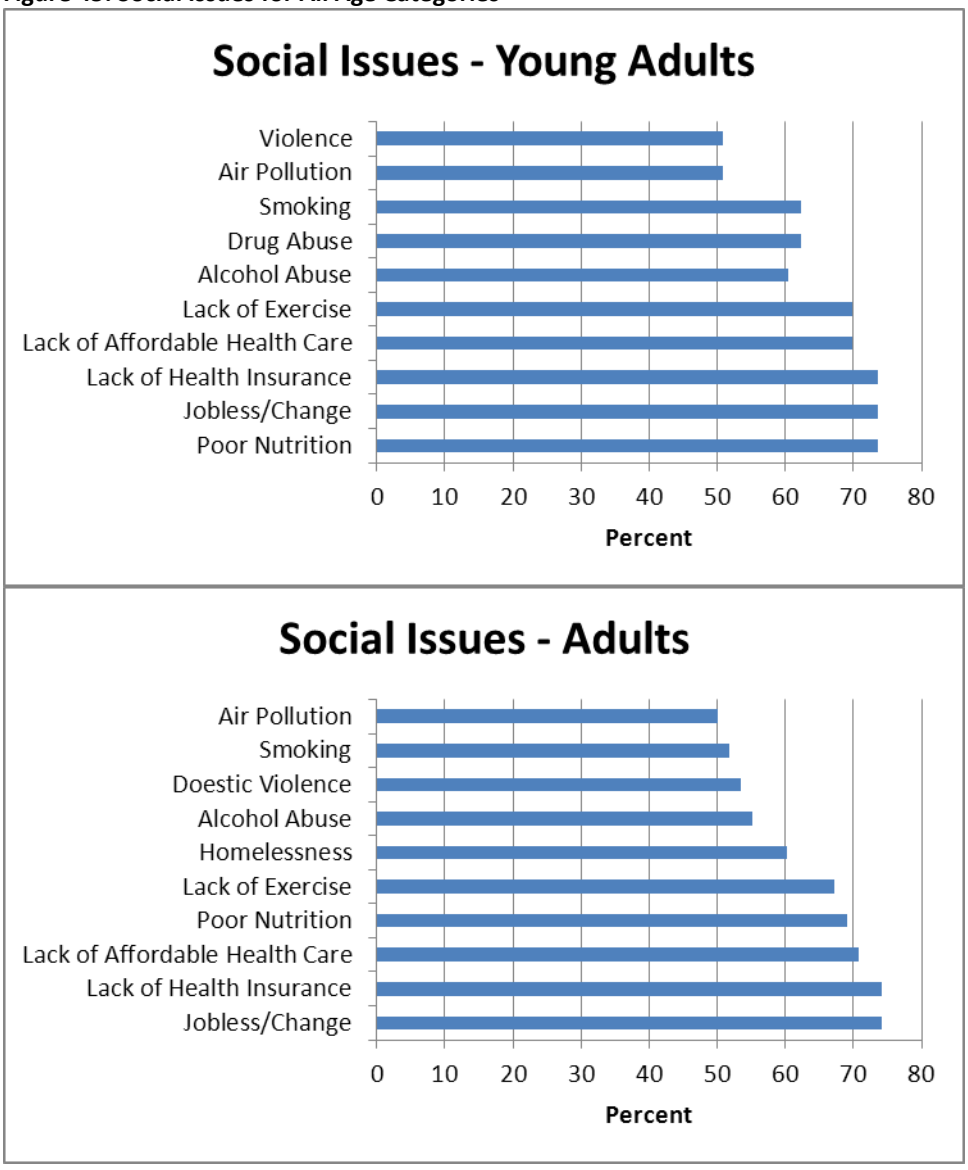
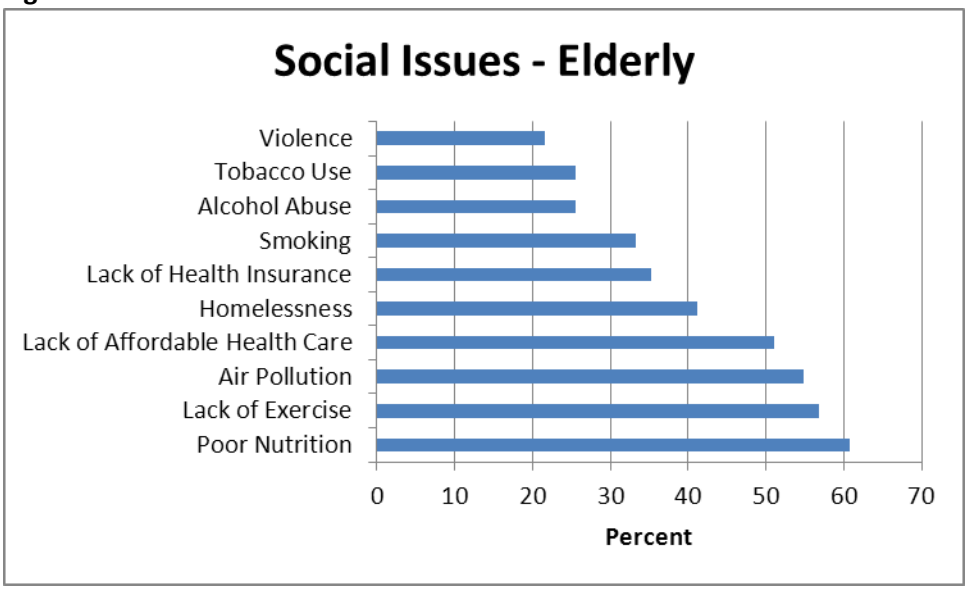


Figure 45: continued.



Lack of Health Care Providers in the City of Long Beach

The top health care provider lacking for young adults, adults and the elderly was a behavioral/mental health provider (about 80%). In addition, it was reported that young adults and adults needed more or easier access to family doctors/primary care, specialty doctors and dentists (more than 40%).

Figure 46: Lack of Health Care Providers for All Age Categories

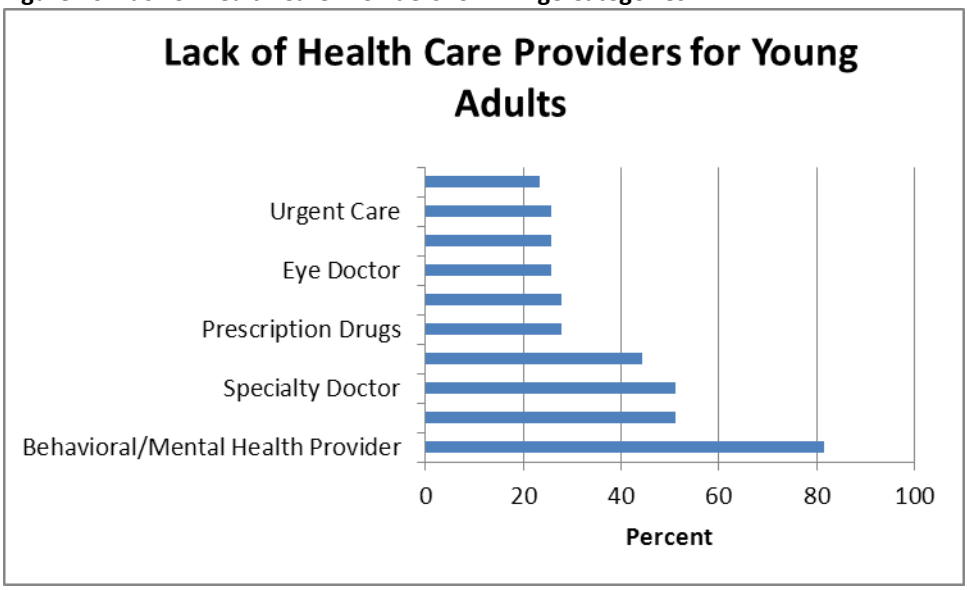
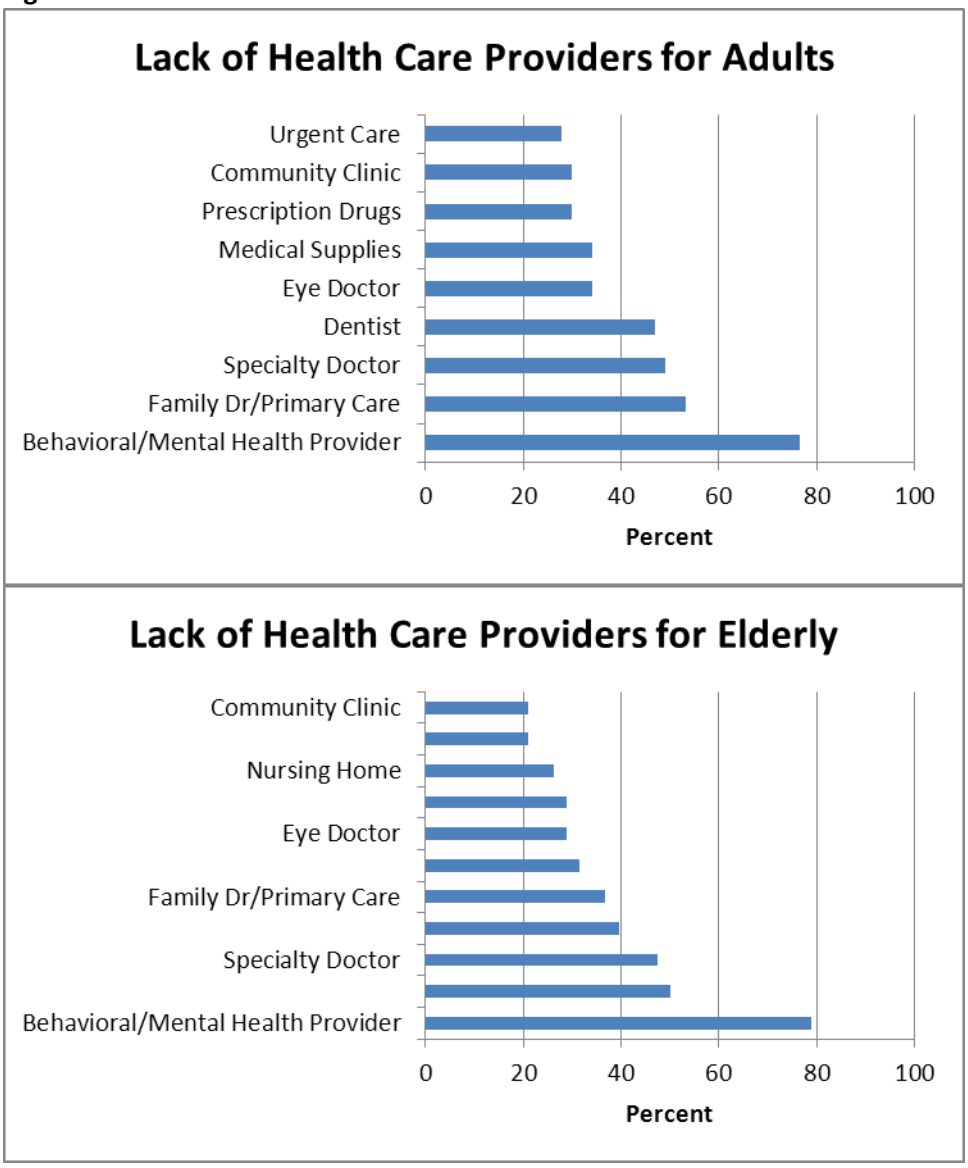


Figure 46 continued.



Places to Receive Prescription Drugs, Health Education and Alternative Health Methods

Key informants were asked to report where the community members fill their prescription drugs and receive medicine; where they received health education and health information, and what type of alternative health care the community may be using. The majority of the individuals received their medicine at a pharmacy (32%) and community clinics (24), followed by hospitals (12%) and health centers (10%). According to key informants, the community members received health education and health information mostly from health fairs (19%), health care provider (18%), word of mouth (18%) and faith based organizations (13%). Finally, the community's top three choices for alternative medicine were herbal medicine (16%), prayer (10%) and massages (8%). These results are consistent with those received from the Long Beach Community Health Needs Assessment Survey.

Figure 47: Where the Community Members Receive Medicine

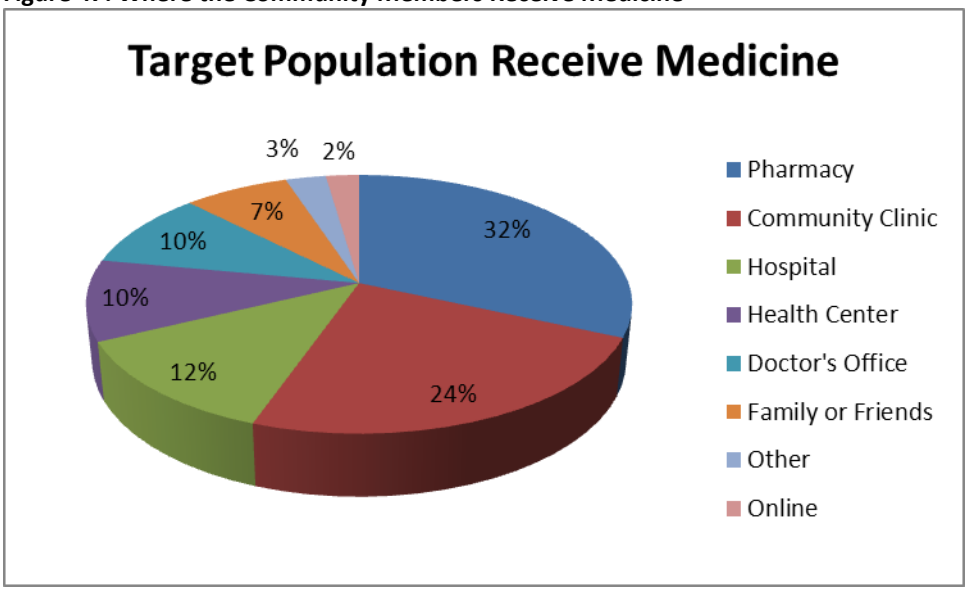


Figure 48: Where the Community Members Receive Health Education

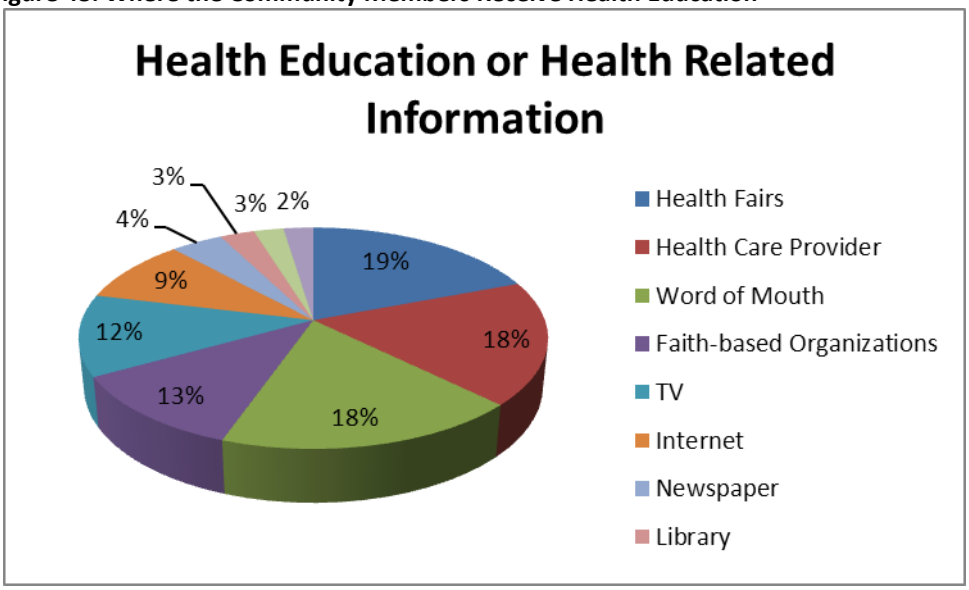
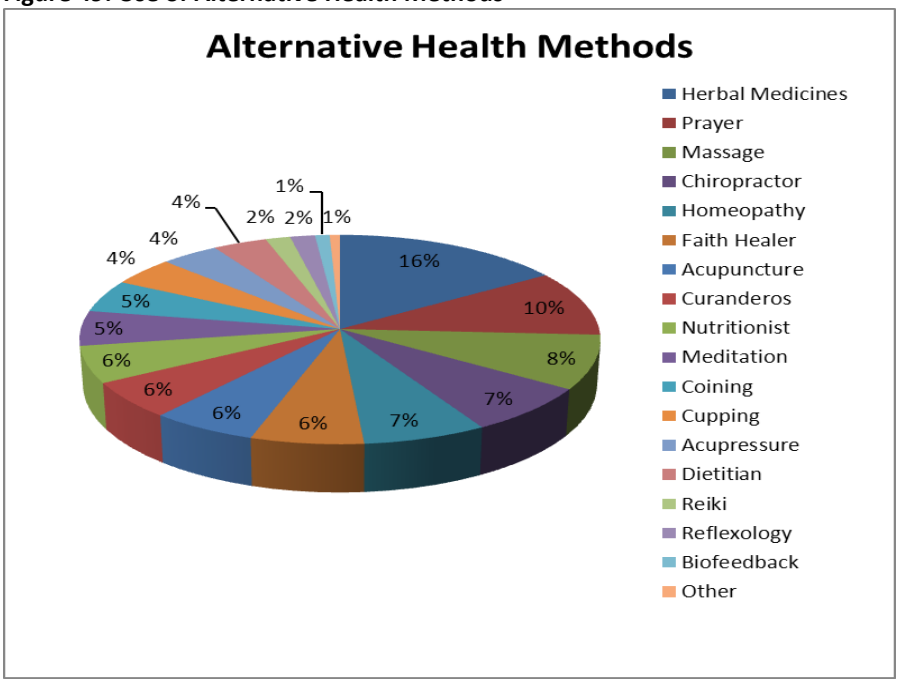


Figure 49: Use of Alternative Health Methods



SPECIFIC FINDINGS FOR LONG BEACH MEMORIAL (LBM)

Results of the Long Beach Community Health Needs Assessment represent all zip codes in the catchment areas of four hospitals-St. Mary Medical Center (SMMC), Long Beach Memorial, Community Hospital Long Beach and Miller Children's Hospital Long Beach. The last three hospitals are part of Memorialcare Health System serving the same geographic market with the same zip codes.

In this section, we analyzed the LBCHNA data set for only Long Beach Memorial. The data sample included 674 valid complete questionnaires for 19 zip codes, which represent the primary service area of Long Beach Memorial. These zip codes and their frequencies are: 90802 (102), 90803 (38), 90804 (59), 90805 (68), 90806 (68), 90807 (47), 90808 (35), 90810 (35), 90813 (134), 90814 (26), and 90815 (62). Overall there is no observable difference between the results of the complete data set and those of the Long Beach Memorial sample. In most cases, results fluctuated only by 1%-2% from their original values. In several questions, especially for young adults, the number of observations was too limited to report meaningful changes that are reliable. Regardless, there are a few changes in the results to mention.

In Long Beach Memorial catchment area, only 35% of the adult respondents had job-based insurance coverage (43% obtained from the full sample), and the proportion of individuals with Medicare and Medicaid coverage increased to approximately 20% and 17%, respectively; about 2 – 4% percent higher than the original results (Figure 23).

Figure 28 revealed information on the participants and their family when they needed medical care but did not receive it. Sixty-two percent of respondents in the Long Beach Memorial catchment area said they did not have insurance and about 27% indicated that copayment was too high preventing them obtaining medical care. These are slightly higher figures than those in the overall results; however, this question received only 114 responses and statistics should be cautiously interpreted. The Long Beach

Memorial respondents also had a stronger complaint about the lack of family doctors (57% versus 52%) but the need for hospital care went down from 37% to 33%. The next difference we were able to find was related to adults eating less fast food per week in the Long Beach Memorial market. The proportion of adults eating fast food 2-3 times per week declined from 29% from 24%, which suggests that Long Beach Memorial and other public health organizations in the area have effective practices to lower the fast food statistics or there is more access to a choice of food services.

Table 9 shows the results of institution- based data analysis of health issues for Long Beach Memorial (LBM) along with those from the full data set. Remarkably, proportions computed for LBM are very close with those computed for the full data set, which represents the catchment area of all hospitals. Obesity, high blood pressure, diabetes, anxiety and asthma were the only health problems with noteworthy difference in statistics; about 2-4%. The largest difference is in the proportion of obesity, about 4% lower, which suggests that the efforts of local hospitals have made a difference.

Table 9: Comparison of Adult Health Issues for LBM and LBCHNA

ADULT HEALTH ISSUES	Long Beach Memorial	Overall Survey Results
ADHD	2.6%	3.2%
Asthma	20.1%	17.6%
Anxiety	25.0%	22.1%
Arthritis	23.4%	21.5%
Autism	.6%	.8%
Blood Disorders	5.2%	4.1%
Bone Loss (Osteoporosis)	4.2%	3.4%
Cancer	7.5%	6.5%
COPD	3.6%	3.0%
Dementias including Alzheimer's	.3%	.2%
Dental disease/decay	15.3%	13.6%
Depression	21.8%	21.5%
Diabetes	23.4%	25.6%
Eating Disorders	5.2%	3.9%
High Blood Pressure	43.2%	46.2%
Hearing Disorders	6.8%	6.1%
Heart Disease	7.8%	7.5%
HIV/AIDS	10.4%	8.9%
Kidney Diseases	3.6%	4.7%
Mental Health	9.7%	8.1%
Obesity	18.5%	22.3%
Physical Injuries	10.4%	11.4%
STDs	2.9%	2.4%
Stroke	3.2%	3.2%

Table 10 reveals the comparison data of health issues for Long Beach Memorial along with those from the full data set for elderly population. The largest discrepancy is in obesity percentage. It appears that the respondents in the LBM catchment area experienced significantly less obesity cases than those respondents in the catchment area of all hospitals (9% vs. 13%). About 4% decrease in the LBM catchment area is a good sign for the hospital and its efforts to fight against obesity amongst elderly. A few other categories showed changes within 2-3% range, and they are anxiety, arthritis, heart disease and diabetes. Once again the number of respondents is too small for most categories to make meaningful comparisons.

Table 10: Comparison of Elderly Health Issues for LBM and LBCHNA

ELDERLY HEALTH ISSUES	Long Beach Memorial	Overall Survey Results
ADHD	.6%	.4%
Asthma	6.9%	7.8%
Anxiety	8.8%	6.9%
Arthritis	39.6%	35.5%
Blood Disorders	3.8%	3.3%
Bone Loss (Osteoporosis)	15.1%	15.1%
Cancer	18.2%	17.1%
COPD	3.1%	4.1%
Dementias including Alzheimer's	7.5%	7.3%
Dental disease/decay	9.4%	8.2%
Depression	15.1%	14.3%
Diabetes	25.8%	29.4%
Eating Disorders	1.3%	1.2%
High Blood Pressure	52.2%	52.2%
Hearing Disorders	11.9%	12.2%
Heart Disease	12.6%	14.7%
HIV/AIDS	1.3%	.8%
Kidney Disease	1.9%	2.4%
Mental Health	3.8%	3.3%
Obesity	8.8%	12.7%
Physical Injuries	6.3%	4.9%
Stroke	4.4%	4.1%

Next, the data specific to LBM are analyzed for the social issues of young adults, adults and elderly, and results are reported in Table 11 along with those from the full data set. Unfortunately, there were not a sufficient number of respondents for young adults and elderly. Therefore we only report results for adults. Once again, the statistics computed for only LBM for this question are very similar to those obtained from the complete data set. Minor differences were in the areas of air pollution (16% vs. 19%), alcohol abuse (13% vs. 16%), jobless/change (30% vs. 35%), lack of affordable health care (23% vs. 27%), lack of health insurance (26% vs. 30%) and lack of exercise (40% vs. 34%). These minor differences were within 3%-5% of the overall results.

Table 11: Comparison of Social Issues of Adults for LBM and LBCHNA

ADULT SOCIAL ISSUES	Long Beach Memorial	Overall Survey Results
Accidents	15.2%	14.8%
Air Pollution	19.2%	15.9%
Alcohol Abuse	15.6%	12.6%
Bullying	.9%	.5%
Child Abuse	1.3%	1.1%
Domestic Violence	4.0%	3.2%
Drug Abuse	8.5%	7.3%
Gang Activities	.9%	1.6%
Gender Discrimination	3.6%	2.4%
Homelessness	8.5%	8.9%
Incarceration	3.6%	3.0%
Jobless/change	35.3%	30.1%
Lack of Affordable Health Care	27.2%	23.4%
Lack of Health Insurance	29.9%	26.3%
Lack of Exercise	33.5%	39.8%
Poor Nutrition	16.1%	16.7%
Smoking	27.7%	25.8%
Sexual Assault (rape)	2.2%	1.6%
Teenage Pregnancy	.9%	.5%
Tobacco Use	16.5%	15.1%
Unplanned Pregnancy	2.7%	1.6%
Violence	3.1%	2.7%

Last, the top 25 Diagnosis Related Groups (DRGs) for Long Beach Memorial are reported in Table 12 and linked the top 25 DRGs to the study findings. As can be seen in this table, LBM discharged a large number of patients in heart related DRGs such as 313, 247, 292, and 291. Also, LBM provided comprehensive care with high acuity rates to a large number of patients in the areas of blood borne diseases, cancer, trauma cases and rehabilitation services. Some of these services may be related to diabetes, obesity and heart conditions, and environmental causes such as air pollution, accidents, violence and lack of exercise. In light of these findings, LBM could emphasize outreach activities and health education efforts in the areas of diabetes, obesity, and lack of exercise to reduce heart-related cases.

Table 12: Long Beach Memorial Top 25 DRGs in 2011

RANKINGS	DRG CODE	DESCRIPTION	CASES	LOS
1	313	CHEST PAIN	859	1.7
2	470	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W/O MC	564	3.1
3	392	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS W/O MCC	544	2.8
4	690	KIDNEY & URINARY TRACT INFECTIONS W/O MCC	445	3.4
5	743	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC/MCC	392	1.9
6	945	REHABILITATION W CC/MCC	370	15.7
7	812	RED BLOOD CELL DISORDERS W/O MCC	367	4.6
8	312	SYNCOPE & COLLAPSE	321	2.3
9	603	CELLULITIS W/O MCC	315	4.1
10	247	PERC CARDIOVASC PROC W DRUG-ELUTING STENT W/O MCC	253	2.2
11	871	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS W MCC	229	7.0
12	292	HEART FAILURE & SHOCK W CC	223	4.2
13	641	NUTRITIONAL & MISC METABOLIC DISORDERS W/O MCC	223	3.4
14	287	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O MCC	222	2.9
15	194	SIMPLE PNEUMONIA & PLEURISY W CC	216	4.7
16	419	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC/MCC	207	3.0
17	310	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC/MCC	205	2.0
18	065	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W CC	204	6.0
19	343	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC/MCC	202	1.8
20	627	THYROID, PARATHYROID & THYROGLOSSAL PROCEDURES W/O CC/MCC	189	1.1
21	069	TRANSIENT ISCHEMIA	184	2.3
22	378	G.I. HEMORRHAGE W CC	178	3.8
23	491	BACK & NECK PROC EXC SPINAL FUSION W/O CC/MCC	175	2.3
24	066	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W/O CC/MCC	173	3.6
25	291	HEART FAILURE & SHOCK W MCC	173	6.1

Reviewing 2011 hospital discharge data from the Office of Statewide Health Planning and Development (OSHPD) and the top diagnosis codes for acute care admissions for adults at Long Beach Memorial are listed in Table 13

Table 13: Long Beach Memorial Discharge Data 2011

OSHPD 2011 - LBMMC	LBM	
Principal Diagnosis Groups	# cases	% of admissions
All pregnancies	198	0.90%
Birth Defects	33	0.20%
Blood/Blood-forming Organs	536	2.50%
Circulatory	3985	18.60%
Digestive	2523	11.80%
Endocrine/Metabolism	1101	5.20%
Genitourinary	1361	6.40%
Infections	758	3.50%
Injuries/drugs/complications	2194	10.30%
Musculoskeletal	1646	7.70%
Neoplasms	1616	7.60%
Nervous & Sensory Systems	514	2.40%
other	2674	12.51%
Psychoses & Neurosis	180	0.80%
Respiratory	1584	7.40%
Skin Disorders	471	2.20%
Perinatal Disorders		
Births		
Total	21374	

At Long Beach Memorial the top three principal diagnoses (highlighted in green) were related to circulatory, digestive and injuries/drugs/complications. Additionally, the top three principal causes of injuries resulting in hospitalization were accidental falls and adverse effects of drugs, rail and motor vehicle accidents.

CONCLUSION

This report presents two sets of results that are consistent throughout the study. The Long Beach Community Health Needs Assessment results highlight the major health priorities, health system challenges, perceived gaps in the health services availability, and barriers to health services. Most of the results were reported separately for young adults, adults and elderly. The Key Informant survey, which is the second part of the study, was used to support the findings from the LBCHNA. In addition, the Key Informant survey sought emerging issues that were not clearly visible and/or identifiable to hospitals and community partners. Both of these data sets were supported by publicly available secondary data.

The report provided an extensive list of findings from 1,066 community health needs assessment surveys and another 122 key informant surveys received. The methodology used in this study was descriptive and did not rely on inferential statistics to make results generalizable for the entire population of the greater Long Beach area. It focused on hard-to-reach populations to understand the needs of these populations who live in certain pockets of the City. Since all health problems, issues, gaps

and health system irregularities are important to us but resources are limited, we prioritized the health needs of the community in this section.

Long Beach Memorial is a leading health care provider in the area, providing comprehensive care to a very large population, and specializing in heart conditions, cancer treatments, circulatory problems, orthopedic surgeries and rehabilitation services. When we analyzed the LBCHNA data set for only Long Beach Memorial to identify specific health problems and health related needs of the LBM catchment area, descriptive statistics (%) did not differ meaningfully from overall study results. The only observed difference was obesity, which was reported about 4% less by the respondents living in the primary catchment areas of LBM.

Specific Findings and Recommendations

Health Priorities

The Community Health Needs Assessment and the Key Informant survey revealed consistent results for hospitals and the community organizations to focus on. Table 14 consolidated the results of both surveys and focused on only the top few health issues/problems mentioned in both surveys by age groups. Asterisks were used for the results of LBCHNA and plus signs were used for those obtained from Key Informant survey. Much stronger results were represented by three or two asterisks or three or two plus signs.

The top health problem for young adults was asthma (PRIORITY #1). Obesity (PRIORITY #2) surfaced as a major problem for young adults and adults in the community health needs assessment, and was supported by key informants for all age categories. The LBCHNA results for obesity were somewhat weaker than the Key Informant survey results, but it is consistently reported by all parties that obesity is a major issue in the community. Another major health problem is mental health (PRIORITY #3) for young adults, adults and the elderly population. The LBCHNA results strongly supported the value of programs addressing anxiety and depression problems for young adults and adults. The Key Informant survey results supported similar findings and added mental health as a major problem for young adults and adults. Diabetes (PRIORITY #4) was also found to be a major issue with a high percentage in the Key Informant survey for young adults and adults. For the elderly, depression and mental health problems along with diabetes appear to be important health priorities. Two other important health issues found in LBCHNA and Key Informant surveys for elderly were: high blood pressure and arthritis (PRIORITY #5). More information is available in Table 14.

Table 14: Consolidated Results of Health Needs Assessment and Key Informant Survey –Health Priorities

Potential Priorities	Young Adults		Adults		Elderly	
Asthma	**	++	*			
Dental Disease	*	++	*			
Obesity	*	+++	**	++	*	
High Blood pressure	*	++	***	+++	***	+++
Anxiety	**	++	**			
Depression	**	+++	**	+++	*	+++
ADHD	*					
Arthritis			**		***	++
Diabetes		+++	**	+++	**	+++
Physical Injury	*					
Bone Loss					*	
Cancer					*	
Hearing Loss					*	
Heart Disease					*	++
Mental Health		+++		++		
STD		++				

*** = Community Health Needs Assessment**
+ = Key Informant Survey

Barriers to Care (ACCESS)

The Long Beach Community Health Needs Assessment survey results showed that 13.6% of the respondents needed care but did not get care. This ratio increased to 17% when only vulnerable zip codes were included in the analysis. The majority of participants (60%) reported that they did not receive health care needed due to lack of insurance and another 23% stated co-payment being too high. A similar question was answered by key informants of the local community for young adults, adults and elderly. The top three reasons for young adults and adults were no health insurance coverage, no vision insurance coverage and did not know where to get care. The top reason for elderly not receiving care was due to lack of transportation.

Therefore, PRIORITY # 1 and PRIORITY #2 in this area should focus on the lack of insurance, and dental and vision coverage in order to provide regular access to medical care. Health education and community outreach activities should be PRIORITY #3 to educate the community members to access the health care system (at least the safety net providers). PRIORITY #4 should go to providing transportation services to elderly and adults; at least to subsidize this valuable service. It is a necessary condition for people to reach the health care provider to access the health care system.

Participants and key informants also identified the type of health care services that community members needed, but were not received. For adults, fifty-two percent of the survey respondents checked family doctor and another 37% marked hospital care as a needed service provider. Specialty doctor and prescription drugs followed the top two responses by 24% and 20%, respectively. Key informants had an overwhelming consensus on the health care needs of young adults, adults and the elderly.

According to both survey results behavioral/mental health providers were desperately needed in the community (80%). In addition, young adults and adults need more and/or easier access to family doctors/primary care, specialty doctors and dentists (over 40% response). In conclusion, PRIORITY #1 and PRIORITY #2 in this section go to behavioral health/mental health and family doctors/primary care. PRIORITY #3 should be assigned to specialty care; however, an additional analysis of this particular data did not suggest any specific type of specialty care needed. Dental care and prescription drugs should be PRIORITY #4 and #5. Dental care has been moderately checked by key informants for all adult age categories.

Social Issues (SERVICE GAPS)

Both the Community Health Needs Assessment and Key Informant surveys examined the social issues of the city's residents and identified areas for improvement. Results are consistent in both surveys for many of the social issues. Table 15 highlights the top social issues identified by both survey respondents and makes suggestions for prioritizing these social issues for local hospitals, public health officials and community leaders.

The most important social issue appeared to be lack of exercise in the community, which was supported by the survey respondents across the board. Clearly, PRIORITY #1 involves the lack of community exercise programs. The second major social issue (perhaps as important as lack of exercise) is the poor nutrition and/or lack of food support program in the community. This appears to be a major problem for all age categories. PRIORITY #2 is to improve nutrition across all age groups and increase food support programs. PRIORITY #3 is lack of health insurance and affordable health care combined. These were not new issues to community activists, hospitals, and public health officials. Earlier in the study, lack of insurance was also identified as one of the priority areas as well. PRIORITY #4 is air pollution and PRIORITY #5 is drug and alcohol programs, which have a moderate show in the surveys. Another area is joblessness in the community, which may be a attributed to the weak economy.

Table 15: Consolidated Results of Health Needs Assessment and Key Informant Survey - Social Issues

Potential Priorities	Young Adults		Adults		Elderly	
Lack of Exercise	***	++	***	++	***	+++
Bullying						
Air pollution	**		*		*	+++
Lack of Affordable C.	**	++	**	+++	*	+++
Lack of Insurance	**	+++	**	+++		+
Poor Nutrition	*	+++	*	++	*	+++
Accidents	*		*		*	
Child Abuse						
Teenage Preg.						
Gang Activities						
Alcohol Abuse	*	++	*	+	*	
Drug Abuse	*	++				
Jobless/change	**	+++	***	+++		
Smoking/Tobacco	*	++	**		*	+
Homelessness				+		

*** = Community Health Needs Assessment** **+ = Key Informant Survey**

Last but not least, the study explored the needs for health related services in the community. Both surveys explored the issue and results were somewhat consistent in both surveys. According to the LBCHNA survey, the most needed services were transportation and CalFresh (food stamps) program, followed by counseling services, assisted living and after school programs.

Key informants also identified the top needs of the community for various age groups. The top services lacking for young adults and adults were health education, transportation and counseling. Services that were lacking for the elderly included adult day care, transportation and assisted living apartments. Based upon the various needs reported, the priorities should be: 1) transportation, 2) CalFresh (food stamps), 3) before and after school programs, 4) counseling and 5) assisted living.

Community Assets and Resources

The Long Beach Community Health Needs Assessment references hospitals and clinics located near the hospital as well as, the links to sources for additional health care facilities and community resources.

Local area hospitals include:
Long Beach Memorial
Community Hospital Long Beach
Miller Children's Hospital Long Beach
Pacific Hospital
Los Alamitos Hospital
St. Mary Medical Center
Torrance Memorial
Veterans Administration Hospital

Local Area Community Clinics include:
Alta Med Health Services Corp.
Harbor Community Clinic
The Children's Clinic (multiple locations in greater Long Beach)
Westside Neighborhood Clinic
Wilmington Family Health Center
Additional sites can be found at www.healthcity.org/services

The City of Long Beach is fortunate to have its own health jurisdiction, one of only three city-based health departments in the state of California. The City of Long Beach Department of Health and Human Services asset inventory of community agencies, addressing community health priorities will be used to provide a comprehensive and up-to-date list. This provides an excellent connection to community resources related to health and healthcare within the greater Long Beach community http://www.longbeach.gov/health.

Long Beach Memorial Identification and Prioritization of Health Needs

Utilizing information from the primary and secondary data collection, community health needs were identified and prioritized through an iterative process conducted with the community benefit oversight committee (CBOC) on February 7, 2013 and presented to the strategy committee and the hospital board representing LBM, MCHLB and CHLB hospitals for final approval, which was received on March 26, 2013.

The health needs were identified from issues supported by the primary and secondary data sources gathered for the Long Beach Community Health Needs Assessment. The needs were indicated by community survey responses, key informants and secondary data sources. The needs were given a value based on the size and seriousness of the problem (as indicated by survey respondents, key informants and prevalence and incidence within the community) and are displayed in the tables below.

Table 16: Adult Health Needs – primary data combined score (community survey and key informant)

Identified Need	Young Adults (19-25)	Adult (26-64)	Elderly (age 65+)
Asthma	4	1	0
Dental Disease	3	1	0
Obesity	4	4	1
High Blood pressure	3	6	6
Mental Health (incl. anxiety, depression, ADHD)	13	9	4
Arthritis	0	2	5
Diabetes	3	5	5
Physical Injury	1	0	0
Bone Loss	0	0	1
Cancer	0	0	1
Hearing Loss	0	0	1
Heart Disease	0	0	3
STD	2	0	0

Those needs with a score of 4 or higher were identified as a priority.

Adult priorities
Obesity
Diabetes
High Blood Pressure
Asthma
Mental Health

These health needs are supported by secondary data analysis and the community forum (conducted in August, 2012), which identified the same priorities. These health priorities fall into two broader categories of chronic disease and mental health.

Based on the community health needs assessment the hospital board approved the following priorities:

Adult Priorities
Chronic Disease
Mental Health
Obesity/Overweight
Access to Care
Preventative Care/Prevention

The CBOC developed an implementation strategy to address these needs at their 2/7/2013 meeting. The implementation strategy will be attached to the IRS form 990 schedule H per the PPACA requirements.

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Service area zip code: - 90815

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Service area zip code: - 90813

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Agency: - Office of Assemblymember Bonnie Lowenthal
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Service area zip code: - 90806, 90057

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Service area zip code: - 90808

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Name: - Danielle Sees
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Service area zip code: - all zip codes in Long Beach

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Agency: - St Matthews
Service area zip code: - 90813 90802

Name: - Pam Shaw
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Service area zip code: - 90815

Name: - Tiffany Sickler
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Name: - Joan Swain
Title: - RN
Service area zip code: - 90806

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Service area zip code: - 90813

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Service area zip code: - 90810

Name: - Mauro Torno
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Agency: - LB DHHS
Service area zip code: - 90815

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Title: - Membership Chair
Agency: - Long Beach NAACP
Service area zip code: - 90810-3531

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Title: - Director
Agency: - YMCA
Service area zip code: - 90808

Name: - Francisco Vargas
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Name: - Rosie Velazquez-Gutierrez LCSW
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Appendix B: Acknowledgements

Study sponsors, MemorialCare Health System's Community Hospital Long Beach, Miller Children's Hospital Long Beach and Long Beach Memorial, and Dignity Health – St. Mary Medical Center.

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