USC Verdugo Hills Hospital
2016 COMMUNITY HEALTH NEEDS ASSESSMENT

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I. Authors and Acknowledgements

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II. Executive Summary

Nonprofit hospitals have been required to conduct a community health needs assessment or CHNA every three years in order to maintain tax exempt status under California State Senate Bill 697 (SB 697) originally enacted in 1994. The requirement was expanded to the federal level thereafter and further solidified in 2010 under the Patient Protection and Affordable Care Act (ACA). As part of the CHNA, each hospital is required to collect and conduct analysis of extensive data from secondary data sources as well as input (primary data) from individuals in the community: public health experts; representatives of government and civic organizations; members, representatives or leaders of low-income, minority, and medically underserved populations and populations with chronic conditions.

As in previous years, three Glendale hospitals - Glendale Adventist Medical Center, Glendale Memorial Hospital and Health Center, and USC Verdugo Hills Hospital - partnered to conduct the 2016 CHNA in collaboration with the Center for Nonprofit Management consulting team. During the initial phase of the CHNA process, community input was collected through focus groups with key stakeholders including health care professionals, government officials, social service providers, community residents, leaders, and other relevant individuals. Appendix B presents the data collection tools, and Appendix C lists the stakeholders involved. Concurrently, secondary data were collected and compared to relevant benchmarks including Healthy People 2020, Los Angeles County or California when possible. The data were also collected by ZIP code, when possible, to allow for more in-depth analysis and identification of health issues. In addition, previous CHNA reports were reviewed to identify trends and ensure that previously identified needs were not overlooked. Primary and secondary data were compiled into a scorecard (Appendix A) presenting health needs with highlighted comparisons to the available data benchmarks. The scorecard was designed to allow for a comprehensive analysis across all data sources (Appendix D) and for use during the second, prioritization phase of the CHNA process.

Originally introduced in 2013, the 2016 CHNA process included a prioritization process involving a facilitated group session that engaged key community stakeholders in a discussion of secondary and primary data (compiled and presented in the scorecards and accompanying health need narratives). At the session, participants were provided with a brief overview of the CHNA process and a list of identified needs in the scorecard format. In smaller groups, participants considered the scorecards and health needs summaries in discussing the data and identifying key issues or considerations that were then shared with the larger group.

As a follow-up to this discussion, participants and other members of the hospital collaborative's network—including the Glendale Healthier Community Coalition—completed a questionnaire (hard copy and online) about health needs and resources, and ranked each health need according to several criteria including severity, change over time, resources available to address the need, and community readiness to support action on behalf of any health need. The survey results were used to prioritize the health needs identified in the first session.

Through the extensive research process described above, eighteen priority health needs, including nine health outcomes and nine health drivers (social determinants of health) were identified (see Table 1 below). This list of health needs will inform the hospital's community benefit program focus and strategies for the period covering 2017 to 2019. The following full Community Health Needs Assessment provides extensive data and supportive information regarding the assessment process as well as relevant data and analysis of the identified health needs.

Prioritized Health Needs, Separated by Outcomes and Drivers

Rank	Health Outcomes
1	Mental Health
2	Obesity/Overweight
3	Substance Abuse
4	Diabetes
5	Cardiovascular Disease
6	Cancer
7	Stroke
8	Communicable/Infectious Diseases
9	Sexual Health / Sexually Transmitted Diseases

Rank	Health Drivers
1	Homelessness and Housing
2	Substance Abuse
3	Poverty
4	Access to Health Care
5	Dental Care
6	Violence/Injury/Safety
7	Preventive Wellness
8	Geriatric Support
9	Transportation

III. Introduction and Background

Purpose of the Community Health Needs Assessment Report

In 1994, the California Legislature enacted Senate Bill 697 (SB 697) which required nonprofit hospitals to complete CHNAs every three years. As part of SB 697, hospitals are also required to annually submit a summary of their Community Benefit contributions, particularly those activities undertaken to address the community needs that arose during the CHNA.

The Patient Protection and Affordable Care Act (ACA), enacted on March 23, 2010, included new stipulations for hospital organizations to maintain their 501(c)(3) status. With regard to the CHNA, the ACA specifically requires nonprofit hospitals to collect and take into account input from public health experts as well as community leaders and representatives of high-need populations (including minority groups, low-income individuals, medically underserved populations, and those with chronic conditions); identify and prioritize community health needs; document a separate CHNA for each individual hospital; and make the CHNA report widely available to the public. In addition, each nonprofit hospital must adopt an implementation strategy to address the identified community health needs and submit a copy of the implementation strategy along with the organization's annual Form 990.[1]

Glendale Hospital Collaborative

The Glendale Hospital Collaborative is comprised of three hospitals serving the Glendale community—Glendale Adventist Medical Center, Glendale Memorial Hospital and Health Center, and USC Verdugo Hills Hospital. These hospitals joined together to conduct one data gathering process and one stakeholder engagement effort in order to better utilize resources and reduce the burden of calling upon community members for input.

USC Verdugo Hills Hospital

USC Verdugo Hills Hospital (USC VHH) was established in 1947 as Behrens Memorial Hospital. A new hospital facility was built in 1972 and renamed Verdugo Hills Hospital on land donated by the Greene family. In 2013, the hospital affiliated with the University of Southern California, one of the world's leading academic medical centers, and was renamed USC Verdugo Hills Hospital.

The association with USC and Keck Medicine has allowed the 158-bed hospital to expand and enhance its services to the Foothill communities with a focus on high quality primary care, state of the art diagnostic excellence and health enhancement with a focus on health and wellness.

Continuing to believe that the human touch is the most important part of the healing process, USC Verdugo Hills Hospital offers an exceptional staff of physicians and hospital professionals who provide excellence in clinical care.

Milestones include:

- 1985—Outpatient diagnostic and surgery services introduced
- 1988—Critical care units remodeled
- 1991—18-bed transitional care unit opened

[1] For more information please see: https://www.gpo.gov/fdsys/pkg/FR-2014-12-31/pdf/2014-30525.pdf

- 1999—Wound care program initiated
- 2003—Emergency department expansion
- 2004—A Balanced Life program introduced
- 2005—Gastroenterology department updated
- 2005—ACCESS digital imaging and records system introduced
- 2008—Digital mammography introduced
- 2010—Telemedicine introduced
- 2011—Wireless EKG monitoring added in Cardiac Rehabilitation
- 2012—Primary Stroke Center designation
- 2013—Affiliation with University of Southern California

Glendale Adventist Medical Center

The Glendale Sanitarium opened in 1905, a year before Glendale was founded as a city. By the 1920s, it expanded its medical, surgical and maternity services, offered the most advanced medical equipment of the day. Given its growth, a 30-acre hillside was selected for a new hospital location. Overlooking Wilson Avenue, the new and expanded facility opened in the mid-1920s. The current hospital remains on this location today.

In the 1970s, the hospital's name changed to Glendale Adventist Medical Center (GAMC) and in the early 2000s, GAMC began a $220-million renovation and building project, which included the West Tower, the Emergency Department and the Lee Hughes Medical Building.

Glendale Memorial Hospital and Health Center

In 1926, Glendale Memorial Hospital and Health Center opened as Physicians and Surgeons Hospital, thanks to six Glendale community members who had a vision to expand healthcare services to the residents of south Glendale. In the following decade, the hospital became incorporated as a non-profit institution and expanding services in 1942. During and after World War II, the hospital served a rapidly growing community, including Glendale, the Crescenta-Cañada Valley, Burbank, and the eastern end of the San Fernando Valley corridor.

In the 1950s, the Physicians and Surgeons Hospital changed its name to Memorial Hospital of Glendale, expanding in size and adding an intensive care unit. Today the hospital is an impressive 334-bed facility that employs over 1,300 individuals and a medical staff comprised of over 500 physicians. The hospital offers primary service lines in heart, spine and women’s health.

Glendale Memorial Hospital and Health Center is now part of Dignity Health, a health system that spans communities in 21 states. Founded in 1986 and headquartered in San Francisco, Dignity Health is the fifth largest health system in the nation and the largest hospital provider in California.

CHNA Consultants

The Center for Nonprofit Management (CNM) team has extensive experience conducting more than 30 Community Health Needs Assessments (CHNAs) for hospitals throughout Los Angeles County and San Diego County since 2004. In 2013, CNM conducted CHNAs for three Kaiser Foundation hospitals (Baldwin Park, Los Angeles and West Los Angeles), Citrus Valley Health Partners, the Glendale Hospitals Collaborative (Glendale Adventist Medical Center, Glendale Memorial Hospital and Verdugo Hills Hospital) and the Metro Hospitals Collaborative (California Hospital Medical Center, Good Samaritan Hospital and St. Vincent Medical Center) and assisted an additional two Kaiser Foundation Hospitals (Panorama City and San Diego) in community benefit planning based on the needs assessments (2014). In 2014, the CNM team conducted the CHNA for Casa Colina Hospital and Centers for Healthcare, and for Hope Street Family Center (2015). The CNM team recently completed 2016 CHNAs for Children's Hospital Los Angeles, as well as two Kaiser Foundation Hospitals (West Los Angeles and Baldwin Park), and is currently in various stages of conducting 2016 CHNAs for Citrus Valley Health Partners and the Los Angeles Metro Hospitals Collaborative.

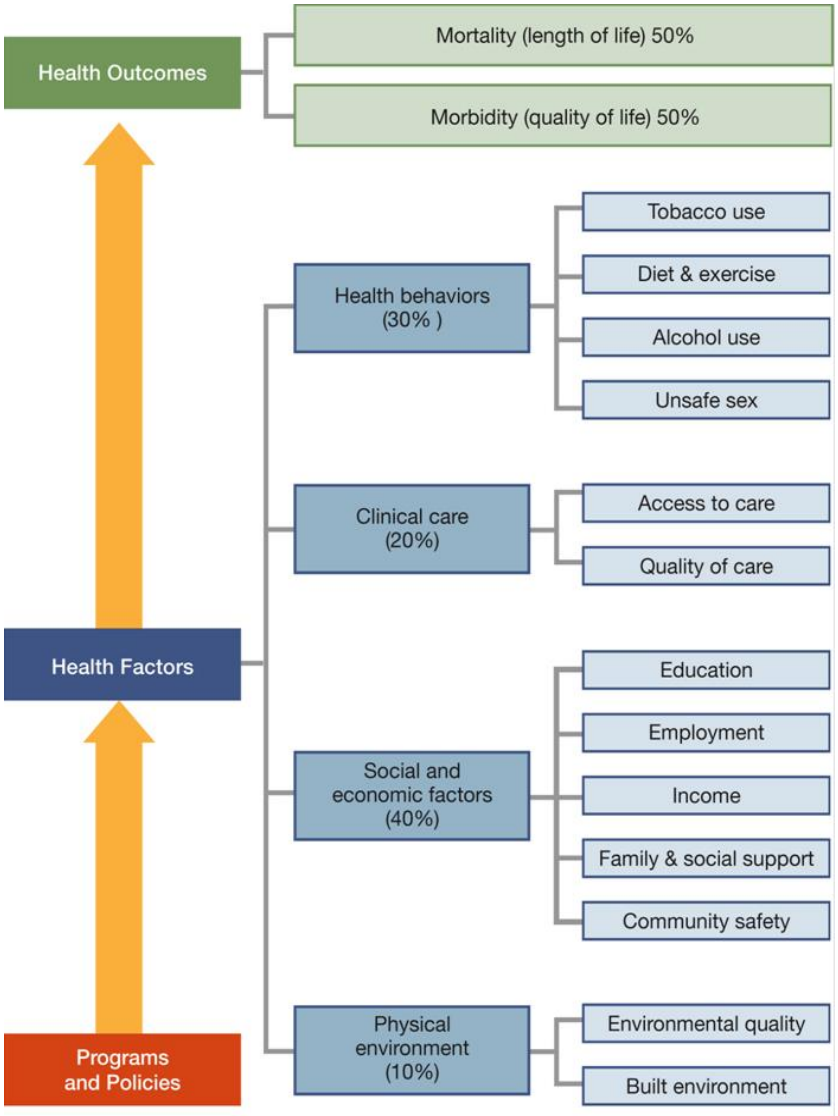
IV. Needs Assessment Methodology and Process

This section outlines the steps taken to identify the 2016 community health needs, via data indicators (secondary data), and community input (primary data).

Secondary Data

The CHNA included the collection of over 300 data indicators that helped illustrate the health states of the community. Secondary data were collected from a wide range of local, county, state and national sources to present demographics, mortality, morbidity, health behaviors, clinical care, social and economic factors, and physical environment. These categories are based on the Mobilizing Action Toward Community Health (MATCH) framework, which illustrates the interrelationships among the elements of health and their relationship to each other: social and economic factors, health behaviors, clinical care, physical environmental, and health outcomes.

Mobilizing Action Toward Community Health (MATCH)



Data available at the ZIP Code level were compiled for the hospital's service area. When not available by ZIP Code, then the data for the appropriate representative portion of the Service Planning Area (SPA) was utilized.

A comprehensive data matrix (see Appendix A—Scorecard) was created listing all identified secondary indicators and noting trends from the qualitative stakeholder data. The Scorecard included hospital-level secondary data (averaged across the service area for each hospital) and primary data mentions (count of mentions in focus groups as the issues emerged as priorities among community stakeholders). The Scorecard also included benchmark data in the form of the nationally recognized Healthy People 2020 (HP2020) goals. Additionally, the most recent county or state-level statistic for each health outcome and driver was used as a comparison.

Primary Data—Community Input

Two community focus groups held on Tuesday, April 5 and Thursday, April 7, 2016 were attended by 48 people including health care professionals, social service providers, city and public health officials, members from the local police department and other community leaders. Participants were invited by the Glendale Hospital Collaborative, leveraging its extensive networks and relationships within the greater Glendale area and the Glendale Healthier Community Coalition.[2] These stakeholders represented a broad range of geographic, public health, and population interest in compliance with the ACA (Appendix C—Stakeholders). For more information on the focus group process, see Appendix B—Primary Data Gathering Tools.

The goal of this component of the CHNA was to identify broad health outcomes and drivers (which, combined are health needs), as well as assets and gaps in resources, through the perceptions and knowledge of varied and multiple stakeholders.

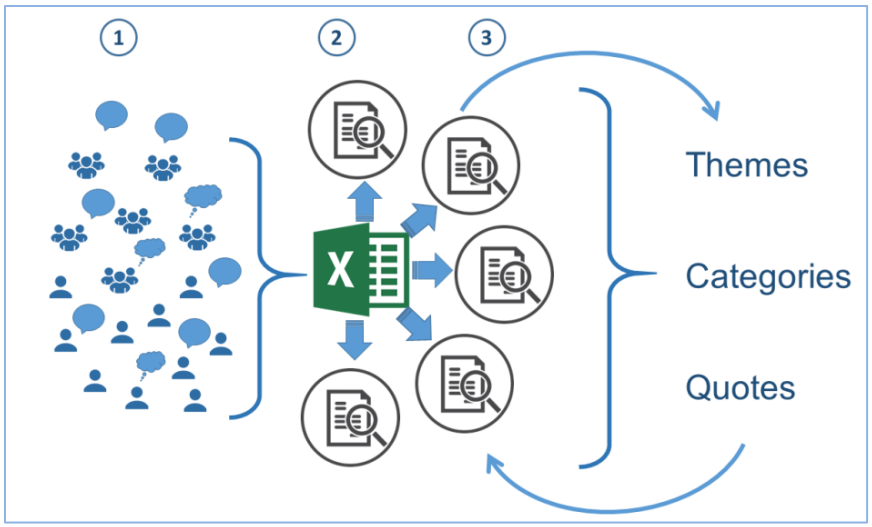
To begin to gain a sense for the perceived severity of each health need in the community, each participant was given a total of ten sticker dots and asked to vote for the most severe health needs on a grid created during the focus group. For the purpose of the voting activity, severity was defined as the level to which a health need or health driver affected the health and lives of those in the community.

Analytical Methods Used To Identify Community Health Needs

The CNM consultant team used a modified content analysis to identify the main themes that emerged from community input through the focus groups. This was a three-step process for analyzing and interpreting primary data (community input): 1) all information gathered during focus groups and interviews were entered into Microsoft Excel, 2) spreadsheet data were reviewed multiple times using content analysis to begin sorting and coding the data, and 3) through the coding process, themes, categories and quotes were identified.

[2] http://www.healthyglendale.org/

Analysis to Identify Main Themes Emerged Via Community Input



To help identify health needs, two requirements needed to be met: 1) a health need had to be mentioned in the primary data collection more than once and 2) a secondary data indicator associated with the need had to perform poorly against a designated benchmark (county averages, state averages, or Healthy People 2020 goals). Once a health need met both requirements, it was designated as an identified health need.

List of identified health needs, in alphabetical order:

- Access to Health Care
- Cancer
- Cardiovascular
- Communicable/Infectious Disease
- Dental Care
- Diabetes
- Geriatric Support
- Homelessness/Housing
- Mental Health
- Obesity
- Poverty
- Preventative Wellness
- Sexual Health/STDs
- Stroke
- Substance Abuse
- Transportation
- Violence/Injury

Data Limitations and Gaps

The secondary data allows for an examination of the broad health needs within a community. However, there are some limitations with regard to this data, as is true with any secondary data. Data were not

always available at the ZIP code level, so county level data as well as SPA level data were also utilized. Moreover, disaggregated data for age, ethnicity, race, and gender are not available for all data indicators, which limited the examination of disparities of health issues within the community. At times, a stakeholder-identified health issue may not have been reflected by the secondary data indicators. In addition, data are not always collected on an annual basis, meaning that some data are several years old.

V. Prioritization of Health Needs

Once a list of health needs was developed, a process was completed to prioritize the health needs. The steps to that process are outlined in the section that follows.

Community Ranking of Health Needs

A total of 34 community stakeholders (See Appendix C-Stakeholders) convened May 24, 2016 for a Prioritization Forum with the goal of ranking the identified health needs. Many of the forum participants had also attended the focus groups. Participants were provided the data Scorecard (Appendix A) and allowed time to review the data and discuss in small groups. CNM consultants were available to answer data questions. To capture all groups' observations, each group was given worksheet to provide input on: geographic areas impacted, specific populations, organizations and programs in the community, and gaps in resources. After a large group discussion, participants were given the opportunity to provide input via voting and a survey. For details, please see Appendix B – Primary Data Gathering Tools.

All participants were given sticker dots (10 sticker dots each), presented with the list of identified health needs and asked to cast their sticker votes for the most severe health needs in the community.

Post-voting, they were asked to complete a written survey that presented all of the identified health needs, and asked to score each health need based on the following criteria:

- severity of the health need in the community
- change over time (improved or gotten worse)
- availability of community resources
- community readiness to address the health need

Ranking: A Deeper Dive

During sticker-voting, participants were allowed to put as many or as few stickers on a health need. If they so chose, they could put all 10 dot-stickers on a single health need, or spread them out throughout.

For the survey, participants were asked to provide input for each health need in terms of: (a) the severity in the community, (b) change over time, (c) availability of resources, and (d) community readiness to address the health need. The possible scores ranged from 1 to 4 (for survey and scoring guide, please see Appendix B-Primary Data Gathering Tools). To illustrate, a high score meant the health need is very severe, getting worse, has a serious shortage of resources and the community has the capacity to address this need and thus focusing on that need would prove to be a good investment. Participants were allowed to mark "don't know" if they did not feel comfortable providing a score – and this response carried no scoring weight.

The outcomes from dot-voting and survey scoring were combined to develop prioritized health needs. The needs were first prioritized by survey scores and then by rank in dot-voting. In the case where multiple health needs received the same score, ranking from the dot-voting was used to re-rank within the same score.

Participants were given a companion document that further explained the four criteria and the scoring system. Absent participants were allowed the opportunity to complete the survey online if they were not able to attend Prioritization Forum. A total of 33 participants completed the survey in person and 13

online, for a total of 46. The survey and the companion document can be found in the Appendix B—Primary Data Gathering Tools.

Prioritized Health Needs

Below is the list of prioritized health needs, categorized by health outcomes and health drivers.

Prioritized Health Needs, Separated by Outcomes and Drivers

Rank	Health Outcomes
1	Mental Health
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Rank	Health Drivers
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VI. Community Health Profile

Service Area Definition

On July of 2013, the University of Southern California (USC) expanded its medical services with the purchase of Verdugo Hills Hospital, giving rise to USC-Verdugo Hills Hospital (USC VHH), and the subsequent expansion of the hospital's service area by four ZIP codes (90042–Highland Park, 91001–Altadena, 91105–Pasadena, and 91342–Sylmar). Currently, the USC VHH Service Area provides health services in twenty ZIP Codes, 10 cities or communities, and three Service Planning Areas (SPAs), all located within Los Angeles County.

USC Verdugo Hills Hospital (USC VHH) Service Area

City/Community	ZIP Code	Service Planning Area
Highland Park	90042*	2
Montrose	91020	2
Sunland-Tujunga	91040	2
Tujunga	91042	2
Verdugo City	91046	2
Glendale	91201	2
Glendale	91202	2
Glendale	91203	2
Glendale	91204	2
Glendale	91205	2
Glendale	91206	2
Glendale	91207	2
Glendale	91208	2
La Crescenta-Montrose	91214	2
Sylmar	91342*	2
Altadena	91001*	3
La Cañada Flintridge	91011	3
Pasadena	91103	3
Eagle Rock	90041	4
Pasadena	91105*	4

*New ZIP Code to the service area

USC Verdugo Hills Hospital (USC VHH) Service Area by ZIP Code

Demographic Overview

A description of the community serviced by USC VHH is provided in the following narrative and data tables. All data provided in the following tables are presented by ZIP code. Data for ZIP code 91046–Verdugo City has been excluded from the report given that it is designated as a P.O. Box.

				
55% are between 25-64 years old*	**61%** of households speak another language aside from English at home	**33%** have up-to a high school education (or GED completion)	**20%** of families earned below 100% FPL*	**27%** die from heart disease**
***Reflects largest age group of the service area population**		***In 2014, the Federal Poverty Line (FPL) for a household of one was $11,670 per year; and a family of four $23,850 per year **Primary cause of death in the service area**		

The new ZIP codes added to the service area: 91342–Sylmar, 90042–Highland Park, 91001–Altadena and 91105–Pasadena contributed 209,672 persons in 2015, almost a third of the population in the service area. These ZIP codes also represented an increase of 2,608 births in 2012 (almost 44%).

These new ZIP codes changed the landscape of the service area, for example, minors (under age 18) account for approximately a quarter of the population in two of the new ZIP codes: 91342–Sylmar (26.7%) and 90042–Highland Park (24.3%). Over a third of the residents completed up to a high school degree, a GED or have less education. These ZIP codes are also some of the fastest growing population: a third of the births in the service area took place in these two ZIP codes (in 2012). On the opposite spectrum, these two ZIP codes also have the some of the highest percentages of deaths. In 2012, 14% of deaths in the service area took place in Sylmar – the highest percentage overall.

Overall, the USC VHH service area population tends to be older relative to Los Angeles County. Adults over the age of 45 account for 43% of the population, while the same age group in the county accounts for 38% of the residents in Los Angeles County.

The racial/ethnic composition of the area is highly diverse and geographically concentrated. Over half of the population (54%) in the city of Glendale is foreign born, with large concentrations of Armenian and Mexican immigrants. Overall, 61% of households in the service area do not speak English at home: 44% of households in the Glendale ZIP codes reported speaking an Indo-European language at home, while 57% to 63% of households in Highland Park and Sylmar reported speaking Spanish at home.

The unemployment rate in the service area was similar (7.5%) than that reported for Los Angeles county (7.6%) – however in some locations, Highland Park and areas of Glendale (ZIP code 91204 and 91205), the unemployment rates were up to 9.5%. Overall, a lower percent of families in the service area live

below poverty (11%) than the county (15%), and 8% of families with children live below poverty in the service area.

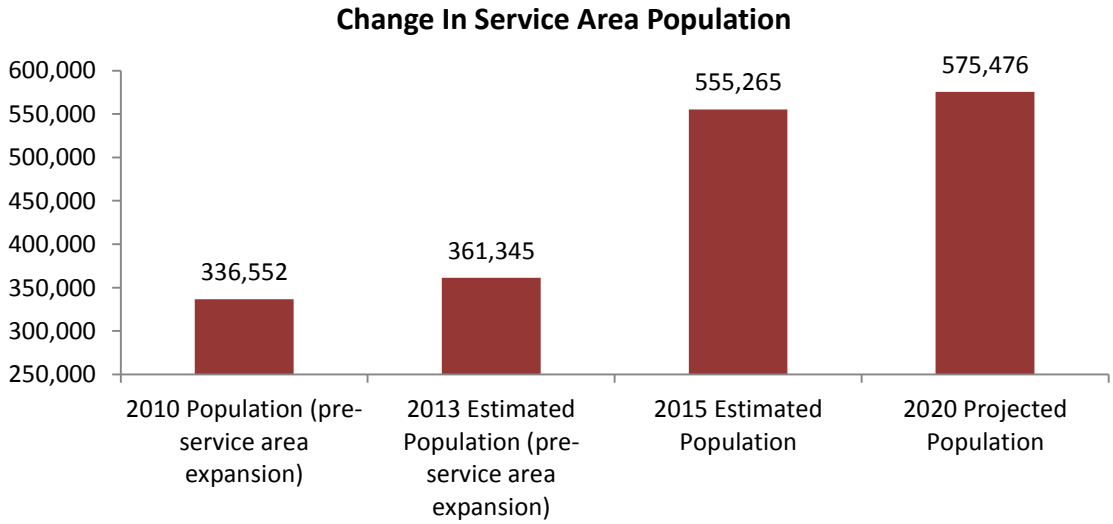
In 2012, there were 5,888 births in the service area. Mothers were typically 20 to 29 years of age (39%), followed by 30 to 34 years of age (32%). The service area had a greater percentage of 30 to 34 year old mothers (32%) relative to the county (27%).

The leading cause of death in the service area is heart disease (27%), followed by cancer (25%) – these values are in accordance with Los Angeles County percentages (28% and 25% accordingly). A higher percentage of the residents die from Alzheimer's disease (5.0%) relative to the county (3.3%).

Population

In 2010, the population in the service area was 336,552, and by 2013 (pre-service area expansion), it was estimated to have grown to 361,345, a 7% increase. In 2015, post-service area expansion (including four new ZIP codes: 90042–Highland Park, 91001–Altadena, 91105–Pasadena, and 91342–Sylmar), placed population estimates at 555,265. Alone, these four ZIP codes contribute 209,672 persons (2015), almost a third of the population in the service area.

Looking to 2020, the population in the service area is expected to increase by approximately 3.6% relative to 2015. The largest population increases are expected in ZIP codes 91040– Sunland-Tujunga (5.7%), 91105–Pasadena (5.5%), and 91020–Montrose (5.2%)—a larger increase than anticipated for Los Angeles County (3.7%), continuing growth trends observed over the past few years.



Estimated Population, 2015

City	ZIP Code	2010 Population	2015 Estimated Population	2020 Projected Population	Percent Increase 2015-20
Eagle Rock	90041	27,554	28,266	29,160	3.2%
Highland Park	90042	--*	64,679	67,706	4.7%
Altadena	91001	--*	36,815	37,610	2.2%
La Cañada Flintridge	91011	20,492	20,970	21,599	3.0%
Montrose	91020	8,469	8,887	9,350	5.2%
Sunland-Tujunga	91040	21,034	22,270	23,534	**5.7%**
Tujunga	91042	27,606	28,519	29,619	3.9%
Pasadena	91103	28,289	29,042	29,992	3.3%
Pasadena	91105	--*	12,879	13,593	5.5%
Glendale	91201	22,982	23,273	23,767	2.1%
Glendale	91202	23,034	23,695	24,516	3.5%
Glendale	91203	13,657	13,926	14,308	2.7%
Glendale	91204	15,935	16,626	17,360	4.4%
Glendale	91205	38,172	38,549	39,282	1.9%
Glendale	91206	32,841	33,422	34,283	2.6%
Glendale	91207	10,001	10,510	11,042	5.1%
Glendale	91208	16,205	16,673	17,247	3.4%
La Crescenta-Montrose	91214	30,281	30,965	31,890	3.0%
Sylmar	91342	--*	95,299	99,618	4.5%
USC VHH Service Area		398,447	555,265	575,476	3.6%
Los Angeles County		9,818,605	10,136,509	10,510,281	3.7%

Data source: Nielsen Claritas
Data year: 2015
Source geography: ZIP Code

* Not in the service area in 2010, thus population not counted.

Gender

As in previous years, slightly more than half of the population (51.3%) in the USC VHH service area in 2015 was female. This trend was also observed in the population of individual ZIP codes with the exception of Sylmar, the only city in the service area where the male population approached 50.0%.

Gender, 2015

City	ZIP Code	Male		Female	
		Number	Percent	Number	Percent
Eagle Rock	90041	13,722	48.6%	14,544	51.4%
Highland Park	90042	31,987	49.5%	32,692	50.5%
Altadena	91001	17,803	48.4%	19,012	51.6%
La Cañada Flintridge	91011	10,200	48.6%	10,770	51.4%
Montrose	91020	4,187	47.1%	4,700	52.9%
Sunland-Tujunga	91040	11,031	49.5%	11,239	50.5%
Tujunga	91042	14,169	49.7%	14,350	50.3%
Pasadena	91103	14,311	49.3%	14,731	50.7%
Pasadena	91105	6,223	48.3%	6,656	51.7%
Glendale	91201	11,350	48.8%	11,923	51.2%
Glendale	91202	11,237	47.4%	12,458	52.6%
Glendale	91203	6,599	47.4%	7,327	52.6%
Glendale	91204	8,028	48.3%	8,598	51.7%
Glendale	91205	18,458	47.9%	20,091	52.1%
Glendale	91206	15,748	47.1%	17,674	52.9%
Glendale	91207	4,922	46.8%	5,588	53.2%
Glendale	91208	7,959	47.7%	8,714	52.3%
La Crescenta-Montrose	91214	14,914	48.2%	16,051	51.8%
Sylmar	91342	47,619	50.0%	47,680	50.0%
USC VHH Service Area		270,467	48.7%	284,798	51.3%
Los Angeles County		5,001,632	49.3%	5,134,877	50.7%

Source: Nielson Claritas
Data Year: 2015
Source Geography: ZIP

Age

Most of the population in the USC VHH service area ranged between the ages of 25 and 64 (55.1%). However, some geographic areas differ from this trend: minors (under age 18) account for approximately a quarter of the population in three ZIP codes: 91342–Sylmar (26.7%), 91103–Pasadena (24.4%) and 90042–Highland Park (24.3%). Seniors over the age of 65 make up a quarter of the population in 91105—Pasadena (25.7%) and a fifth of the population in 91207—Glendale (21.9%).

Age Distribution, 2015

City	ZIP Code	0–4	5–9	10–17	18–24	25–44	45–64	65–84	85+	Total
Eagle Rock	90041	4.8%	5.0%	8.1%	11.5%	27.1%	27.2%	13.8%	2.4%	100.0%
Highland Park	90042	7.0%	6.9%	10.4%	9.9%	31.7%	23.5%	9.4%	1.2%	100.0%
Altadena	91001	5.7%	5.8%	10.1%	8.7%	22.4%	31.2%	14.0%	1.9%	100.0%
La Cañada Flintridge	91011	4.0%	4.0%	12.8%	12.1%	14.1%	34.8%	15.8%	2.3%	100.0%
Montrose	91020	4.6%	4.7%	10.1%	9.8%	25.9%	31.3%	11.4%	2.1%	100.0%
Sunland-Tujunga	91040	5.0%	5.1%	8.3%	8.5%	24.7%	32.2%	14.1%	2.0%	100.0%
Tujunga	91042	5.1%	5.3%	8.5%	8.1%	27.0%	31.2%	13.1%	1.6%	100.0%
Pasadena	91103	6.9%	6.8%	10.7%	9.7%	28.4%	24.4%	11.3%	1.8%	100.0%
Pasadena	91105	4.1%	4.5%	6.5%	5.0%	24.8%	29.4%	20.9%	4.8%	100.0%
Glendale	91201	4.4%	4.6%	7.9%	8.1%	29.3%	29.2%	14.5%	2.0%	100.0%
Glendale	91202	4.8%	5.1%	7.3%	7.3%	28.7%	28.8%	15.5%	2.6%	100.0%
Glendale	91203	4.5%	4.7%	7.4%	7.4%	32.3%	27.6%	13.9%	2.2%	100.0%
Glendale	91204	5.1%	5.2%	8.4%	8.1%	**32.2%**	26.6%	12.4%	2.0%	100.0%
Glendale	91205	4.7%	4.8%	7.9%	8.7%	30.3%	27.4%	13.9%	2.3%	100.0%
Glendale	91206	4.6%	4.8%	7.2%	7.0%	28.3%	29.0%	16.4%	2.8%	100.0%
Glendale	91207	5.0%	5.4%	7.9%	5.9%	23.1%	30.8%	18.7%	**3.2%**	100.0%
Glendale	91208	4.8%	4.9%	9.5%	8.0%	22.0%	31.4%	16.3%	3.0%	100.0%
La Crescenta-Montrose	91214	4.3%	4.3%	11.1%	11.3%	20.3%	34.0%	12.9%	1.9%	100.0%
Sylmar	91342	7.4%	7.2%	12.1%	10.9%	28.8%	23.7%	8.8%	1.1%	100.0%
USC VHH Service Area		5.6%	5.6%	9.6%	9.3%	27.2%	27.9%	12.8%	2.0%	100.0%
Los Angeles County		6.4%	6.4%	10.5%	10.2%	29.1%	25.2%	10.6%	1.7%	100.0%

Data source: Nielsen Claritas
Data year: 2015
Source geography: ZIP Code

In 2015, residents in the USC VHH service area were slightly older (41.2 years old) than the rest of Los Angeles County (37.3 years old). The median age (36.0) for residents of Los Angeles County was lower than the average age (37.3), while in the USC VHH service area, the median age (41.8) was higher than the average age (41.2). This contrast indicates that in the USC VHH service area, a higher percentage of residents were represented in older age groups than the rest of Los Angeles County.

Median and Average Age (in years), 2015

	ZIP Code	Median Age	Average Age
Eagle Rock	90041	40.4	40.8
Highland Park	90042	35.0	36.1
Altadena	91001	42.6	40.9
La Cañada Flintridge	91011	46.8	42.6
Montrose	91020	41.3	40.5
Sunland-Tujunga	91040	43.7	42.0
Tujunga	91042	41.8	41.0
Pasadena	91103	35.6	37.3
Pasadena	91105	48.6	47.0
Glendale	91201	41.9	41.9
Glendale	91202	42.8	42.6
Glendale	91203	41.0	41.6
Glendale	91204	39.3	40.1
Glendale	91205	40.4	41.3
Glendale	91206	43.7	43.3
Glendale	91207	46.7	44.5
Glendale	91208	45.5	43.3
La Crescenta-Montrose	91214	43.8	41.3
Sylmar	91342	33.3	35.1
USC VHH Service Area		41.8	41.2
Los Angeles County		36.0	37.3

Data source: Nielsen Claritas
Data year: 2015
Source geography: ZIP Code

Race and Ethnicity

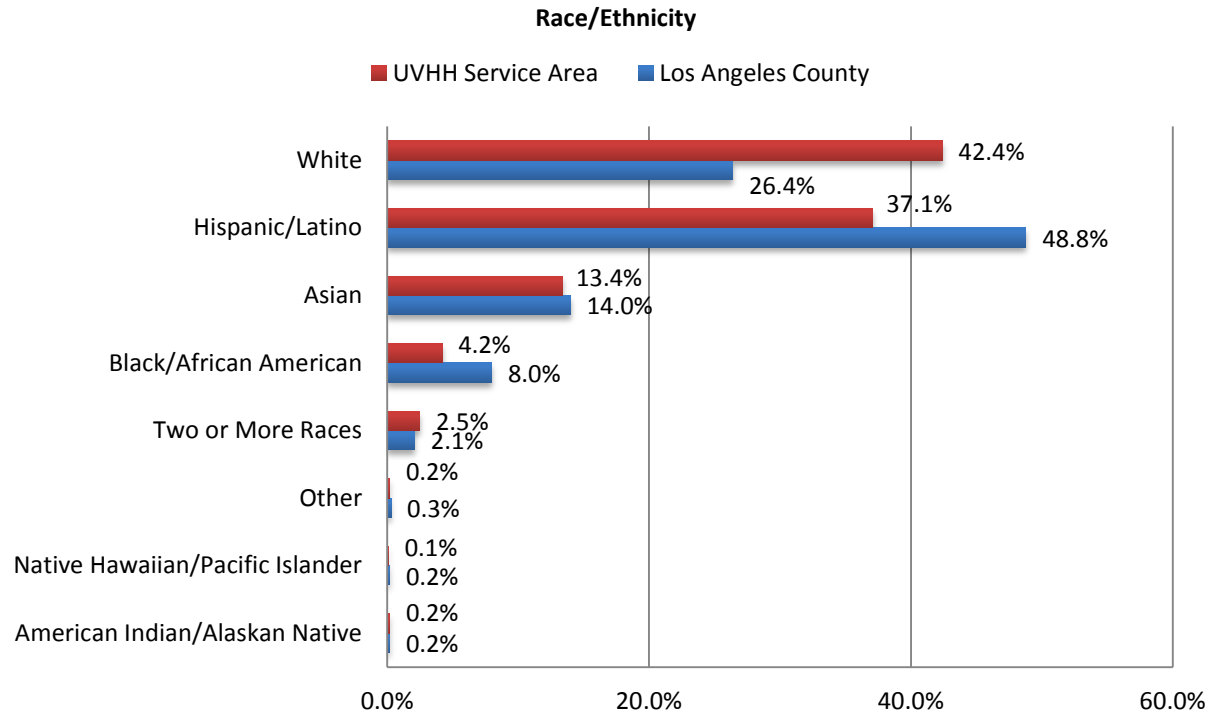
In 2015, a majority of the population living in the USC VHH service area identified as either White (42.4%) or Hispanic/Latino (37.1%). Los Angeles County had a higher percentage of Hispanic/Latino residents (48.8%) and a significantly lower percentage of White residents (26.4%) than in the USC VHH service area. The Black/African-American population in the USC VHH service area (4.2%) was nearly half of Los Angeles County (8.0%). The Asian population in USC VHH service area (13.4%) was slightly lower than in Los Angeles County (14.0%).

The USC VHH service area consists of highly diverse, geographically concentrated ethnic communities that contribute to the area's vibrancy and community-based assets. For example, Glendale is home to 80,000 Armenians. According to the 2000 US Census, 54.4% of the population in Glendale (ZIP codes including 91201, 91202, 91203, 91204, 91205, 91206, 91207, 91208, 91214) was foreign born. Iran (22.7%) and Armenia (16.4%) were the most common foreign places of birth. Armenian (29.3%) and

Mexican (10.5%) were the most common ancestries among both the US-born and foreign-born populations.[3] This profile makes Glendale unique among the Verdugos and Los Angeles County.

The USC VHH service area also includes communities with large Latino populations such as Highland Park where 51% of the residents are of Mexican ancestry, and of the foreign-born population (45.1% of all residents), Mexico (55.3%) and El Salvador (12.0%) are the most common foreign places of birth.[4]

Finally, the USC VHH service area includes portions of Pasadena with distinctive populations. For example, whereas the majority of areas (as defined by ZIP codes) in the USC VHH service area are between 1% and 3% African American, the area defined by 91103–Pasadena has a population that is 17.9% African American, and an additional 52.9% of the population are Hispanic/Latino. Interestingly, the neighboring community (ZIP code 91105) has a much smaller African American and Latino population.[5]



Language

In 2015, the percent of residents in the USC VHH service area who exclusively spoke English at home (39.3%) was slightly lower than in Los Angeles County (42.9%). Conversely, the percentage of the USC VHH service area population speaking only a language of Indo-European origin (19.3%) at home was

[3] Los Angeles Times. Mapping LA. Los Angeles, CA. Available at http://maps.latimes.com/neighborhoods/neighborhood/glendale/. Accessed [August 28, 2016]

[4] Los Angeles Times. Mapping LA. Los Angeles, CA. Available at http://maps.latimes.com/neighborhoods/neighborhood/highland-park/. Accessed [August 28, 2016]

[5] Nielsen. Claritas Demographic Reports. New York, NY. Available at https://www.claritas.com/sitereports/demographic-reports.jsp. Accessed [September 6, 2016]

over three times that of the rest of Los Angeles County (5.6%). The category for Indo-European languages is broad and defined as "including most languages of Europe and the Indic languages of India" and lists approximately 70 languages[6]. Given the ethnic/racial context of the USC VHH community, it is most likely that the high percent of Indo-European speakers reflects the size of the Armenian population. In particular, parts of Glendale: ZIP codes 91201 (54.3%), 91203 (49.8%), 91205 (48.4%), and 91202 (46.7%), the percent of Indo-European speakers was nearly ten times the rest of the County.

While the percent of residents in the USC VHH service area who spoke only Spanish at home (30.1%) was lower than in Los Angeles County (39.6%), there are specific geographic areas where the percent almost doubles the service area average. ZIP codes 91342–Sylmar (62.9%) and 90042–Highland Park (57.1%) have high concentrations of Spanish-speakers at home.

There are also smaller groups of people who speak an Asian/Pacific Islander language at home – these are located in 21020–Montrose (23.1%), La Crescenta-Montrose–91214 (22.2%) and La Cañada Flintridge–91011.

It is important to mention that speaking a language aside from English at home is not an indicator for a population's ability to speak English.

Language Spoken at Home, 2015

City	ZIP Code	English Only	Asian/Pacific Islander	Indo-European	Spanish	Other
Eagle Rock	90041	46.3%	17.2%	4.3%	31.9%	0.3%
Highland Park	90042	32.0%	9.5%	1.3%	57.1%	0.2%
Altadena	91001	67.5%	2.9%	4.4%	24.7%	0.5%
La Cañada Flintridge	91011	63.9%	21.7%	9.6%	4.4%	0.4%
Montrose	91020	46.1%	23.1%	20.3%	9.5%	0.9%
Sunland-Tujunga	91040	55.0%	8.7%	16.2%	19.4%	0.8%
Tujunga	91042	42.3%	6.9%	30.0%	20.2%	0.8%
Pasadena	91103	47.8%	4.9%	2.0%	44.9%	0.4%
Pasadena	91105	74.1%	8.3%	6.2%	11.0%	0.4%
Glendale	91201	24.2%	7.4%	54.3%	13.1%	0.9%
Glendale	91202	31.2%	13.4%	46.7%	8.0%	0.8%
Glendale	91203	16.9%	15.6%	49.8%	15.4%	2.2%
Glendale	91204	17.7%	14.9%	36.5%	29.8%	1.0%
Glendale	91205	17.9%	11.9%	48.4%	20.0%	1.9%
Glendale	91206	28.7%	13.8%	43.4%	11.8%	2.4%
Glendale	91207	43.1%	10.0%	42.0%	4.4%	0.6%
Glendale	91208	48.6%	11.6%	30.7%	8.7%	0.4%
La Crescenta-Montrose	91214	56.9%	22.2%	14.8%	5.7%	0.4%
Sylmar	91342	30.7%	4.6%	1.5%	62.9%	0.3%
USC VHH Service Area		39.3%	10.5%	19.3%	30.1%	0.7%
Los Angeles County		42.9%	10.9%	5.6%	39.6%	1.1%

Data source: Nielsen Claritas
Data year: 2015
Source geography: ZIP Code

[6]United States Census Bureau. American Community Survey Reports. Language Use in the United States. Available at https://www.census.gov/prod/2013pubs/acs-22.pdf. Accessed [August 31, 2016]

Education

The population in the USC VHH service area represented a higher percentage of individuals that have completed a degree in higher education (AA, Bachelor's or Master's) (47.7%) than Los Angeles County (36.5%). Overall, members of the USC VHH service area population were more likely to have an Associate degree (7.7% to 6.8% respectively), a Bachelor's degree (25.5% to 19.5%), or a Master's degree or higher (14.5% to 10.2%) than the population in Los Angeles County.

In three communities, almost a third of residents had low educational attainment, meaning that residents had less than a ninth-grade education and/or some high school education but no diploma. These are: 91342–Sylmar (31.1%), 90042–Highland Park (30.5%) and 91103–Pasadena (29.4%). Residents in these three communities largely spoke Spanish at home as well. Most of the residents in Glendale ZIP codes had high educational attainment (AA, Bachelor's and/or Master's degrees) as well as those in Altadena, La Cañada Flintridge and Montrose.

Educational Attainment, 2015

City	ZIP Code	Less than Ninth Grade	Some High School, No Diploma	High School Graduate or GED	Some College, No Degree	Associate Degree	Bachelor's Degree	Master's Degree or Higher
Eagle Rock	90041	8.4%	7.2%	16.8%	20.5%	7.8%	25.6%	13.8%
Highland Park	90042	17.3%	13.2%	18.2%	17.7%	6.8%	17.0%	9.8%
Altadena	91001	7.1%	6.5%	14.0%	22.0%	7.4%	23.7%	19.3%
La Cañada Flintridge	91011	1.5%	1.4%	6.9%	14.5%	5.7%	37.6%	32.3%
Montrose	91020	4.2%	3.4%	13.7%	22.9%	7.9%	33.3%	14.5%
Sunland-Tujunga	91040	7.7%	7.1%	22.1%	25.3%	7.5%	21.4%	9.0%
Tujunga	91042	9.3%	5.9%	25.5%	23.0%	9.6%	17.8%	8.9%
Pasadena	91103	18.5%	10.9%	17.2%	18.7%	5.7%	15.5%	13.5%
Pasadena	91105	2.3%	2.8%	8.5%	12.8%	5.3%	35.4%	32.8%
Glendale	91201	11.5%	8.2%	23.6%	19.7%	8.0%	21.9%	7.2%
Glendale	91202	7.7%	4.8%	19.1%	17.2%	8.5%	28.7%	14.0%
Glendale	91203	11.4%	7.1%	21.0%	17.8%	9.3%	25.4%	8.0%
Glendale	91204	15.4%	7.7%	19.3%	20.5%	8.1%	22.4%	6.5%
Glendale	91205	14.1%	7.2%	20.8%	17.9%	8.2%	23.1%	8.7%
Glendale	91206	9.5%	4.6%	17.9%	18.0%	7.6%	27.7%	14.7%
Glendale	91207	3.4%	3.5%	13.7%	19.2%	7.6%	33.0%	19.5%
Glendale	91208	1.9%	2.8%	14.5%	18.0%	11.1%	31.6%	20.2%
La Crescenta-Montrose	91214	3.2%	3.0%	17.1%	19.7%	7.5%	31.9%	17.6%
Sylmar	91342	17.6%	13.5%	24.5%	20.6%	6.5%	12.3%	4.9%
USC VHH Service Area		9.1%	6.4%	17.6%	19.3%	7.7%	25.5%	14.5%
Los Angeles County		13.5%	9.7%	20.6%	19.7%	6.8%	19.5%	10.2%

Data source: Nielsen Claritas
Data year: 2015
Source geography: ZIP Code

Marital Status

In 2015, the percentage of the population that was married with their spouse present was higher in the USC VHH service area (43.7%) than in Los Angeles County (38.3%). However communities with high Spanish speaking populations and low education levels have relatively high levels of married, spouse absent, which may suggest a newcomer/migrant population. These are 90042–Highland Park (7.3%) and 91342–Sylmar (7.0%). The community with the highest percent of married, spouse absent persons was in Glendale (91204 – 8.6%) which had a strong presence of both Indo-European and Spanish-speaking only households.

Marital Status, 2015

City	ZIP Code	Never Married	Married, Spouse Present	Married, Spouse Absent	Widowed	Divorced
Eagle Rock	90041	43.5%	35.7%	6.3%	5.4%	9.0%
Highland Park	90042	44.7%	35.7%	7.3%	4.3%	7.9%
Altadena	91001	34.8%	45.0%	4.4%	5.4%	10.4%
La Cañada Flintridge	91011	26.2%	60.3%	2.2%	5.2%	6.1%
Montrose	91020	32.4%	47.0%	3.3%	7.7%	9.6%
Sunland-Tujunga	91040	33.7%	41.0%	5.7%	5.7%	13.9%
Tujunga	91042	34.5%	45.3%	5.5%	4.2%	10.5%
Pasadena	91103	42.2%	33.0%	7.5%	6.5%	10.8%
Pasadena	91105	33.7%	46.4%	3.1%	6.8%	9.9%
Glendale	91201	34.2%	47.3%	6.3%	5.7%	6.6%
Glendale	91202	29.6%	50.7%	4.6%	7.1%	8.0%
Glendale	91203	34.6%	43.3%	5.5%	7.6%	9.1%
Glendale	91204	39.6%	37.6%	8.6%	6.0%	8.2%
Glendale	91205	36.0%	42.1%	6.8%	7.5%	7.6%
Glendale	91206	32.1%	46.9%	5.6%	7.0%	8.5%
Glendale	91207	27.7%	53.1%	3.2%	7.5%	8.6%
Glendale	91208	27.2%	51.5%	5.2%	7.1%	9.1%
La Crescenta-Montrose	91214	30.3%	55.6%	3.0%	5.3%	5.8%
Sylmar	91342	40.5%	40.9%	7.0%	3.9%	7.7%
USC VHH Service Area		36.4%	43.7%	5.8%	5.6%	8.6%
Los Angeles County		41.5%	38.3%	6.7%	5.0%	8.6%

Data source: Nielsen Claritas
Data year: 2015
Source geography: ZIP Code

Household Income

Households in the USC VHH service area earning an average income of less than $50,000 (43.2%) reflected a lower percentage than the rest of Los Angeles County (46.9%). Household incomes in the USC VHH service area between $50,000 and $150,000 (43.1%) and greater than $150,000 (13.8%) were more prevalent when compared to Los Angeles County (41.5% and 11.6%, respectively).

Household Income, 2015

Income level	USC VHH Service Area		Los Angeles County	
	Number	Percentage	Number	Percentage
Below $15,000	20,781	11.0%	440,017	13.1%
$15,000–$24,999	20,764	11.0%	368,258	11.0%
$25,000–$34,999	16,885	8.9%	324,780	9.7%
$35,000–$49,999	23,386	12.3%	439,461	13.1%
$50,000–$74,999	31,341	16.5%	564,594	16.9%
$75,000–$99,999	23,269	12.3%	384,054	11.5%
$100,000–$124,999	16,618	8.8%	272,585	8.1%
$125,000–$149,999	10,451	5.5%	166,270	5.0%
$150,000–$199,999	11,459	6.0%	181,675	5.4%
$200,000–$249,999	4,352	2.3%	65,904	2.0%
$250,000–$499,999	7,132	3.8%	100,559	3.0%
Above $500,000	3,152	1.7%	40,774	1.2%
Total	189,590	100.0%	3,348,931	100.0%

Data source: Nielsen Claritas
Data year: 2015
Source geography: ZIP Code

Employment Status

In 2015, a majority of the USC VHH service area population was employed (56.3%), similar to Los Angeles County (57.0%). Only 7.5% of the population in the USC VHH service area was unemployed, slightly lower than Los Angeles County's 7.6% unemployment rate. In particular, 90042–Highland Park (9.5%), and communities in Glendale 91205 (9.5%), and 91203 (9.1%) reflected areas with the highest percentage of unemployed residents in the USC VHH service area. The remaining 36.1% of the population in the USC VHH service area were not classified as currently in the labor force because they were students, retired, seasonal workers, or taking care of their homes and families (homemakers).

Employment Status, 2015

City	ZIP Code	In Armed Forces	Employed	Unemployed	Not in Labor Force
Eagle Rock	90041	0.2%	55.7%	7.4%	36.8%
Highland Park	90042	0.0%	58.2%	9.5%	32.3%
Altadena	91001	0.0%	58.1%	7.9%	33.9%
La Cañada Flintridge	91011	0.0%	55.0%	4.0%	40.9%
Montrose	91020	0.0%	62.5%	5.9%	31.6%
Sunland-Tujunga	91040	0.0%	56.8%	8.0%	35.2%
Tujunga	91042	0.0%	59.8%	6.7%	33.5%
Pasadena	91103	0.0%	55.0%	8.1%	36.9%
Pasadena	91105	0.0%	58.0%	7.4%	34.6%
Glendale	91201	0.0%	53.7%	7.4%	38.9%
Glendale	91202	0.0%	55.1%	6.7%	38.2%
Glendale	91203	0.0%	52.9%	8.6%	38.6%
Glendale	91204	0.0%	55.6%	9.1%	35.3%
Glendale	91205	0.0%	50.4%	9.5%	40.0%
Glendale	91206	0.0%	55.0%	7.0%	37.9%
Glendale	91207	0.0%	58.3%	4.0%	37.8%
Glendale	91208	0.0%	59.0%	5.1%	35.9%
La Crescenta-Montrose	91214	0.0%	58.8%	4.4%	36.8%
Sylmar	91342	0.0%	56.5%	7.9%	35.6%
USC VHH Service Area		0.0%	56.3%	7.5%	36.1%
Los Angeles County		0.0%	57.0%	7.6%	35.3%

Data source: Nielsen Claritas
Data year: 2015
Source geography: ZIP Code

Income

The level of poverty in an area can have an impact on overall health and create barriers to everyday necessities, including healthy and affordable foods, health care, and other basic needs.

The Department of Health and Human Services issues Federal Poverty Guidelines (better known as Federal Poverty Level or simply FPL) that are used to determine financial eligibility for certain programs (e.g., Medicaid and the State Children's Health Insurance Program).[7] The guidelines vary by family size and are updated annually. For example, in 2014, a family (or household) of one earning an annual income of $11,670 and a family of four earning an annual income of $23,850, would both be considered earning at 100% the Federal Poverty Level. Research indicates that families in California can earn two or more times the Federal Poverty Level and still struggle to meet their basic needs.[8]

In the USC VHH service area, almost one in five households (20.1%) were estimated to have earned below 100% FPL in 2014 – a figure similar to Los Angeles County (21.0%) – while almost half of the service area households (45.8%) lived below 200% FPL, a percent slightly higher relative to Los Angeles County.

[7] United States Department of Health and Human Services. Frequently Asked Questions Related To The Poverty Guidelines And Poverty. https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty#differences [Accessed September 8, 2013]

[8] Lucile Packard Foundation for Children's Health. Self-Sufficiency Standard. Palo Alto, CA. Available at *Self-Sufficiency Standard*. Accessed [September 6, 2016].

Federal Poverty Level, 2014

Report Area	Percentage of Households Earned Below 100% FPL	Percentage of Households Earned Below 200% FPL
SPA 2–San Fernando Valley	17.5%	42.1%
SPA 3–San Gabriel Valley	22.2%	47.2%
SPA 4–Metro	27.1%	57.4%
USC VHH Service Area	20.1%	45.8%
Los Angeles County	21.0%	45.1%

Data source: California Health Interview Survey
Data year: 2014
Source geography: SPA

For additional information about the income of residents in the service area by ZIP code, please refer to the "Poverty" section under HEALTH DRIVERS.

Natality

Births

In 2012, there were a total of 503,788 births in California, and 1.2% (n=5,888) took place in the USC VHH service area. The addition of four new ZIP codes (90042, 91001, 91105 and 91342) to the service area represented an increase of 2,608 births (nearly 44%). Two of the new ZIP codes contributed the greatest percentage of births: one in five (21.2%) births in the service area was to a mother that lived in 91342–Sylmar, while 14.5% of births were to a mother from 90042–Highland Park.

Births, 2012

City	ZIP Code	Number	Percentage
Eagle Rock	90041	230	3.9%
Highland Park	90042	856	14.5%
Altadena	91001	364	6.2%
La Cañada Flintridge	91011	90	1.5%
Montrose	91020	86	1.5%
Sunland-Tujunga	91040	176	3.0%
Tujunga	91042	281	4.8%
Pasadena	91103	381	6.5%
Pasadena	91105	134	2.3%
Glendale	91201	233	4.0%
Glendale	91202	249	4.2%
Glendale	91203	151	2.6%
Glendale	91204	183	3.1%
Glendale	91205	421	7.2%
Glendale	91206	332	5.6%
Glendale	91207	94	1.6%
Glendale	91208	148	2.5%
La Crescenta-Montrose	91214	229	3.9%
Sylmar	91342	1,250	21.2%
USC VHH Service Area		5,888	100%
California		503,788	

Data source: California Department of Public Health
Data year: 2012
Source geography: ZIP Code

Births by Mother's Age

In 2012, most births in the USC VHH service area were to women between the ages of 20 and 29 (39.0%), a trend also observed in Los Angeles County (44.5%); however, a greater percentage of women between 30 and 34 years of age are having babies in the service area (31.8%) relative to the County (27.3%).

Births by Mother's Age, 2012

	USC VHH Service Area		Los Angeles County	
Age Group	Number	Percentage	Number	Percentage
Under 20 years old	267	4.5%	9,296	7.0%
20–29 years old	2,296	39.0%	58,963	44.5%
30–34 years old	1,870	31.8%	36,186	27.3%
35 years old and older	1,455	24.7%	28,161	21.2%
Total	5,888	100.0%	132,606	100.0%

Data source: California Department of Public Health
Data year: 2012
Source geography: ZIP Code

Births by Mother's Ethnicity

By ethnicity, almost half (47.6%) of births in the USC VHH service area in 2012 were to Hispanic mothers, while a third (32.5%) were to mothers who are White.

Births by Mother's Ethnicity, 2012

Ethnicity	USC VHH Service Area		Los Angeles County	
	Number	Percentage	Number	Percentage
Native American or Alaskan Native	5	0.1%	116	0.1%
Asian/Pacific Islander	818	13.9%	19,579	14.8%
African-American	207	3.5%	9,446	7.1%
Hispanic/Latina	2,801	47.6%	76,320	57.6%
White	1,916	32.5%	23,012	17.4%
Two or More Races	79	1.3%	1,847	1.4%
Other Race	62	1.1%	2,288	1.7%
Total	5,888	100.0%	132,608	100.0%

Data source: California Department of Public Health
Data year: 2012
Source geography: ZIP Code

Birth Weight

In the USC VHH service area, 336 babies were born with low birth weight and another 74 with very low birth weight of the total born in 2012. Most low and very low birth weights (under 2,500 g) were to mothers from 91342–Sylmar (83 total), and 90042–Highland Park (61 total).

Birth Weight, 2012

City	ZIP Code	Low Birth Weight (1,500 to 2,500g)		Very Low Birth Weight (<1,500g)	
		Number	Percentage of total births	Number	Percentage of total births
Eagle Rock	90041	11	4.8%	5	2.2%
Highland Park	90042	51	6.0%	10	1.2%
Altadena	91001	18	4.9%	4	1.1%
La Cañada Flintridge	91011	6	6.7%	0	0.0%
Montrose	91020	4	4.7%	2	2.3%
Sunland-Tujunga	91040	11	6.3%	1	0.6%
Tujunga	91042	10	3.6%	1	0.4%
Pasadena	91103	31	8.1%	4	1.0%
Pasadena	91105	8	6.0%	1	0.7%
Glendale	91201	18	7.7%	5	2.1%
Glendale	91202	13	5.2%	9	3.6%
Glendale	91203	5	3.3%	4	2.6%
Glendale	91204	9	4.9%	2	1.1%
Glendale	91205	25	5.9%	7	1.7%
Glendale	91206	14	4.2%	2	0.6%
Glendale	91207	4	4.3%	1	1.1%
Glendale	91208	16	10.8%	4	2.7%
La Crescenta-Montrose	91214	10	4.4%	1	0.4%
Sylmar	91342	72	5.8%	11	0.9%
USC VHH Service Area		336		74	

Data source: California Department of Public Health
Data year: 2012
Source geography: ZIP Code

Breastfeeding

Breastfeeding is an important element in the development of newborns. In the USC VHH service area, over half (50.8%) of mothers breastfed their babies for at least six months, more than in Los Angeles County (49.7%) but fewer than the Healthy People 2020 goal of >=60.6%. Well over half (55.9%) of women in SPA 4 breastfed their babies for at least six months.

Similarly, almost a third (32.0%) of mothers in the USC VHH service area breastfed their babies for at least twelve months, a larger percentage than in Los Angeles County (27.6%) but still falling short of the Healthy People 2020 goal (>=34.1%).

Breastfeeding, 2015

Report Area	Breastfeeding at Least 6 Months Percentage	Breastfeeding at Least 12 Months Percentage
SPA 2–San Fernando Valley	49.3%	37.9%
SPA 3–San Gabriel Valley	51.0%	16.5%*
SPA 4–Metro	55.9%	24.7%
USC VHH Service Area	50.8%	32.0%
Los Angeles County	49.7%	27.6%
Healthy People 2020	>=60.6%	>=34.1%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA

Disability

An umbrella term for impairments, activity limitations, and participation restrictions, disability is the interaction between individuals with a health condition (e.g., cerebral palsy, Down syndrome, depression) and personal and environmental factors (e.g., negative attitudes, inaccessible transportation and public buildings, and limited social supports).[9] Examples of disabilities include hearing, vision, movement, thinking, remembering, learning, communication, and/or mental health and social relationships. Disabilities can affect a person at any point in his/her life cycle.[10]

In California alone, 5.7 million adults, or 23% of the adult population, have a disability. The proportion of the population with disabilities increases with age and among females, and African-American, White, or American Indian/Alaskan native populations. People with disabilities are also more likely than others to be poorly educated, unemployed, and living below the poverty level. [11]

Prevalence

In 2014, the population living in the USC VHH service area with disability status due to physical, mental or emotional conditions (27.8%) was slightly lower than in Los Angeles County (28.6%). Although a high prevalence of mental illness exists in SPA 4, the percent of the population described is the lower of the two SPAs where the USC VHH service area is located.

[9] World Health Organization. Disability and Health Fact Sheet. Geneva, Switzerland. Available at http://www.who.int/mediacentre/factsheets/fs352/en/index.html. Accessed [August 2, 2016].

[10] Center for Disease Control and Prevention. Disability Overview. Atlanta, GA. Available at http://www.cdc.gov/ncbddd/disabilityandhealth/types.html. Accessed [August 2, 2016].

[11] California Department of Public Health. Planning for Today, Thinking of Tomorrow—California's 2011-2016 Strategic Directions for Promoting the Health of People with Disabilities. Sacramento, CA. Available at http://www.cdph.ca.gov/HealthInfo/injviosaf/Documents/Planning_for_Today.pdf. Accessed [August 2, 2016].

Disability Status Due To Physical, Mental Or Emotional Condition, Adults, 2014

Report Area	Percentage
SPA 2–San Fernando Valley	28.1%
SPA 3–San Gabriel Valley	28.2%
SPA 4–Metro	26.3%
USC VHH Service Area	27.8%
Los Angeles County	28.6%

Data source: California Health Interview Survey
Data year: 2014
Source geography: SPA

In 2011, a smaller percentage of adults (17.3%) cared for or assisted other adults with a long-term illness or disability in the USC VHH service area when compared to Los Angeles County (20.0%).

Adults Who Have Provided Care or Assistance to Another Adult In The Past Month, 2011

Report Area	Percentage
SPA 2–San Fernando Valley	17.4%
SPA 3–San Gabriel Valley	24.1%
SPA 4–Metro	11.3%
USC VHH Service Area	17.3%
Los Angeles County	20.0%

Data source: Los Angeles County Health Survey
Data year: 2011
Source geography: SPA

Special Health Care Needs in Children

Children with Special Health Care Needs (CSHCN) are identified via a Screening Tool from the Foundation for Accountability. The CSHCN screener has three "definitional domains." These are: (1) Dependency on prescription medications; (2) Service use above that considered usual or routine; and (3) Functional limitations.[12]

In 2015, a slightly smaller percentage (14.2%) of children between 0 and 17 years of age had special health care needs in the USC VHH service area when compared to Los Angeles County (14.5%), with a slightly higher rate (16.0%) in SPA 2.

[12] Los Angeles County Department of Public Health. Los Angeles County Health Survey 2015. Topics & Data. "Percent of Children (0-17 years old) Who Meet Criteria for Having Special Health Care Needs (SHCNs)" Available at http://www.publichealth.lacounty.gov/ha/LACHSDataTopics2015.htm. Accessed [September 1, 2016]

Children 0–17 Years old with Special Health Care Needs, 2015

Report Area	Percentage
SPA 2–San Fernando Valley	16.0%
SPA 3–San Gabriel Valley	9.1%
SPA 4–Metro	12.3%
USC VHH Service Area	14.2%
Los Angeles County	14.5%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA

Disparities

Almost one in six children between 12 and 17 years old had a special health care need in Los Angeles County in 2015. Another 16.6% of children between 6 and 11 years old and 9.8% of children between 0 and 5 years old had a special health care need.

Children 0 to 17 Years old with Special Health Care Needs by Age, 2015

Age Group	Percentage
0–5 years old	9.8%
6–11 years old	16.6%
12–17 years old	17.1%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

By ethnicity, nearly a third (32.4%) of African-American children had a special health care need. In addition, 17.5% of White children and 12.0% of Latino children have a special health care need. Only 10.5% of Asian/Pacific Islander children and 8.7% of American Indian/Alaskan Native children have special health care needs.

Children 0 to 17 Years old with Special Health Care Needs by Ethnicity, 2015

Age Group	Percentage
Latino	12.0%
White	17.5%
African-American	32.4%
Asian/Pacific Islander	10.5%
American Indian/Alaskan Native	8.7%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

Mortality

Deaths

In 2012, the 3,618 deaths in the USC VHH service area comprised 6.2% of the total deaths in Los Angeles County. One in seven deaths in the service area took place in 91342–Sylmar (14.3%). Other areas where

most deaths take place were: 91205–Glendale (7.5%), 91001–Altadena (7.4%), and 90042–Highland Park (7.3%).

Total Deaths, 2012

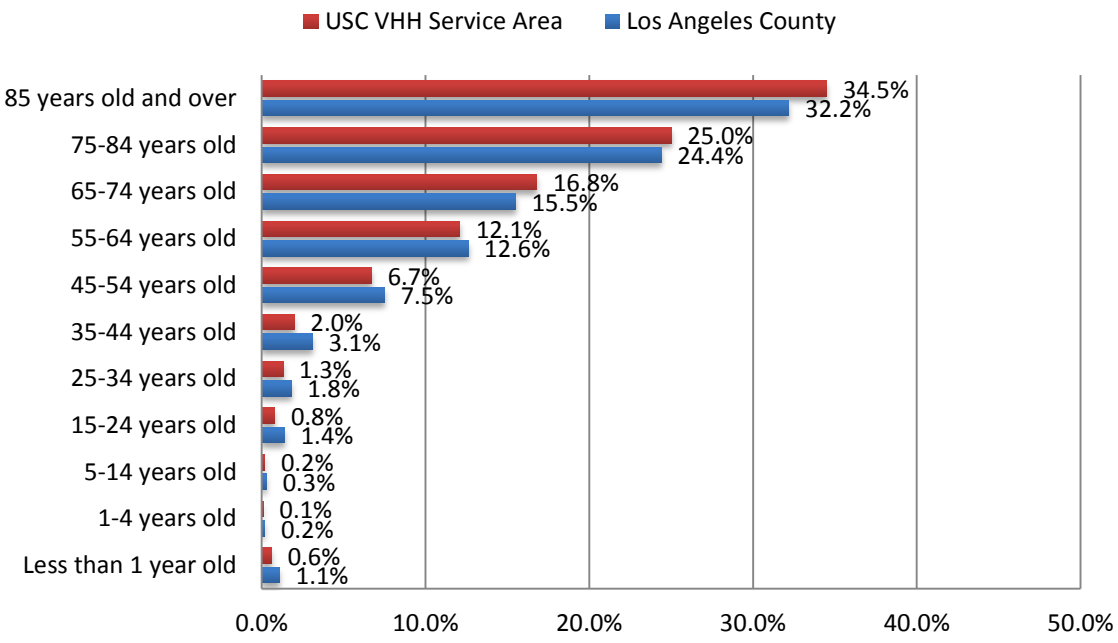
City	ZIP Code	Total	Percentage
Eagle Rock	90041	180	5.0%
Highland Park	90042	265	7.3%
Altadena	91001	266	7.4%
La Cañada Flintridge	91011	137	3.8%
Montrose	91020	73	2.0%
Sunland-Tujunga	91040	188	5.2%
Tujunga	91042	180	5.0%
Pasadena	91046	12	0.3%
Pasadena	91103	261	7.2%
Glendale	91105	111	3.1%
Glendale	91201	176	4.9%
Glendale	91202	138	3.8%
Glendale	91203	86	2.4%
Glendale	91204	140	3.9%
Glendale	91205	271	7.5%
Glendale	91206	253	7.0%
Glendale	91207	75	2.1%
Glendale	91208	109	3.0%
La Crescenta-Montrose	91214	178	4.9%
Sylmar	91342	519	14.3%
USC VHH Service Area		3,618	6.2%
Los Angeles County		58,498	

Data source: California Department of Public Health (CDPH)
Data year: 2012
Source geography: ZIP Code

Deaths by Age Group

In 2012, deaths were most common among those 85 years old and over in the USC VHH service area (34.5%), similar to the rate in Los Angeles County (32.2%). In the service area, generally deaths decrease with decreasing age; however, a greater percentage infants less than one year of age die (0.6%) than 1 to 4 year olds and 5 to 14 year olds combined.

Total Deaths, by Age Group



Total Deaths, by Age Group, 2010, 2012

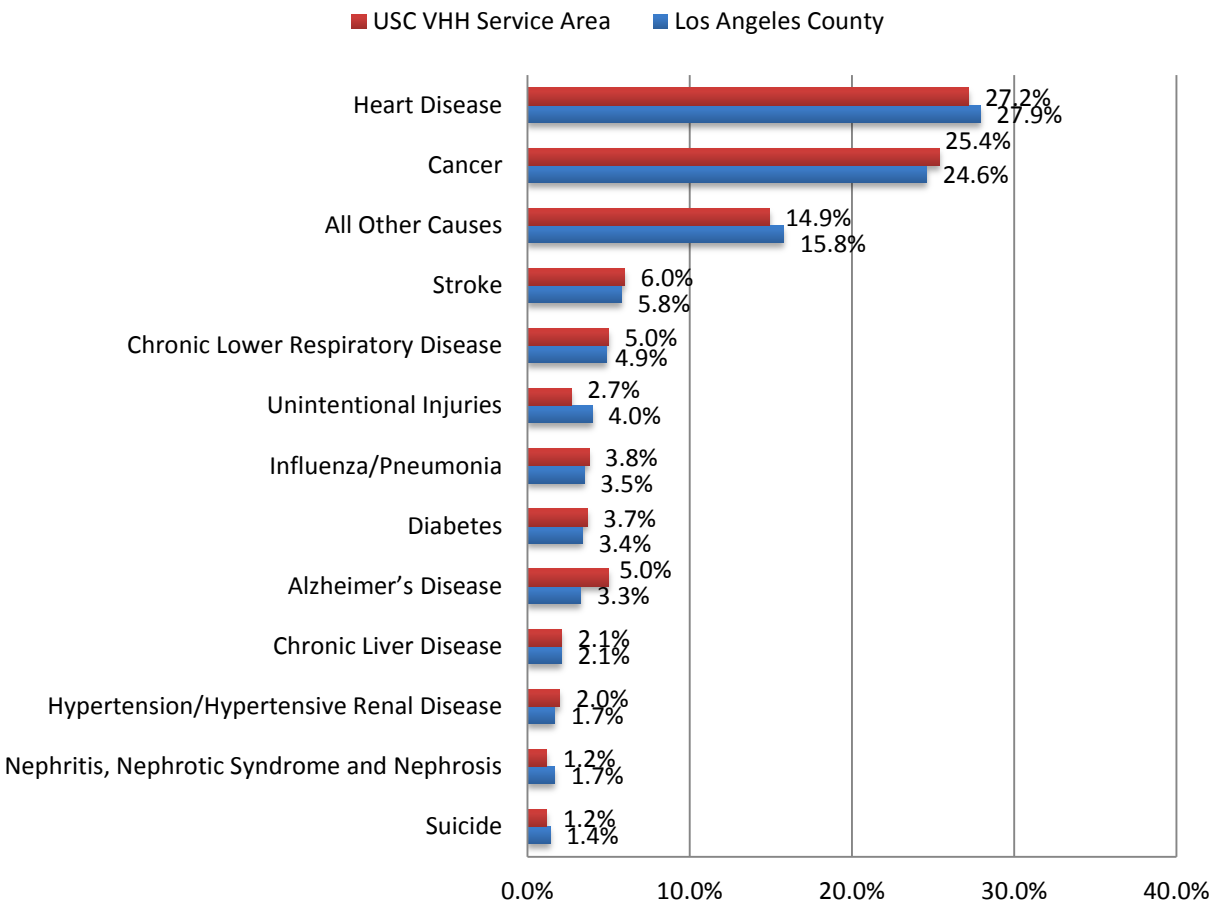
Age Group	USC VHH Service Area		Los Angeles County	
	Number	Percentage	Number	Percentage
Less than 1 year old	21	0.6%	613	1.1%
1–4 years old	2	0.1%	105	0.2%
5–14 years old	7	0.2%	159	0.3%
15–24 years old	29	0.8%	771	1.4%
25–34 years old	46	1.3%	1,018	1.8%
35–44 years old	72	2.0%	1,716	3.1%
45–54 years old	244	6.7%	4,123	7.5%
55–64 years old	437	12.1%	6,955	12.6%
65–74 years old	607	16.8%	8,572	15.5%
75–84 years old	906	25.0%	13,481	24.4%
85 years old and over	1,247	34.5%	17,818	32.2%
Total	3,618	100.0%	55,331	100.0%

Data source: California Department of Public Health (CDPH)
Data year: 2010/2012
Source geography: ZIP Code

Cause of Death

In 2010, the leading causes of death in the USC VHH service area were heart disease (27.2%), cancer (25.4%) and stroke (6.0%). The percentages for other causes of death are comparable to those reported for the county, except for Alzheimer's disease where the rate for the USC VHH service area (5%) is greater than that reported for the county (3.3%).

Total Deaths, by Cause



Total Deaths, by Cause, 2010, 2012

Cause	USC VHH Service Area		Los Angeles County	
	Number	Percentage	Number	Percentage
Heart disease	985	27.20%	15,451	27.90%
Cancer	918	25.40%	13,624	24.60%
All other causes	540	14.90%	8,718	15.80%
Stroke	216	6.00%	3,231	5.80%
Chronic lower respiratory disease	180	5.00%	2,710	4.90%
Alzheimer's disease	180	5.00%	1,827	3.30%
Influenza/pneumonia	136	3.80%	1,922	3.50%
Diabetes	133	3.70%	1,866	3.40%
Unintentional injuries	97	2.70%	2,213	4.00%
Chronic liver disease	76	2.10%	1,144	2.10%
Hypertension/hypertensive renal disease	71	2.00%	919	1.70%
Suicide	43	1.20%	760	1.40%
Nephritis, nephrotic syndrome, and nephrosis	43	1.20%	946	1.70%
Total	4,053	100.0%	55,331	100.0%

Data source: California Department of Public Health (CDPH)
Data year: 2010/2012
Source geography: ZIP Code

VII. Key Findings—Health Needs

In total, 17 unique health needs were identified and ranked through the CHNA process. The health needs can be separated into outcomes and drivers. Since Substance Abuse is considered both an outcome and a driver, it appears on both lists.

Prioritized Health Needs, Separated by Outcomes and Drivers

Rank	Health Outcomes
1	Mental Health
2	Obesity/Overweight
3	Substance Abuse
4	Diabetes
5	Cardiovascular Disease
6	Cancer
7	Stroke
8	Communicable/Infectious Diseases
9	Sexual Health / Sexual Transmitted Diseases

Rank	Health Drivers
1	Homelessness and Housing
2	Substance Abuse
3	Poverty
4	Access to Health Care
5	Dental Care
6	Violence/Injury/Safety
7	Preventive Wellness
8	Geriatric Support
9	Transportation

This section presents key findings on the health needs categorized by health outcomes and health drivers, in alphabetical order.

HEALTH OUTCOMES

Alcohol and Substance Abuse and Tobacco Use

Substance abuse (defined as use of alcohol, tobacco, prescription or illicit substances) has a major impact on individuals, families and communities. Substance abuse is considered both a driver of poor health outcomes and an outcome in and of itself. Key determinants—or drivers—of alcohol and substance abuse and tobacco use outcomes include biological, social, economic and environmental factors. Drivers of individual and population substance use and abuse outcomes include gender, race and ethnicity, age, income level, educational attainment and sexual orientation. Substance abuse is also strongly influenced by interpersonal, household, and community dynamics including access to alcohol and drugs. Among adolescents, family, social networks, and peer pressure are key influencers of substance use.[13] Understanding the relationship between key substance abuse drivers in the USC VHH service area and substance use and abuse patterns is important in improving substance abuse outcomes indicators.

[13] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/lhi/substanceabuse.aspx?tab=determinants. Accessed [August 1, 2016].

Alcohol Use

In 2015, more than half (53.0%) of adults (18+ years old) in the USC VHH service area reported drinking alcohol at least once in the past month, an increase from 51.3% in 2011. Almost one in seven (15.1%) adults reported engaging in binge drinking. Binge drinking is defined for females as consumption of four or more drinks and for males, consumption of five or more drinks on one occasion.

Adult Alcohol Use in the Past Month, 2015

Report Area	Drank Alcohol at Least Once	Binge Drinking
SPA 2–San Fernando Valley	55.0%	14.3%
SPA 3–San Gabriel Valley	51.5%	15.5%
SPA 4–Metro	47.2%	17.6%
USC VHH Service Area	53.0%	15.1%
Los Angeles County	51.9%	15.8%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA

The density of alcohol outlets is associated with heavy drinking, drinking and driving, higher rates of motor vehicle-related pedestrian injuries, child abuse and neglect, and other violence.[14] In 2016, the average number of alcohol outlets per 1,000 persons in the USC VHH service area was 0.5. The top rates were reported in Pasadena (91105; 6.1), Glendale (91203; 4.0) and Montrose (2.9).

[14] Stewart, K. (n.d.). How Alcohol Outlets Affect Neighborhood Violence. Calverton, MD. Available at http://urbanaillinois.us/sites/default/files/attachments/how-alcohol-outlets-affect-nbhd-violence.pdf. Accessed [August 1, 2016].

Number of Alcohol Outlets per 1,000 Persons, 2016

City	ZIP Code	Rate
Eagle Rock	90041	1.6
Highland Park	90042	0.9
Altadena	91001	0.5
La Cañada Flintridge	91011	1.6
Montrose	91020	2.9
Sunland-Tujunga	91040	1.1
Tujunga	91042	1.0
Pasadena	91103	2.0
Pasadena	91105	6.1
Glendale	91201	1.5
Glendale	91202	0.9
Glendale	91203	4.0
Glendale	91204	1.7
Glendale	91205	1.7
Glendale	91206	1.2
Glendale	91207	0.2
Glendale	91208	1.6
La Crescenta-Montrose	91214	0.8
Sylmar	91342	0.6
USC VHH Service Area		1.7
Los Angeles County		0.6

Data source: California Department of Alcoholic Beverage Control (ABC)
Data year: 2016
Source geography: ZIP Code

Prescription and Illicit Substance Use

In 2015, substance abuse throughout the USC VHH service area was lower than the rest of Los Angeles County. In particular, adults who reported misusing prescription drugs in the USC VHH service area (4.6%) was slightly lower than Los Angeles County (5.5%). Similarly, the percentage of adults who reported using marijuana in the past year in the USC VHH service area (11.3%) was slightly below the average for Los Angeles County (11.6%). Teen use of drugs such as marijuana, cocaine, and other drugs was also lower in the USC VHH service area (11.2%) when compared to the rest of the county (14.7%). In SPA 4, substance abuse is significantly higher than all other service areas for all three indicators described.

Prescription and Illicit Abuse, 2012, 2015

Report Area	Adults Who Reported Misusing Any Form of Prescription Drugs in the Past Year[1]	Adults Who Reported Using Any Form of Marijuana in the Past Year[1]	Teens Who Have Ever Tried Marijuana, Cocaine, Sniffing Glue, Other Drugs[2]
SPA 2–San Fernando Valley	3.9%	11.1%	9.4%
SPA 3–San Gabriel Valley	4.7%	7.7%	10.2%
SPA 4–Metro	7.0%	15.1%	18.2%
USC VHH Service Area	4.6%	11.3%	11.2%
Los Angeles County	5.5%	11.6%	14.7%

[1]Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA
[2]Data source: California Health Interview Survey
Data Year: 2012
Source geography: SPA

Alcohol and Drug Treatment

In 2011, a larger percentage (3.0%) of the population in the USC VHH service area needed or sought out treatment for an alcohol or substance abuse problems in the past five years when compared to Los Angeles County (2.5%).

In addition, a smaller percentage (15.7%) of the population in the USC VHH service area had needed help for a mental, emotional, or alcohol and drug issue in the past year when compared to Los Angeles County (18.0%). The percentage was particularly high in SPA 4 (21.9%).

Needed Help or Treatment for Mental, Emotional, Alcohol or Drug Issues, 2011

Report Area	Needed or Wanted Treatment for Alcohol or Drug Issues in the Past Five Years	Needed Help for Mental, Emotional, or Alcohol/Drug Issues
	Percentage	Percentage
SPA 2–San Fernando Valley	3.1%	14.2%
SPA 3–San Gabriel Valley	2.1%	14.4%
SPA 4–Metro	3.3%	21.9%
USC VHH Service Area	3.0%	15.7%
Los Angeles County	2.5%	18.0%

Data source: Los Angeles County Health Survey
Data year: 2011
Source geography: SPA

Tobacco Use

Tobacco use is the most preventable cause of death and disease in the United States. Each year, approximately 443,000 Americans die from tobacco-related illnesses. For every person who dies from tobacco use, 20 more suffer with at least one serious tobacco-related illness. In addition, tobacco use

costs the U.S. $193 billion annually in direct medical expenses and lost productivity.[15] The percent of self-reported smoking in the USC VHH service area (11.6%) is equivalent to that in Los Angeles County (13.3%).

The percentage of smoking in the USC VHH service area has decreased from 13.2% in 2011 to 11.6% in 2015. A smaller percentage of the population in the USC VHH service area reported smoking when compared to Los Angeles County (13.3%), with marginal differences between service planning areas ranging less than 2%.

Currently Smoking, 2015

Report Area	Percentage
SPA 2–San Fernando Valley	11.9%
SPA 3–San Gabriel Valley	10.5%
SPA 4–Metro	11.4%
USC VHH Service Area	11.6%
Los Angeles County	13.3%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA

Disparities

In 2015, most tobacco users in Los Angeles County were between the ages of 25 and 29 (18.9%). Another 14.9% were between the ages of 30 and 39 and another 13.8% were between the ages of 50 and 59. The lowest percentage of the population in Los Angeles County who regularly used tobacco was 65 years old or older (7.4%).

Tobacco Use by Age, 2015

Age Group	Percentage
18–24 years old	12.2%
25–29 years old	18.9%
30–39 years old	14.9%
40–49 years old	14.0%
50–59 years old	13.8%
60–64 years old	13.1%
65 years old and older	7.4%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

In addition, larger percentages of the population in Los Angeles County who used tobacco were American Indian/Alaskan Native (19.7%) and African-American (17.4%). Smaller percentages of the

[15] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=41. Accessed [August 1, 2016].

population in Los Angeles County who used tobacco were Latino (12.3%) and Asian/Pacific Islanders (13.1%).

Tobacco Use by Ethnicity, 2015

Age Group	Percentage
Latino	12.3%
White	13.4%
African-American	17.4%
Asian/Pacific Islander	13.1%
American Indian/Alaskan Native	19.7%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

Stakeholder Feedback

Stakeholders identified areas of heavy smoking throughout the central and southern parts of Glendale and among members of the Armenian population. Stakeholders observed that the teen population was drawn to both vaping and hookah smoking in addition to smoking cigarettes. Additionally, stakeholders discussed concerns about the abuse of over-the-counter drugs and prescription drugs, as well as alcoholism.

Cancer

Cancer is the second leading cause of death in the United States, claiming the lives of more than half a million Americans every year[16]. In 2009, cancer incidence rates per 100,000 persons indicate that the three most common cancers among men in the United States were prostate cancer (137.7), lung cancer (64.3), and colorectal cancer (42.5). Among women, the leading causes of cancer deaths were breast cancer (123.1), lung cancer (54.1), and colorectal cancer (37.1).[17] Research has shown that early detection through regular cancer screenings can help reduce the number of new cancer cases and, ultimately, deaths.[18] Research has also shown that cancer is associated with certain diseases and behaviors including obesity, tobacco, alcohol, certain chemicals, some viruses and bacteria, a family history of cancer, poor diet, and lack of physical activity.[19]

Prevalence

In Los Angeles County, the top invasive cancer incidence rates per 100,000 persons were female breast cancer (113.8), prostate cancer (92.6) and lung cancer (35.9).

[16] Centers for Disease Control and Prevention. Using Science to Prevent Cancer. Atlanta, GA. Available at http://www.cdc.gov/Features/CancerResearch/. Accessed [August 1, 2016].

[17] Centers for Disease Control and Prevention. Invasive Cancer Incidence. Atlanta, GA. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6207a1.htm. Accessed [August 1, 2016].

[18] Centers for Disease Control and Prevention. Cancer Prevention. Atlanta, GA. Available at http://www.cdc.gov/cancer/dcpc/prevention/index.htm. Accessed [August 1, 2016].

[19] National Cancer Institute. Cancer Prevention Overview. Available at http://www.cancer.gov/cancertopics/pdq/prevention/overview/patient/page3. Bethesda, MD. Accessed [August 1, 2016].

Top 10 Cancer Sites Rates per 100,000 pop.

	Cancer Site	Rate
1	Female Breast	113.8
2	Prostate	92.6
3	Lung and Bronchus	35.9
4	Colon and Rectum	35.7
5	Corpus and Uterus, NOS*	25.6
6	Non-Hodgkin Lymphoma	18.4
7	Urinary Bladder	15.2
8	Thyroid	13.7
9	Melanomas of the Skin	13.1
10	Kidney and Renal Pelvis	12.7

Source: Centers for Disease Control, United States Cancer Statistics (USCS)
Data Year: 2013
Source Geography: County
*NOS: non-invasive

Clinical Interventions

Of all cancer-related surgeries performed, the top performed at USC VHH are breast (60%), colon (17.8%), and prostate and rectum (both at 9%). Breast cancer and colon cancer are also the top two surgeries performed in Los Angeles County and the state.

Volume of Cancer Surgeries Performed at USC Verdugo Hills Hospital, 2014

Type of Cancer	USC Verdugo Hills Hospital		Los Angeles County		California	
	Number	Percent	Number	Percent	Number	Percent
Bladder	0	0.0%	362	2.5%	897	1.8%
Brain	1	2.2%	777	5.4%	2,858	5.6%
Breast	27	60.0%	6,176	43.2%	25,290	49.7%
Colon	8	17.8%	1,977	13.8%	7,335	14.4%
Esophagus	0	0.0%	118	0.8%	354	0.7%
Liver	0	0.0%	503	3.5%	1,298	2.6%
Lung	1	2.2%	913	6.4%	3,269	6.4%
Pancreas	0	0.0%	286	2.0%	877	1.7%
Prostate	4	8.9%	2,117	14.8%	5,434	10.7%
Rectum	4	8.9%	638	4.5%	2,239	4.4%
Stomach	0	0.0%	443	3.1%	1,030	2.0%
Total	45	100.0%	14,310	100.0%	50,881	100.0%

Data source: Office of Statewide Health Planning and Development (OSHPD)
Data year: 2014
Source geography: Hospital

Screenings

In 2015, cervical cancer screenings were slightly higher for the population living in the USC VHH service area (85.2%) relative to the rest of Los Angeles County (84.4%). SPA 2 had the highest population (88.2%) receiving pap smears in the last three years of any of the three SPAs within the USC VHH service area.

In regards to breast cancer screenings, the population living within the USC VHH service area (77.8%) receiving mammograms in the last two years was slightly higher than in Los Angeles County (77.3%). The range among SPAs was much smaller (less than 2%) when compared to cervical cancer screenings.

Cancer Screenings, 2015

Service Planning Area	Cervical cancer screening (pap smear) in last 3 years	Breast cancer screening (mammogram) in the last 2 years
SPA 2–San Fernando Valley	88.2%	77.9%
SPA 3–San Gabriel Valley	81.2%	76.7%
SPA 4–Metro	78.4%	78.5%
USC VHH Service Planning Area	85.2%	77.8%
Los Angeles County	84.4%	77.3%
Healthy People 2020	>=93.0%	>=81.1%

Source: Los Angeles County Health Survey
Data Year: 2015
Source Geography: SPA

Mortality

In 2012, a total of 913 people died from cancer in the USC VHH service area, which represented a quarter (25.3%) of all deaths. This percentage is higher than that reported for and California (23.7%). The highest percentages of death were reported for 91203 (30.2%), La Cañada Flintridge (29.9%), and 91205 (28.4%).

Total Cancer-Related Deaths in 2012

City	ZIP Code	Number of Deaths Cancer-Related	Total Number of Deaths	Percent of Cancer-Related Deaths
Eagle Rock	90041	49	180	27.2%
Highland Park	90042	65	265	24.5%
Altadena	91001	75	266	28.2%
La Cañada Flintridge	91011	41	137	29.9%
Montrose	91020	16	73	21.9%
Sunland-Tujunga	91040	49	188	26.1%
Tujunga	91042	45	180	25.0%
Pasadena	91103	56	261	21.5%
Pasadena	91105	24	111	21.6%
Glendale	91201	45	176	25.6%
Glendale	91202	35	138	25.4%
Glendale	91203	26	86	30.2%
Glendale	91204	32	140	22.9%
Glendale	91205	77	271	28.4%
Glendale	91206	67	253	26.5%
Glendale	91207	18	75	24.0%
Glendale	91208	24	109	22.0%
La Crescenta-Montrose	91214	47	178	26.4%
Sylmar	91342	122	519	23.5%
USC VHH Service Area		913	3,606	25.3%
California		57,514	242,461	23.7%

Source: California Department of Public Health
Data Year: 2012
Source Geography: ZIP

Disparities

African American/Black persons in Los Angeles County demonstrated higher incidence rates of cancer compared to the County and other races. Relative to the female breast cancer rate reported for the county (113.8 per 100,000 population), Black and White women were disproportionally affected at 122.6 and 116.2 per 100,000 population, respectively.

Further, the prostate cancer incidence rate for African American/Black men was greater than 1.5 times (147.9) the rate reported for Los Angeles County men (92.6); while the rate of lung and bronchus cancer was also higher for African American/Black populations (51.3) relative to County residents (35.9).

Top 10 Cancer Sites Rates per 100,000 pop., by Race, 2013

	White	African American/Black	Asian/Pacific Islander	Hispanic
1	Female Breast 116.2	Prostate 147.9	Female Breast 98.8	Female Breast 84.6
2	Prostate 83.6	Female Breast 122.6	Prostate 41.8	Prostate 82.2
3	Lung and Bronchus 35.2	Lung and Bronchus 51.3	Colon and Rectum 33.6	Colon and Rectum 30.3
4	Colon and Rectum 34.6	Colon and Rectum 44.1	Lung and Bronchus 30.8	Corpus and Uterus, NOS 24.0
5	Corpus and Uterus, NOS 26.7	Corpus and Uterus, NOS 26.0	Corpus and Uterus, NOS 20.4	Lung and Bronchus 22.3
6	Non-Hodgkin Lymphoma 19.6	Kidney and Renal Pelvis 15.3	Thyroid 15.5	Non-Hodgkin Lymphoma 16.5
7	Urinary Bladder 16.9	Pancreas 14.0	Non-Hodgkin Lymphoma 13.8	Kidney and Renal Pelvis 13.8
8	Melanomas of the Skin 16.4	Non-Hodgkin Lymphoma 13.4	Stomach 12.9	Liver and Intrahepatic Bile Duct 12.5
9	Thyroid 14.1	Urinary Bladder 12.9	Ovary 11.3	Thyroid 11.8
10	Kidney and Renal Pelvis 13.6	Myeloma 11.6	Liver and Intrahepatic Bile Duct 11.0	Stomach 11.0

Associated Drivers of Cancer

A primary method of preventing cancer is screening for cervical, colorectal, and breast cancers[20]. The most common risk factors for cancer include growing older, obesity, tobacco, alcohol, sunlight exposure, certain chemicals, some viruses and bacteria, family history of cancer, poor diet, and lack of physical activity[21].

Stakeholder Feedback

Stakeholders recognized a disconnect between preventive cancer services and the communities served by USC VHH. Specifically, stakeholders observed that the Armenian community, African American communities and Hispanic/Latino communities do not actively participate in preventive cancer care, signaling a need for additional engagement in and outreach to these communities.

[20] Centers for Disease Control and Prevention. Cancer Prevention. Atlanta, GA. Available at http://www.cdc.gov/cancer/dcpc/prevention/index.htm. Accessed [August 7, 2016].

[21] National Cancer Institute. Risk Factors for Cancer. Bethesda, MD. Available at http://www.cancer.gov/about-cancer/causes-prevention/risk. Accessed [August 7, 2016].

Cardiovascular Disease

Cardiovascular disease—also called heart disease and coronary heart disease—includes several health conditions related to plaque buildup in the walls of the arteries, or atherosclerosis. As plaque builds up, the arteries narrow, restricting blood flow and creating the risk of heart attack. Currently, more than one in three adults (81.1 million) in the United States lives with one or more types of cardiovascular disease. In addition to being one of the leading causes of death in the United States, heart disease results in serious illness and disability, decreased quality of life, and hundreds of billions of dollars in economic loss every year.[22]

Cardiovascular disease encompasses and/or is closely linked to a number of health conditions that include arrhythmia, atrial fibrillation, cardiac arrest, cardiac rehab, cardiomyopathy, cardiovascular conditions in childhood, high cholesterol, congenital heart defects, diabetes, heart attack, heart failure, high blood pressure, HIV, heavy alcohol consumption, metabolic syndrome, obesity, pericarditis, peripheral artery disease (PAD), and stroke.[23]

Prevalence and Management

In 2014, the percentage of the population in the USC VHH service area diagnosed with heart disease (4.5%) was smaller than in Los Angeles County (5.7%), with a larger percentage in SPA 3 (7.0%). The prevalence of heart disease in the USC VHH service area decreased in 2014 from 5.4% in 2009.

Of those in the USC VHH service area with heart disease, more than half (55.3%) receive assistance from a care provider in managing their disease, similar to Los Angeles County (55.5%). An even larger percentage of the population in SPA 4 (61.5%) received assistance from a care provider.

Heart Disease Indicators, 2014

Report Area	Heart Disease Prevalence Percentage	Heart Disease Management Percentage
SPA 2–San Fernando Valley	4.5%	54.8%
SPA 3–San Gabriel Valley	7.0%	50.1%
SPA 4–Metro	2.4%	61.5%
USC VHH Service Area	4.5%	55.3%
Los Angeles County	5.7%	55.5%

Data source: California Health Interview Survey (CHIS)
Data year: 2014
Source geography: SPA

Hospitalizations

In 2012, the hospitalization rate resulting from heart failure was much higher (422.7) per 100,000 persons in the USC VHH service area when compared to California (366.6). The highest heart failure hospitalization rates were reported in ZIP Codes 91205 (678.1), and 91204 (634.0).

[22] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=21. Accessed [August 1, 2016].

[23] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=21. Accessed [August 1, 2016].

Hospitalizations Resulting from Heart Failure per 100,000 Persons, 2012

City	ZIP Code	Rate
Eagle Rock	90041	381.1
Highland Park	90042	248.1
Altadena	91001	325.5
La Cañada Flintridge	91011	197.3
Montrose	91020	455.8
Sunland-Tujunga	91040	540.8
Tujunga	91042	436.4
Pasadena	91103	372.7
Pasadena	91105	339.8
Glendale	91201	510.3
Glendale	91202	451.9
Glendale	91203	326.5
Glendale	91204	634.0
Glendale	91205	678.1
Glendale	91206	535.4
Glendale	91207	567.8
Glendale	91208	316.3
La Crescenta-Montrose	91214	324.3
Sylmar	91342	377.2
USC VHH Service Area		422.7
Los Angeles County		366.6
California		339.0

Data source: Office of Statewide Health Planning and Development (OSHPD)
Data year: 2012
Source geography: ZIP Code

Mortality

In 2012, a higher heart disease mortality rate per 10,000 persons was reported in the USC VHH service area (19.6) when compared to California (15.5), particularly in ZIP Codes 91207 (31.6), 91105 (30.6), and 91103 (28.8).

Heart Disease Mortality Rate per 10,000 Persons, 2012

City	ZIP Code	Rate
Eagle Rock	90041	16.4
Highland Park	90042	11.3
Altadena	91001	18.1
La Cañada Flintridge	91011	9.9
Montrose	91020	19.9
Sunland-Tujunga	91040	22.8
Tujunga	91042	16.9
Pasadena	91103	28.8
Pasadena	91105	30.6
Glendale	91201	21.7
Glendale	91202	15.2
Glendale	91203	14.2
Glendale	91204	24.6
Glendale	91205	17.6
Glendale	91206	22.1
Glendale	91207	31.6
Glendale	91208	20.5
La Crescenta-Montrose	91214	13.4
Sylmar	91342	17.4
USC VHH Service Area		19.6
California		15.5

Data source: California Department of Public Health (CDPH)
Data year: 2012
Source geography: ZIP Code

Cholesterol Prevalence and Management

In 2015, almost a quarter (24.9%) of the population in the USC VHH service area was diagnosed with high cholesterol, very similar when compared to Los Angeles County (25.2%). SPA 4 had the largest percentage (25.7%).

Of those in the USC VHH service area with high cholesterol, a slightly higher percentage (69.5%) received disease management services for the condition than in Los Angeles County (68.7%). In particular, the population in SPA 3 reflected a higher percentage of individuals using medication to manage high levels of cholesterol.

Cholesterol Indicators, 2015

Report Area	Cholesterol Prevalence[1]	Cholesterol Management[2]
	Percentage	Percentage
SPA 2–San Fernando Valley	24.9%	68.0%
SPA 3–San Gabriel Valley	23.7%	81.4%
SPA 4–Metro	25.7%	65.1%
USC VHH Service Area	24.9%	69.5%
Los Angeles County	25.2%	68.7%

[1]Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA
[2]Data source: California Health Interview Survey
Data year: 2014
Source geography: SPA

Hypertension Prevalence and Management

In 2015, close to a quarter (23.7%) of the population in the USC VHH service area was diagnosed with hypertension (or high blood pressure), slightly more than in Los Angeles County (23.5%). SPA 3 had a higher percentage (25.3%).In 2014, more than half (65.5%) of the population with high blood pressure in the USC VHH service area took medication to control their high blood pressure—not as many as in Los Angeles County (67.2%). The rate was higher in SPA 3 (69.9%).

Hypertension Indicators, 2014, 2015

Report Area	Hypertension Prevalence[1]	High Blood Pressure Management[2]
	Percentage	Percentage
SPA 2–San Fernando Valley	23.7%	64.2%
SPA 3–San Gabriel Valley	25.3%	69.9%
SPA 4–Metro	22.4%	66.2%
USC VHH Service Area	23.7%	65.5%
Los Angeles County	23.5%	67.2%

[1]Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA
[2]Data source: California Health Interview Survey
Data year: 2014
Source geography: SPA

Hypertension Mortality

In 2012, 985 people in the USC VHH service area died as a result of hypertension or some other heart-related disease, comprising 27.2% of such deaths in Los Angeles County (n=15,916). ZIP code 91207 had the highest percentage (40.0%) of hypertension mortality.

Hypertension Mortality, 2012

City	ZIP Code	Number	Percentage
Eagle Rock	90041	47	26.1%
Highland Park	90042	70	26.4%
Altadena	91001	66	24.8%
La Cañada Flintridge	91011	20	14.6%
Montrose	91020	17	23.3%
Sunland-Tujunga	91040	51	27.1%
Tujunga	91042	48	26.7%
Pasadena	91103	81	31.0%
Pasadena	91105	36	32.4%
Glendale	91201	48	27.3%
Glendale	91202	36	26.1%
Glendale	91203	20	23.3%
Glendale	91204	38	27.1%
Glendale	91205	64	24.7%
Glendale	91206	75	29.6%
Glendale	91207	30	40.0%
Glendale	91208	33	30.3%
La Crescenta-Montrose	91214	41	23.0%
Sylmar	91342	159	30.6%
USC VHH Service Area		985	27.2%
Los Angeles County		15,916	

Data source: California Department of Public Health (CDPH)
Data year: 2012
Source geography: ZIP Code

Disparities

The burden of cardiovascular disease is disproportionately distributed across the population. Significant disparities are evident based on gender, age, race/ethnicity, geographic area, and socioeconomic status with regard to prevalence of risk factors, access to treatment, appropriate and timely treatment, treatment outcomes, and mortality.[24]

In 2015, more than half (54.2%) of the population age 65 and older in Los Angeles County were diagnosed with hypertension. Similarly, nearly half (42.5%) of the population between age 60 and 64 had hypertension, nearly a third (31.1%) of the population between age 50 and 59, and 17.6% of those between age 40 and 49. The prevalence of hypertension diminishes among the younger population—only 11.4% of those between age 30 and 39, 7.9% of those between age 25 and 29, and 6.2% of those between age 18 and 24.

[24] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=21. Accessed [August 1, 2016].

Hypertension Prevalence by Age, 2015

Age Group	Percentage
18–24 years old	6.2%
25–29 years old	7.9%
30–39 years old	11.4%
40–49 years old	17.6%
50–59 years old	31.1%
60–64 years old	42.5%
65 years old and older	54.2%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

By ethnicity, exactly one-third of the African-American population (33.3%) and over a quarter of the White population (27.5%) in Los Angeles County had hypertension, along with almost a quarter (24.2%) of the American Indian/Alaskan Native population, and slightly over one-fifth (20.4%) of the Asian/Pacific Islander population. The Latino population had the lowest percentage (19.7%) of hypertension prevalence in Los Angeles County.

Hypertension Prevalence by Ethnicity, 2015

Age Group	Percentage
Latino	19.7%
White	27.5%
African American	33.3%
Asian/Pacific Islander	20.4%
American Indian/Alaskan Native	24.2%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

In 2015, nearly half (47.5%) of the population in Los Angeles County who were 65 or older had high cholesterol, as did those between the ages of 60 and 64 (41.2%). Over a third (34.5%) of those between the ages of 50 and 59 had high cholesterol, and approximately a quarter (24.8%) of those between the ages of 40 and 49. Another 15.0% of those between the ages of 30 and 39 had high cholesterol, as well as 11.8% of the population between the ages of 25 and 29, a number that has doubled since 2011. Another 5.6% between the ages of 18 and 24 have been diagnosed with high cholesterol.

Cholesterol Prevalence by Age, 2015

Age Group	Percentage
18–24 years old	5.6%
25–29 years old	11.8%
30–39 years old	15.0%
40–49 years old	24.8%
50–59 years old	34.5%
60–64 years old	41.2%
65 years old and older	47.5%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

Associated Drivers of Cardiovascular Disease

The leading risk factors for cardiovascular disease are high blood pressure, high cholesterol, smoking, diabetes, poor diet, physical inactivity, and overweight and obesity. Cardiovascular disease is closely linked with and can often lead to stroke.[25]

Some health conditions, as well as lifestyle and genetic factors, can put people at a higher risk for developing high cholesterol. Age is a contributing factor; as people get older, cholesterol level tends to rise. Diabetes can also lead to the development of high cholesterol. Some behaviors can also lead to high cholesterol, including a diet high in saturated fats, trans-fatty acids (trans fats), dietary cholesterol, or triglycerides. Being overweight and physical inactivity can also contribute to high cholesterol.

Smoking, obesity, the regular consumption of salt and fat, excessive drinking, and physical inactivity are risk factors for hypertension. People who have previously had a stroke, have high cholesterol, or have heart or kidney disease are also at higher risk of developing hypertension.

Stakeholder Feedback

Stakeholders observed that overall, the service area population would benefit from additional outreach and education around the symptoms and underlying causes of cardiovascular disease. In clinical settings, providers observe that cardiovascular disease is linked to falls and shortness of breath, stroke and heart failure among the aging population in the service area.

Communicable and Infectious Diseases

Communicable diseases include hepatitis B, tuberculosis, encephalitis, and HIV/AIDS, among others. Transmission is from person to person and even from animal to person, and spread is airborne or through contact with bodily fluids[26].

[25] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=21. Accessed [August 1, 2016].

[26] California Department of Public Health. Department of Communicable Disease Control. Research Highlights. Available at http://www.cdph.ca.gov/programs/dcdc/Pages/DCDCResearchHighlights.aspx. Accessed [September 1, 2016].

Hepatitis B

Hepatitis B is caused by a virus that attacks the liver and can cause a lifelong infection, cirrhosis of the liver, liver cancer, liver failure, and eventually death[27]. Hepatitis B is contagious and may be contracted through blood or other body fluid exchanges through the skin, eyes or mouth. It can also be transmitted from mother to child at birth[28]. Symptoms of Hepatitis B are similar to the flu and may include jaundice although some individuals do not experience any symptoms at all[29]. In the United States, it is estimated that 800,000 to 1.4 million individuals have Hepatitis B[30]. Individuals most at risk include those who have sex with an infected person, have multiple sex partners, live with someone who is infected, are exposed to blood at work, hemodialysis patients, or travelers to countries with high rates of Hepatitis B[31].

Prevalence

In 2013, the prevalence of hepatitis B per 100,000 adults in the USC VHH service area (0.5) was slightly lower than that of Los Angeles County (0.6). In total, 16.4% of Hepatitis B cases in Los Angeles County were estimated to be within the USC VHH service area.

Hepatitis B Prevalence Rate per 100,000 Adults, 2013

Report Area	Number	Percent	Rate
SPA 2–San Fernando Valley	9	16.4%	0.4
SPA 3–San Gabriel Valley	9	16.4%	0.6
SPA 4–Metro	9	16.4%	0.8
Unknown	2	3.6%	-
USC VHH Service Area		16.4%	0.5
Los Angeles County	55	100.0%	0.6

Data source: Los Angeles County Department of Public Health, Acute Communicable Disease Control Program, Annual Morbidity Report and Special Studies Report
Data year: 2013
Source geography: SPA

Tuberculosis

Tuberculosis is caused by bacteria (i.e. mycobacterium tuberculosis) that usually attacks the lungs but can also attack the kidneys, spine, and brain[32]. It is spread through the air when an infected person coughs, sneezes, speaks, or sings[33]. There are two types of tuberculosis infections: (1) a latent infection which is active and therefore not contagious but may become active; and (2) the case in which the

[27] Center for Disease Control and Prevention. Hepatitis B Vaccinations. Atlanta, GA. Available at http://www.cdc.gov/vaccines/vpd-vac/hepb/. Accessed [August 1, 2016].
[28] National Institutes of Health. Hepatitis B. Atlanta, GA. Available at http://www.nlm.nih.gov/medlineplus/hepatitisb.html. Accessed [August 1, 2016].
[29] National Institutes of Health. Hepatitis B. Atlanta, GA. Available at http://www.nlm.nih.gov/medlineplus/hepatitisb.html. Accessed [August 1, 2016].
[30] Center for Disease Control and Prevention. Hepatitis B FAQ for the Health Professionals. Atlanta, GA. Available at http://www.cdc.gov/hepatitis/hbv/hbvfaq.htm#overview. Accessed [August 2, 2016].
[31] Center for Disease Control and Prevention. Hepatitis B FAQ for the Health Professionals. Atlanta, GA. Available at http://www.cdc.gov/hepatitis/hbv/hbvfaq.htm#overview. Accessed [August 2, 2016].
[32] Center for Disease Control and Prevention. Tuberculosis (TB). Atlanta, GA. Available at http://www.cdc.gov/tb/topic/basics/default.htm. Accessed [August 1, 2016].
[33] Center for Disease Control and Prevention. Tuberculosis (TB). Atlanta, GA. Available at http://www.cdc.gov/tb/topic/basics/default.htm. Accessed [August 1, 2016].

bacteria is active and able to spread[34]. Individuals who are susceptible to a tuberculosis infection include people who are HIV positive, have become recently infected with the tuberculosis bacteria, have other health conditions that make it difficult for the body to fight off bacteria, abuse alcohol or use illegal drugs, or were exposed to the bacteria but were not treated in the past [35]. Overall, tuberculosis is on the decline in California, however, in 2013 there was a 6% increase in Los Angeles County over 2012[36].

Prevalence

In 2013, the prevalence of tuberculosis in Los Angeles County was highest in SPA 3 (24.8%), followed by SPA 4 (18.0%) and SPA 2 (17.8%), all service areas that encompass the USC VHH service area (18.9%). In comparison, Los Angeles County accounts for 30.5% of the tuberculosis incidents in the state of California.

Proportion of Tuberculosis Cases by Service Planning Area, 2013

Report Area	Number	Percent
SPA 2–San Fernando Valley	118	17.8%
SPA 3–San Gabriel Valley	164	24.8%
SPA 4–Metro	119	18.0%
Unknown	4	0.2%
USC VHH Service Area		18.9%
Los Angeles County	662	30.5%
California	2,169	22.6%

Data source: Los Angeles County Department of Public Health, Acute Communicable Disease Control Program, Annual Morbidity Report and Special Studies Report
Data year: 2013
Source geography: SPA

Disparities

The prevalence of Tuberculosis is significantly higher in Hispanic and Asian populations, accounting for 85% of the total number of tuberculosis cases in Los Angeles County in 2013.

Stakeholder Feedback

Stakeholders stated that there are a growing number of community members with tuberculosis. They also shared that many who have tuberculosis do not seek treatment early on that in turn causes the transmission of the disease to others.

[34] Center for Disease Control and Prevention. Tuberculosis (TB). Atlanta, GA. Available at http://www.cdc.gov/tb/topic/basics/default.htm. Accessed [August 1, 2016].

[35] Center for Disease Control and Prevention. Tuberculosis (TB). Atlanta, GA. Available at http://www.cdc.gov/tb/topic/basics/default.htm. Accessed [August 1, 2016].

[36] Los Angeles County Department of Public Health Tuberculosis Control Program. Tuberculosis in Los Angeles County: A Snapshot. Los Angeles, CA. Available at http://publichealth.lacounty.gov/tb/docs/LAC_TBFactSheet_Final%20122014.pdf. Accessed [August 1, 2016].

Diabetes

Diabetes affects an estimated 23.6 million people and is the seventh leading cause of death in the United States. Diabetes lowers life expectancy by up to 15 years, increases the risk of heart disease by two to four times, and is the leading cause of kidney failure, lower-limb amputations, and adult-onset blindness.[37] A diabetes diagnosis can also indicate an unhealthy lifestyle—a risk factor for further health issues—and is also linked to obesity.

Given the steady rise in the number of people with diabetes, and the earlier onset of Type 2 diabetes, there is growing concern about substantial increases in diabetes-related complications and the potential to impact and overwhelm the health care system. There is a clear need to take advantage of recent discoveries about the individual and societal benefits of improved diabetes management and prevention by bringing life-saving findings into wider practice, and complementing those strategies with efforts in primary prevention among those at risk for developing diabetes.[38]

In addition, evidence is emerging that diabetes is associated with other co-morbidities, including cognitive impairment, incontinence, fracture risk, and cancer risk and prognosis.[39]

Prevalence and Disease Management

In 2011, 9.0% of the population 18 years old and older in the USC VHH service area had been diagnosed with diabetes, a smaller percentage than in Los Angeles County (9.8%). In SPA 4, a larger percentage was diagnosed with diabetes (11.6%). Diabetes diagnoses in the service area have increased from 8.1% of the population in 2011.

In 2009, over two-thirds (69.2%) of the diabetic population had met with their medical provider to develop a diabetes care plan, less than the percentage (77.8%) in Los Angeles County. A substantially larger percentage of the population in SPA 3 (86.6%) had a diabetes management plan, however, when compared to the County.

[37] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at https://www.healthypeople.gov/2020/topics-objectives/topic/diabetes. Accessed [August 2, 2016].

[38] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at https://www.healthypeople.gov/2020/topics-objectives/topic/diabetes. Accessed [August 1, 2016].

[39] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at https://www.healthypeople.gov/2020/topics-objectives/topic/diabetes. Accessed [August 1, 2016].

Diabetes Indicators, 2014, 2015

Report Area	Diabetes Prevalence[1]	Diabetes Management[2]
	Percentage	Percentage
SPA 2–San Fernando Valley	8.2%	66.7%
SPA 3–San Gabriel Valley	9.1%	86.6%
SPA 4–Metro	11.6%	63.3%
USC VHH Service Area	9.0%	69.2%
Los Angeles County	9.8%	77.8%

[1]Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA
[2]Data source: California Health Interview Survey
Data year: 2014
Source geography: SPA

Hospitalizations

In 2012, the diabetes hospitalization rate per 100,000 persons under 18 years of age in the USC VHH service area was significantly less than (20.6) that of California (31.2). ZIP Codes 91342 (33.5) and 91205 (30.3) reported rates similar to California, but ZIP Code 91203 reported a significantly higher rate (52.6).

The diabetes hospitalization rate per 100,000 adults in the USC VHH service area (140.5) was only slightly lower when compared to California (142.6), but rates among adults were much higher in ZIP Codes 91103 (411.7), 91020 (210.4), 91204 (181.1), and 91342 (180.4).

In 2012, the hospitalization rate per 100,000 persons resulting from uncontrolled diabetes was over double (17.7) in the USC VHH service area when compared to California (8.6), and particularly higher in ZIP Codes 91020 (70.1), 91103 (31.9), 91105 (25.5), and 91201 (22.6).

Diabetes Hospitalizations per 100,000 Persons, 2012

City	ZIP Code	Diabetes Hospitalizations (Youth)	Diabetes Hospitalizations (Adults)	Hospitalizations Resulting from Uncontrolled Diabetes
Eagle Rock	90041	12.0	104.9	7.0
Highland Park	90042	14.1	153.0	8.1
Altadena	91001	23.7	172.3	16.4
La Cañada Flintridge	91011	12.9	54.3	4.9
Montrose	91020	-	210.4	70.1
Sunland-Tujunga	91040	15.8	134.1	8.9
Tujunga	91042	11.5	112.6	14.1
Pasadena	91103	30.8	411.7	31.9
Pasadena	91105	-	110.4	25.5
Glendale	91201	7.5	140.0	22.6
Glendale	91202	16.8	101.4	8.4
Glendale	91203	52.6	85.2	14.2
Glendale	91204	19.5	181.1	19.4
Glendale	91205	30.3	160.3	13.1
Glendale	91206	17.9	108.8	14.7
Glendale	91207	-	157.7	-
Glendale	91208	20.6	55.8	12.4
La Crescenta-Montrose	91214	9.5	36.0	-
Sylmar	91342	33.5	180.4	9.8
USC VHH Service Area		20.6	140.5	17.7
California		31.2	142.6	8.6

Data source: Office of Statewide Health Planning and Development (OSHPD)
Data year: 2012
Source geography: ZIP Code

Mortality

In 2012, the diabetes mortality rate per 10,000 persons in the USC VHH service area was slightly higher (2.3) than California (2.1). In particular, ZIP codes 91020 (5.8), 91201 (3.6), 91342 (3.4), and 91001 (3.3) had higher rates of mortality caused by diabetes.

Diabetes Mortality Per 10,000 Persons, 2012

City	ZIP Code	Rate
Eagle Rock	90041	2.8
Highland Park	90042	1.8
Altadena	91001	3.3
La Cañada Flintridge	91011	2.5
Montrose	91020	5.8
Sunland-Tujunga	91040	2.7
Tujunga	91042	2.5
Pasadena	91103	2.8
Pasadena	91105	1.7
Glendale	91201	3.6
Glendale	91202	1.3
Glendale	91203	0.7
Glendale	91204	1.3
Glendale	91205	2.9
Glendale	91206	1.2
Glendale	91207	1.1
Glendale	91208	1.2
La Crescenta-Montrose	91214	2.0
Sylmar	91342	3.4
USC VHH Service Area		2.3
California		2.1

Data source: California Department of Public Health (CDPH)
Data year: 2012
Source geography: ZIP Code

Disparities

In 2015, one in five (21.2%) residents over the age 65 older in Los Angeles County was identified as diabetic. Another 21.7% of the population between the ages of 60 and 64 were diabetic, as was another 15.6% of the population age 50 to 59. The percentage of diabetes prevalence drops with age group.

Diabetes Prevalence by Age, 2015

Age Group	Percentage
18–24 years old	1.2%
25–29 years old	2.0%
30–39 years old	3.0%
40–49 years old	8.3%
50–59 years old	15.6%
60–64 years old	21.7%
65 years old and older	21.2%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

In addition, larger percentages of the population in Los Angeles County who were diabetic are American Indian/Alaskan Natives (15.2%) or African-American (13.7%).

Diabetes Prevalence by Ethnicity, 2015

Age Group	Percentage
Latino	10.7%
White	8.2%
African-American	13.7%
Asian/Pacific Islander	8.2%
American Indian/Alaskan Native	15.2%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

Associated Drivers of Diabetes

Factors associated with diabetes include being overweight; having high blood pressure, high cholesterol, high blood sugar (or glucose); physical inactivity, smoking, unhealthy eating, age, race, gender, and having a family history of diabetes.[40]

Stakeholder Feedback

Stakeholders identified diabetes as one of the top three most important health problems in the Glendale community. They also added that outreach regarding available community resources and family-based intervention is important, especially among African American and Latino/Hispanic subpopulations. Care providers expressed that prevention and maintenance education, as well as expanded access to preventive and maintenance care, would support the communities most impacted by diabetes.

Mental Health

Mental illness is a common cause of disability. Untreated disorders may leave individuals at risk for substance abuse, self-destructive behavior, and suicide. Additionally, mental health disorders can have a serious impact on physical health and are associated with the prevalence, progression, and outcome of chronic diseases.[41] Suicide is considered a major preventable public health problem. In 2010, suicide was the tenth leading cause of death among Americans of all ages, and the second leading cause of death among people between the ages of 25 and 34.[42] An estimated 11 attempted suicides occur per every suicide death.

[41] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=28. Accessed [August 2, 2016].

[42] Centers for Disease Control and Prevention. 10 Leading Causes of Death by Age Group, United States – 2010. Available at http://www.cdc.gov/injury/wisqars/pdf/10LCID_All_Deaths_By_Age_Group_2010-a.pdf. Accessed [August 2, 2016].

Research shows that more than 90% of those who die by suicide suffer from depression or other mental disorders, or a substance-abuse disorder (often in combination with other mental disorders).[43] Among adults, mental disorders are common, with approximately one-quarter of adults being diagnosable for one or more disorders.[44] Mental disorders are not only associated with suicide, but also with chronic diseases, a family history of mental illness, age, substance abuse, and life-event stresses.[45]

Interventions to prevent suicide include therapy, medication, and programs that focus on both suicide risk and mental or substance-abuse disorders. Another intervention is improving primary care providers' ability to recognize and treat suicide risk factors, given the research indicating that older adults and women who die by suicide are likely to have seen a primary care provider within the year before their death.[46]

Prevalence

In 2015, adults experienced an average of 2.5 days of poor mental health–related unhealthy days in the USC VHH service area, which is slightly higher when compared to Los Angeles County (2.3).

In 2014, a slightly larger percentage (9.9%) of adults in the USC VHH service area reported having serious psychological distress when compared to Los Angeles County (9.6%), with an even larger percentage (10.7%) reported in SPA 2. Additionally, the percentage of adults in the USC VHH service area that reported having psychological distress was higher than the reported rate in 2009 (7.4%).

In 2015, a larger percentage (65.3%) of the population in the USC VHH service area reported having necessary social and emotional support when compared to Los Angeles County (64.0%). Additionally, SPA 2 (69.1%) had a higher percentage than either the USC VHH service area or Los Angeles County.

In addition, the percentage of the population in the USC VHH service area diagnosed with anxiety was higher (6.9%) when compared to Los Angeles County (6.4%); the percentage was also higher in SPA 4 (7.4%) and SPA 2 (7.2%).

The percentage of the population in the USC VHH service area diagnosed with depression was slightly lower (8.3%) when compared to Los Angeles County (8.6%). The percentage was higher in SPA 4 (10.8%).

[43] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at https://www.healthypeople.gov/2020/topics-objectives/topic/mental-health-and-mental-disorders. Accessed [August 1, 2016].

[44] National Institute of Mental Health. Any Disorder Among Adults. Available at http://www.nimh.nih.gov/statistics/1ANYDIS_ADULT.shtml. Accessed [August 2, 2016].

[45] Public Health Agency of Canada. Mental Illness. Available at http://www.phac-aspc.gc.ca/cd-mc/mi-mm/index-eng.php. Accessed [August 2, 2016].

[46] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at https://www.healthypeople.gov/2020/topics-objectives/topic/mental-health-and-mental-disorders. Accessed [August 1, 2016].

Mental Health Indicators, 2011, 2014, 2015

Report Area	Unhealthy Days Resulting from Poor Mental Health[1]	Adults with Serious Psychological Distress in the Last Year[3]	Adequate Social and Emotional Support[1]	Anxiety Prevalence[2]	Depression Prevalence[1]
	Days	Percentage	Percentage	Percentage	Percentage
SPA 2–San Fernando Valley	2.5	10.7%	69.1%	7.2%	8.0%
SPA 3–San Gabriel Valley	2.0	7.1%	55.5%	5.3%	6.4%
SPA 4–Metro	2.7	9.4%	60.2%	7.4%	10.8%
USC VHH Service Area	2.5	9.9%	65.3%	6.9%	8.3%
Los Angeles County	2.3	9.6%	64.0%	6.4%	8.6%

[1,2]Data source: Los Angeles County Health Survey
[1]Data year: 2015
[2]Data Source: 2011
Source geography: SPA

[3]Data source: California Health Interview Survey (CHIS)
Data year: 2014
Source geography: SPA

Alcohol- and Drug-Related Mental Illness

Alcohol and drug use is often associated with and linked to mental illness. In 2012, the rate per 100,000 adults of alcohol and drug-induced mental illness in the USC VHH service area was significantly higher (162.6) when compared to California (102.5), especially in ZIP Codes 91105 (314.3), 91103 (227.2), 91011 (192.4), 91040 (187.7), 91214 (183.5), and 91204 (181.1).

Alcohol- and Drug-Induced Mental Illness Rate per 100,000 Adults, 2012

City	ZIP Code	Rate
Eagle Rock	90041	129.4
Highland Park	90042	107.9
Altadena	91001	131.3
La Cañada Flintridge	91011	192.4
Montrose	91020	175.3
Sunland-Tujunga	91040	187.7
Tujunga	91042	147.8
Pasadena	91103	227.2
Pasadena	91105	314.3
Glendale	91201	149.0
Glendale	91202	147.8
Glendale	91203	141.9
Glendale	91204	181.1
Glendale	91205	144.6
Glendale	91206	179.4
Glendale	91207	126.2
Glendale	91208	86.8
La Crescenta-Montrose	91214	183.5
Sylmar	91342	136.7
USC VHH Service Area		162.6
California		102.5

Data source: Office of Statewide Health Planning and Development (OSHPD)
Data year: 2012
Source geography: ZIP Code

In the USC VHH service area, those who needed help for mental, emotional, or alcohol/drug issues represented a smaller percentage of the service area population (15.7%) than in Los Angeles County. Consistent with the prevalence of mental health issues found throughout SPA 4, the percentage of residents in SPA 4 who needed help for mental, emotional, or alcohol/drug issues was higher (21.9%) than all other service areas within the report area.

Needed Help for Mental, Emotional, or Alcohol/Drug Issues, 2011

Report Area	Percentage
SPA 2–San Fernando Valley	14.2%
SPA 3–San Gabriel Valley	14.4%
SPA 4–Metro	21.9%
USC VHH Service Area	15.7%
Los Angeles County	18.0%

Data source: Los Angeles County Health Survey
Data year: 2011
Source geography: SPA

Hospitalizations

In 2012, the mental health hospitalization rate per 100,000 adults in the USC VHH service area was significantly higher (846.5) than in California (540.9), and approximately two to three times higher in ZIP Codes 91020 (2,209.0) and 91103 (1,742.7). Although not nearly as prevalent, the mental health hospitalization rate per 100,000 youth under 18 years old in the USC VHH service area was still higher (396.2) than in California (294.8), and approximately four times higher in ZIP Code 91105 (1,578.6).

Mental Health Hospitalization Rate per 100,000 persons, 2012

City	ZIP Code	Adult Rate	Youth Rate
Eagle Rock	90041	912.6	421.3
Highland Park	90042	617.0	372.3
Altadena	91001	845.3	860.7
La Cañada Flintridge	91011	399.6	327.9
Montrose	91020	2,209.0	463.5
Sunland-Tujunga	91040	1,130.8	308.0
Tujunga	91042	774.2	352.0
Pasadena	91103	1,742.7	500.8
Pasadena	91105	1,299.8	1,578.6
Glendale	91201	704.5	164.4
Glendale	91202	435.0	227.2
Glendale	91203	454.2	170.9
Glendale	91204	640.4	204.8
Glendale	91205	1,138.1	251.1
Glendale	91206	688.4	244.8
Glendale	91207	504.7	213.8
Glendale	91208	477.6	174.7
La Crescenta-Montrose	91214	455.4	300.0
Sylmar	91342	654.9	390.1
USC VHH Service Area		846.5	396.2
California		540.9	294.8

Data source: Office of Statewide Health Planning and Development (OSHPD)
Data year: 2012
Source geography: ZIP Code

Suicide

In 2012, the suicide rate per 10,000 persons in the USC VHH service area was lower (0.9) when compared to California (1.0), and below the Healthy People 2020 goal (<=1.0). However, high rates were reported in ZIP Codes 91207 (2.1), 91202 (2.1), and 91204 (1.9).

Suicide Rate per 10,000 Persons, 2012

City	ZIP Code	Rate
Eagle Rock	90041	0.4
Highland Park	90042	0.3
Altadena	91001	0.8
La Cañada Flintridge	91011	0.5
Montrose	91020	1.2
Sunland-Tujunga	91040	1.3
Tujunga	91042	1.1
Pasadena	91103	0.0
Pasadena	91105	0.9
Glendale	91201	0.0
Glendale	91202	2.1
Glendale	91203	0.7
Glendale	91204	1.9
Glendale	91205	0.5
Glendale	91206	1.2
Glendale	91207	2.1
Glendale	91208	0.6
La Crescenta-Montrose	91214	1.0
Sylmar	91342	0.8
USC VHH Service Area		0.9
California		1.0
Healthy People 2020		<=1.0

Data source: California Department of Public Health (CDPH)
Data year: 2012
Source geography: ZIP Code

Disparities

Mental health, particularly depression, affects people across various age groups. However, in Los Angeles County, those most affected are between the ages of 50 and 64. Around 12.1% of those from age 50 to 59 have been diagnosed with depression, as have 11.3% of those between the ages of 60 and 64. Another 10.4% of those between ages of 40 and 49, and smaller percentages of those age 65 and older (9.2%), 25 to 29 (6.7%), 30 to 39 (5.9%), and 18 to 24 (5.2%), have been diagnosed with depression.

Depression Prevalence by Age, 2015

Age Group	Percentage
18–24 years old	5.2%
25–29 years old	6.7%
30–39 years old	5.9%
40–49 years old	10.4%
50–59 years old	12.1%
60–64 years old	11.3%
65 years old and older	9.2%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

By ethnicity, larger percentages of Whites (13.8%), and African-Americans (13.8%) in Los Angeles County were diagnosed with depression, as were smaller percentages of American Indian/Alaskan Natives (6.8%), Latinos (6.4%) and Asian/Pacific Islanders (3.6%).

Depression Prevalence by Ethnicity, 2015

Age Group	Percentage
Latino	6.4%
White	13.8%
African-American	10.4%
Asian/Pacific Islander	3.6%
American Indian/Alaskan Native	6.8%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

Associated Drivers of Mental Health

Mental health is associated with many other health factors, including poverty, heavy alcohol consumption, and unemployment. Chronic diseases such as cardiovascular disease, diabetes, and obesity are also associated with mental health disorders such as depression and suicide.[47]

Stakeholder Feedback

Stakeholders identified poor mental health as one of the top health concerns in the Glendale community, adding that it affects everyone, regardless of age. There is a serious need for mental health to be integrated into primary care for a more cohesive service delivery model. Stakeholders emphasized a need for the prevention of mental health episodes like stress, PTSD, and other issues "to avoid tragedies." More specifically, stress is on the rise in the Glendale community because of job-related demands and neighborhood safety. Also, people often avoid seeking treatment because of the stigma attached to mental health, therefore providers need to find a way to share information in a way that mitigates the stigma and is culturally sensitive.

[47] Centers for Disease Control and Prevention. CDC Mental Illness Surveillance. Available at http://www.cdc.gov/mentalhealthsurveillance/. Accessed [August 2, 2016].

Obesity/Overweight

Obesity[48], a condition in which a person has an abnormally high and unhealthy proportion of body fat, has risen to epidemic levels in the United States; 68% of adults age 20 years and older are overweight[49] or obese.[50] Excess weight indicates an unhealthy lifestyle that influences further health issues.

Obesity reduces life expectancy and causes devastating and costly health problems, increasing the risk of coronary heart disease, stroke, high blood pressure, diabetes, and a number of other chronic diseases. Findings suggest that obesity also increases the risks for cancers of the esophagus, breast (postmenopausal), endometrium, colon and rectum, kidney, pancreas, thyroid, gallbladder, and possibly other cancer types.[51] Obesity is associated with factors including poverty, inadequate fruit/vegetable consumption, breastfeeding, and lack of access to grocery stores, parks, and open space.

Prevalence

In 2015, slightly over a third (36.2%) of the adult population in the USC VHH service area was overweight, slightly more than in Los Angeles County (35.9%). Conversely, a smaller percentage of adults (20.9%) were obese in the USC VHH service area when compared to Los Angeles County (23.5%). In 2011, 21.7% of the adult population in the service area was obese, and 34.9% was overweight.

In the USC VHH service area, the percentage of children overweight for their age (10.6%) was lower than the rest of Los Angeles County (13.3%). Of the three SPAs represented in the USC VHH service area, SPA 4 had the highest percentage of children overweight for their age (15.0%).

Overweight and Obese Populations, 2012, 2015

Report Area	Overweight Adults (Age 18+)[1]	Obese Adults (Age 18+)[1]	Children Overweight for Age (Age 0-11)[2]	Overweight or Obese Population (Age 12+)[2]
SPA 2–San Fernando Valley	37.0%	19.8%	9.6%	51.2%
SPA 3–San Gabriel Valley	35.0%	23.8%	9.7%	50.5%
SPA 4–Metro	34.4%	22.1%	15.0%	52.6%
USC VHH Service Area	36.2%	20.9%	10.6%	51.4%
Los Angeles County	35.9%	23.5%	13.3%	54.8%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA
[2]Data source: California Health Interview Survey
Data year: 2012
Source geography: SPA

In 2009, the USC VHH service area had a higher percentage of those who were overweight (32.7%) when compared to Los Angeles County (29.7%). In particular, those living in ZIP Codes 91042 (35.7%), 91040

[48] If your BMI is 30.0 or higher, it falls within the obese range. Available at https://www.cdc.gov/obesity/adult/defining.html.
[49] If your BMI is 25.0 to <30, it falls within the overweight range. Available at https://www.cdc.gov/obesity/adult/defining.html
[50] National Cancer Institute. Obesity and Cancer Risk. Available at http://www.cancer.gov/cancertopics/factsheet/Risk/obesity. Accessed [August 2, 2016].
[51]National Cancer Institute. Obesity and Cancer Risk. Available at http://www.cancer.gov/cancertopics/factsheet/Risk/obesity. Accessed [August 2, 2016].

(35.4%), 91208 (34.1%), and 91020 (33.5%), had a higher percentage of the population overweight than in the USC VHH service area and Los Angeles County. Although some of the population in the USC VHH service area was obese (17.5%), it was not as prevalent an issue when compared to Los Angeles County (21.2%), and met the Healthy People 2020 goal of being below or equal to 30.5%.

Overweight and Obese Populations, 2009

City	ZIP Code	Percent Overweight	Percent Obese
Eagle Rock	90041	26.8%	18.4%
Highland Park	90042	28.9%	22.3%
Altadena	91001	32.9%	21.8%
La Cañada Flintridge	91011	32.5%	11.4%
Montrose	91020	33.5%	13.3%
Sunland-Tujunga	91040	35.4%	15.0%
Tujunga	91042	35.7%	15.3%
Pasadena	91103	32.8%	24.4%
Pasadena	91105	31.7%	19.2%
Glendale	91201	31.7%	19.2%
Glendale	91202	31.4%	14.9%
Glendale	91203	31.6%	15.8%
Glendale	91204	31.7%	15.8%
Glendale	91205	31.9%	16.6%
Glendale	91206	31.7%	15.4%
Glendale	91207	32.2%	15.9%
Glendale	91208	34.1%	12.7%
La Crescenta-Montrose	91214	33.0%	12.7%
Sylmar	91342	36.8%	17.7%
USC VHH Service Area		32.7%	17.5%
Los Angeles County		29.7%	21.2%
Healthy People 2020			<=30.5%

Data source: California Health Interview Survey (CHIS)
Data year: 2009
Source geography: ZIP Code

Disparities

In 2015, over a third of the population in Los Angeles County was overweight for those age 65 years old and older (40.7%), age 40 to 49 (39.1%), age 30 to 39 (38.3%), age 60 to 64 (37.5%), and those between 50 and 59 years old (37.4%). Less than a third of those between the ages of 18 and 24 (23.9%) and age 25 to 29 (31.3%) were considered overweight.

In terms for obese populations, for all age groups, the percentage of obese individuals was less than a third of the population, with those between the ages of 18 and 24 having the lowest percentage of being obese (15.3%), followed by individuals age 65 years and older (20.2%).

Overweight/Obesity Prevalence by Age, 2015

Age Group	Percent Overweight	Percent Obese
18–24 years old	23.9%	15.3%
25–29 years old	31.3%	24.9%
30–39 years old	38.3%	25.4%
40–49 years old	39.1%	25.8%
50–59 years old	37.4%	27.2%
60–64 years old	37.5%	26.0%
65 years old and older	40.7%	20.2%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

By ethnicity, larger percentages of American Indians/Alaskan Natives (54.2%) and Latinos (39.3%) in Los Angeles County were considered overweight, along with over a third of Whites (34.0%). Nearly a third of African-Americans (32.9%) and Latinos (30.9%) in Los Angeles County were classified as obese.

Overweight/Obesity Prevalence by Ethnicity, 2015

Ethnic Group	Percent Overweight	Percent Obese
Latino	39.3%	30.9%
White	35.0%	18.0%
African-American	32.0%	32.9%
Asian/Pacific Islander	30.3%	9.3%
American Indian/Alaskan Native	54.2%	19.1%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

Associated Drivers of Health

Obesity is associated with factors such as poverty, inadequate consumption of fruits and vegetables, physical inactivity, and lack of access to grocery stores, parks, and open space. Obesity increases the risk of coronary heart disease, stroke, high blood pressure, diabetes, and a number of other chronic diseases. The condition also increases the risks of cancers of the esophagus, breast (postmenopausal), endometrium, colon and rectum, kidney, pancreas, thyroid, gallbladder, and possibly other cancer types.[52]

Stakeholder Feedback

Additionally, stakeholders highlighted the economic challenges associated with accessing healthy food. A focus group participant explained, “The rent is extremely high and there is not a lot of affordable housing, so you have a lot of families that spend more money on trying to pay rent and are not able to pay for food.” In the focus groups, stakeholders focused on the impact of obesity on youth in the community, pointing out that healthier food options should be served in schools.

[52] National Cancer Institute. Obesity and Cancer Risk. Available at http://www.cancer.gov/cancertopics/factsheet/Risk/obesity. Accessed [August 2, 2016].

Sexual Health / Sexually Transmitted Diseases

Sexually transmitted diseases (STDs) refer to more than 25 infectious organisms transmitted primarily through sexual activity. STD prevention is an essential primary care strategy for improving reproductive health. Despite the burdens, costs, and complications—and being preventable to a certain extent—STDs remain a significant public health problem in the United States, greatly under-recognized by the public, policymakers, and health care professionals. STDs have the potential to cause many harmful, often irreversible clinical complications, including having an impact on reproductive health, fetal and perinatal health problems and cancer, and the transmission of HIV. The spread of STDs is directly affected by social, economic, and behavioral factors. Obstacles to STD prevention include access to and provision of care, willingness to seek care, and social norms regarding sex and sexuality. Among certain vulnerable populations, a historical experience with segregation and discrimination exacerbates the influence of these factors. Many studies document the association of substance abuse with STDs. The introduction of illicit substances into communities often can alter sexual behavior drastically in high-risk sexual networks, leading to the spread of STDs.[53]

Adolescents ages 15 to 24 account for nearly half of the 20 million new cases of STDs each year in the United States. Today, four in 10 sexually active teen girls in the United States have had an STD with the potential to cause infertility and even death. Regular screenings are critical, as STDs often have no obvious signs or physical symptoms. Also, certain racial and ethnic groups (mainly African-American, Hispanic/Latino, and American Indian/Alaska Native populations) have high rates of STDs compared with Whites. Race and ethnicity in the United States are correlated with other determinants of health status such as poverty, limited access to health care, fewer attempts to get medical treatment, and living in communities with high rates of STDs.[54]

Prevalence

In 2012, the percentage of the population with more than one sexual partner in the past 12 months was slightly lower in the USC VHH service area (12.9%) than in Los Angeles County (13.2%), but higher than the rest of California (11.3%).

A significantly lower percentage of the USC VHH service area population (64.8%) has been tested for HIV than Los Angeles County (72.9%) and California (70.6%). In particular, SPA 3 (87.5%) and SPA 4 (83.0%) had high percentages.

The rate of chlamydia incidence in the USC VHH service area (376.5) was significantly lower than Los Angeles County (512.9), with SPA 2 (320.5) and SPA 3 (353.2) having rates nearly half that of the county.

The prevalence of gonorrhea per 100,000 people in the USC VHH service area (83.1) was also lower than in Los Angeles County (103.4). SPA 4 (204.7) had roughly four times the rate of other SPAs reported and twice the rate in Los Angeles County.

[53] Centers for Disease Control and Prevention. (2015). *Sexually Transmitted Diseases*. Washington, DC. Available at http://www.healthypeople.gov/2020/topics-objectives/topic/sexually-transmitted-diseases. Accessed [August 2, 2016].

[54] Centers for Disease Control and Prevention. Sexually Transmitted Diseases. Washington, DC. Available at http://www.healthypeople.gov/2020/topics-objectives/topic/sexually-transmitted-diseases. Accessed [August 2, 2016].

Sexual Activity, 2012, 2013, 2014

Report Area	More than one sexual partner in the past 12 months[1]	Have ever been tested for HIV – Adults[2]	Chlamydia Incidence per 100,000[3]	Gonorrhea Incidence per 100,000[3]
	Percent	Percent	Rate	Rate
SPA 2–San Fernando Valley	13.6%	54.0%	320.5	57.9
SPA 3–San Gabriel Valley	10.9%	87.5%	353.2	40.2
SPA 4–Metro	12.3%	83.0%	587.7	204.7
USC VHH Service Area	12.9%	64.8%	376.5	83.1
Los Angeles County	13.2%	72.9%	512.9	103.4
California	11.3%	70.6%	-	-

[1,2]Source: California Health Interview Survey
[1]Data Year: 2012
[2]Data Year: 2014
Source Geography: SPA
[3]Source: Los Angeles County Department of Public Health
Data Year: 2013
Source Geography: SPA

The rate of HIV hospitalizations per 100,000 people in the USC VHH service area (6.9) was nearly half that of the rate for the state of California (11.0). Within the service area however, ZIP codes such as 90041 (18.2), 91201 (17.6), and 91203 (15.1) had much higher rates than the rest of the USC VHH service area.

HIV Hospitalizations per 100,000 Population, 2010

City	ZIP Code	Rate
Eagle Rock	90041	18.2
Highland Park	90042	11.2
Altadena	91001	8.3
La Cañada Flintridge	91011	0.0
Montrose	91020	11.9
Sunland-Tujunga	91040	0.0
Tujunga	91042	3.6
Pasadena	91103	10.9
Pasadena	91105	0.0
Glendale	91201	17.6
Glendale	91202	0.0
Glendale	91203	15.1
Glendale	91204	6.2
Glendale	91205	5.3
Glendale	91206	9.1

Glendale	91207	0.0
Glendale	91208	0.0
La Crescenta-Montrose	91214	0.0
Sylmar	91342	13.1
USC VHH Service Area		6.9
CA		11.0

Source: Office of Statewide Health Planning and Development
Data Year: 2010
Source Geography: ZIP

Stroke

A stroke occurs when the flow of blood to the brain suddenly stops, causing brain cells to die[55]. There are two types of stroke that occur, one caused by a blood clot which blocks the flow of blood to the brain (ischemic stroke) and the other where a blood vessel breaks and bleeds into the brain (hemorrhagic stroke)[56]. Stroke is the leading cause of death in the United States[57]. Strokes can be prevented by making healthier life choices including not smoking, eating a healthy diet, maintaining a healthy weight, staying physically active, and knowing your family history of stroke[58].

Prevalence

In 2012, the prevalence of strokes experienced by the USC VHH population over the age of 65 (6.7%) was slightly lower than in Los Angeles County (7.1%). However, in SPA 3, the percent of the population diagnosed with a stroke (7.8%) was higher than in USC VHH's service area and the rest of Los Angeles County.

Stroke Prevalence (Age 65+), 2012

Report Area	Percent
SPA 2–San Fernando Valley	6.6%
SPA 3–San Gabriel Valley	7.8%
SPA 4–Metro	6.3%
USC VHH Service Area	6.7%
Los Angeles County	7.1%
California	8.1%

Source: California Health Interview Survey
Data Year: 2012
Source Geography: SPA

Mortality

In 2012, the stroke mortality rate per 10,000 adults in the USC VHH service area (4.3) was moderately higher than in Los Angeles County (3.5). Several ZIP codes experienced much higher rates, including 91105 (8.5), 91214 (6.9), 91204 (6.5), and 91040 (5.8).

[55] National Institute of Health. (2014). *Stroke*. Bethesda, MD. Available at http://www.nlm.nih.gov/medlineplus/stroke.html#cat5. Accessed [August 2, 2016].
[56] National Institute of Health. (2014). *Stroke*. Bethesda, MD. Available at http://www.nlm.nih.gov/medlineplus/stroke.html#cat5. Accessed [August 2, 2016].
[57] U.S. Department of Health and Human Services. (2014). *What is a stroke?*. Bethesda, MD. Available at http://www.nhlbi.nih.gov/health/health-topics/topics/stroke. Accessed [August 2, 2016].
[58] U.S. Department of Health and Human Services. (2014). *How can a stroke be prevented?*. Bethesda, MD. Available at http://www.nhlbi.nih.gov/health/health-topics/topics/stroke/prevention. Accessed [August 2, 2016].

Stroke Mortality Rate per 10,000 Adults, 2012

City	ZIP Code	Rate
Eagle Rock	90041	2.5
Highland Park	90042	3.4
Altadena	91001	4.1
La Cañada Flintridge	91011	4.4
Montrose	91020	0.0
Sunland-Tujunga	91040	5.8
Tujunga	91042	3.5
Pasadena	91103	4.6
Pasadena	91105	8.5
Glendale	91201	5.0
Glendale	91202	2.5
Glendale	91203	4.3
Glendale	91204	6.5
Glendale	91205	3.2
Glendale	91206	4.1
Glendale	91207	3.2
Glendale	91208	5.6
La Crescenta-Montrose	91214	6.9
Sylmar	91342	2.8
USC VHH Service Area		4.3
California		3.5

Data source: California Department of Public Health, Death Statistical Master File
Data year: 2012
Source geography: ZIP Code

Associated Drivers of Stroke

Risk factors associated with stroke include chronic health issues and conditions such as high blood pressure, diabetes, high cholesterol, obesity, and heart disease. Additional risk factors include smoking, brain aneurysms, age, gender, race and ethnicity, alcohol and substance abuse, unhealthy diet, lack of physical activity, stress and depression, and genetics.[59]

[59] U.S. Department of Health and Human Services. National Heart, Lung, and Blood Institute. What is a stroke? Bethesda, MD. Available at http://www.nhlbi.nih.gov/health/health-topics/topics/stroke. Accessed [August 2, 2016].

HEALTH DRIVERS

Access to Healthcare

Access to health care services is important for everyone's quality of life, which requires the ability to navigate the health care system, access a health care location where needed services are provided, and find a health care provider with whom the patient can communicate and trust.[60] Access to health care impacts overall physical, social, and mental health status, the prevention of disease and disability, the detection and treatment of health conditions, quality of life, preventable death, and life expectancy for individuals.[61]

Medicare Beneficiaries

Medicare is a federal program administered by the Centers for Medicare & Medicaid Services (CMS) and provides health insurance for people age 65 or older, those under age 65 with certain disabilities or ALS (amyotrophic lateral sclerosis, or Lou Gehrig's disease), and people of any age with End-Stage Renal Disease (permanent kidney failure requiring dialysis or a kidney transplant).[62] The Medicare program provides insurance through various parts, including insurance for inpatient hospital, skilled nursing facility, and home health services; coverage for physician services, outpatient hospital services, durable medical equipment, and certain home health services; health plan options are provided by Medicare-approved private insurance companies (e.g., HMOs, PPOs); and insurance coverage for prescription drugs.[63]

In 2012, only 1.4% of the population in the USC VHH service area was enrolled in Medicare, which is identical in Los Angeles County (1.4%). SPA 4 (2.8%) had a larger percentage of its population enrolled in Medicare when compared to the USC VHH service area and Los Angeles County (1.4%).

Medicare Beneficiaries, 2012

Report Area	Percentage
SPA 2–San Fernando Valley	1.7%
SPA 3–San Gabriel Valley	1.2%
SPA 4–Metro	2.8%
USC VHH Service Area	1.8%
Los Angeles	1.4%

Data source: Managed Risk Medical Insurance Board
Data year: 2012

[60] Office of Disease Prevention and Health Promotion. Social Determinants of Health. Healthy People 2020. https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health Accessed [August 31, 2016].

[61] Office of Disease Prevention and Health Promotion. Access to Health Services. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=1. Accessed [August 1, 2016].

[62] State of California Department of Health Care Services (2012). Medi-Cal's Coordinated Care Initiative Population Combined Medicare & Medi-Cal Cost, Utilization, and Disease Burden, Sacramento, CA. Available at http://www.dhcs.ca.gov/dataandstats/statistics/Documents/Dual%20Data%20Sets%20Medicare.pdf. Accessed [August 1, 2016].

[63] State of California Department of Health Care Services (2012). Medi-Cal's Coordinated Care Initiative Population Combined Medicare & Medi-Cal Cost, Utilization, and Disease Burden, Sacramento, CA. Available at http://www.dhcs.ca.gov/dataandstats/statistics/Documents/Dual%20Data%20Sets%20Medicare.pdf. Accessed [August 1, 2016].

Source geography: ZIP Code

Medi-Cal and Healthy Families Programs

Medi-Cal, California's Medicaid program is a public health insurance program that provides health care services at no or low cost to low-income individuals. The federal government dictates a mandatory set of basic services, which include, but are not limited to, physician, family nurse practitioner, nursing facility, hospital inpatient and outpatient, laboratory and radiology, family planning, and early and periodic screening, diagnosis, and treatment for children. In addition to these mandatory services, California provides optional benefits such as outpatient drugs, home- and community-based waiver services, and medical equipment.[64]

The Healthy Families Program offers low-cost insurance that provides health, dental, and vision coverage to children who do not have insurance or who do not qualify for no-cost Medi-Cal.[65] However, starting January 1, 2013, no new enrollments of children into the Healthy Families Program were allowed and existing enrollees are being transitioned into the Medi-Cal program because of a change in state law.[66]

In the USC VHH service area, there are 118,297 Medi-Cal beneficiaries who make up 4.8% of the total Medi-Cal beneficiaries in Los Angeles County. A large percentage of Medi-Cal beneficiaries in the USC VHH service area live in ZIP Codes 91342 (19.7%), 90042 (14.4%), and 91205 (12.0%). On average, 5.2% of the population in the USC VHH service area is covered by Medi-Cal.

In 2012, there were 11,989 new enrollments into the Healthy Families program in the USC VHH service area. On average, 5.6% of children in the USC VHH service area were enrolled in Healthy Families that year. ZIP Codes 91342 (27.8%) and 90042 (9.8%) experienced the highest percentages of children enrolled in the Healthy Families program.

[64] State of California Department of Health Care Services (2012). Medi-Cal's Coordinated Care Initiative Population Combined Medicare & Medi-Cal Cost, Utilization, and Disease Burden, Sacramento, CA. Available at http://www.dhcs.ca.gov/dataandstats/statistics/Documents/Dual%20Data%20Sets%20Medicare.pdf. Accessed [August, 1, 2016].

[65] California Department of Health Care Services (2014). The Healthy Families Program Transition to Medi-Cal Final Comprehensive Report. Sacramento, CA. Available at http://www.dhcs.ca.gov/provgovpart/Documents/Waiver%20Renewal/AppendixCHFP.PDF. Accessed [August 2, 2016].

[66] California Department of Health Care Services (2014). The Healthy Families Program Transition to Medi-Cal Final Comprehensive Report. Sacramento, CA. Available at http://www.dhcs.ca.gov/provgovpart/Documents/Waiver%20Renewal/AppendixCHFP.PDF. Accessed [August 2, 2016].

Medi-Cal and Healthy Families Beneficiaries and Enrollment, 2011, 2012

		Medi-Cal Beneficiaries[1]		Healthy Families Enrollment[2]	
City	ZIP Code	Number	Percentage	Number	Percentage
Eagle Rock	90041	4,164	3.5%	450	3.8%
Highland Park	90042	17,003	14.4%	1,169	9.8%
Altadena	91001	5,622	4.8%	547	4.6%
La Cañada Flintridge	91011	438	0.4%	137	1.1%
Montrose	91020	1,087	0.9%	306	2.6%
Sunland-Tujunga	91040	2,988	2.5%	401	3.3%
Tujunga	91042	6,070	5.1%	651	5.4%
Pasadena	91103	8,838	7.5%	632	5.3%
Pasadena	91105	736	0.6%	42	0.4%
Glendale	91201	6,915	5.8%	518	4.3%
Glendale	91202	4,510	3.8%	434	3.6%
Glendale	91203	4,098	3.5%	327	2.7%
Glendale	91204	6,451	5.5%	380	3.2%
Glendale	91205	14,163	12.0%	806	6.7%
Glendale	91206	7,205	6.1%	631	5.3%
Glendale	91207	1,335	1.1%	139	1.2%
Glendale	91208	1,190	1.0%	260	2.2%
La Crescenta-Montrose	91214	2,086	1.8%	823	6.9%
Sylmar	91342	23,345	19.7%	3,336	27.8%
USC VHH Service Area		118,297	4.8%	11,989	5.6%
Los Angeles County		2,444,850		215,543	

[1] Data source: California Department of Health Care Services (DHCS)
Data year: 2011
Source geography: ZIP Code
[2] Data source: Managed Risk Medical Insurance Board
Data year: 2012
Source geography: ZIP Code

Federally Qualified Health Centers

Federally Qualified Health Centers (FQHCs) are community-based and patient-directed organizations that serve populations with limited access to health care. They consist of public and private nonprofit health care organizations that meet certain criteria under the Medicare and Medicaid programs and receive funds under the Health Center Program (Section 330 of the Public Health Service Act).

In 2012, there were an estimated 43 FQHCs in the USC VHH service area, making up 23.5% of FQHCs in Los Angeles County (n=183).

Federally Qualified Health Centers, 2012

Report Area	Number
SPA 2–San Fernando Valley	31
SPA 3–San Gabriel Valley	22
SPA 4–Metro	70
USC VHH Service Area	43
Los Angeles County	183

Data source: U.S. Department of Health and Human Services Health Resources and Services Administration (HRSA)
Data year: 2012
Source geography: SPA

Uninsured

In the USC VHH service area, 14.2% of adults did not have health insurance (or were uninsured), just below the percentage of uninsured adults in the County (16.1%).

In 2015, 5.8% of children in the USC VHH service area did not have health insurance (or were uninsured) when compared to Los Angeles County (6.4%). More specifically, SPA 3 had a higher percentage (6.7%) of children without health insurance (or who were uninsured) overall.

Uninsured, 2011, 2014

Report Area	Adults[1]	Children[2]
SPA 2–San Fernando Valley	11.9%	5.4%
SPA 3–San Gabriel Valley	14.1%	6.7%
SPA 4–Metro	22.0%	6.3%
USC VHH Service Area	14.2%	5.8%
Los Angeles County	16.1%	6.4%
Healthy People 2020	0.0%	0.0%

Data source: Los Angeles County Health Survey
[1]Data year: 2014
[2]Data year: 2011
Source geography: SPA

Specifically, in 2012, a smaller percentage (16.2%) in the USC VHH service area population was uninsured when compared to Los Angeles County (19.5%). Higher percentages in ZIP Codes 90042 (25.6%), 91342 (21.5%), and 90041 (21.3%) were uninsured when compared to the USC VHH service area (16.2%), overall.

Uninsured Population, 2012

City	ZIP Code	Percentage
Eagle Rock	90041	21.3%
Highland Park	90042	25.6%
Altadena	91001	14.3%
La Cañada Flintridge	91011	6.3%
Montrose	91020	14.5%
Sunland-Tujunga	91040	15.0%
Tujunga	91042	15.8%
Pasadena	91103	20.1%
Pasadena	91105	11.7%
Glendale	91201	16.9%
Glendale	91202	15.6%
Glendale	91203	18.0%
Glendale	91204	20.7%
Glendale	91205	19.0%
Glendale	91206	15.5%
Glendale	91207	12.4%
Glendale	91208	10.6%
La Crescenta-Montrose	91214	12.1%
Sylmar	91342	21.5%
USC VHH Service Area		16.2%
Los Angeles County		19.5%

Data source: California Health Interview Survey
Data year: 2012
Source geography: ZIP Code

Lack of Consistent Source of Care

The percentage of adults who lacked a consistent source of primary care in the USC VHH service area (19.5%) was consistent with that of Los Angeles County (19.7%). Specifically, SPA 4 (23.0%) had the largest percentage of those who lacked a consistent source of primary care.

Lack of a Consistent Source of Primary Care for Adults, 2015

Report Area	Percentage
SPA 2–San Fernando Valley	18.6%
SPA 3–San Gabriel Valley	18.8%
SPA 4–Metro	23.0%
USC VHH Service Area	19.5%
Los Angeles County	19.7%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA

Difficulty Accessing Care

Almost a quarter of adults (23.5%) in the USC VHH service area had difficulty accessing medical care, the same as Los Angeles County (23.6%). Difficulty accessing healthcare in the USC VHH service area has increased from 12.3% in 2009. A larger percentage of adults in SPA 4 (28.0%) had difficulty accessing medical care overall.

A similar percentage of children between the ages of 0 and 17 in the service area (11.2%) had difficulty accessing medical care when compared to Los Angeles County (11.0%).

Difficulty Accessing Medical Care, 2015

Report Area	Adults (Age 18+)	Children (Age 0-17)
SPA 2–San Fernando Valley	21.6%	9.4%
SPA 3–San Gabriel Valley	25.5%	14.9%
SPA 4–Metro	28.6%	14.5%
USC VHH Service Area	23.5%	11.2%
Los Angeles County	23.6%	11.0%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA

Health Care Providers

Data of primary care provider, dentist and psychiatrists available to serve communities designated by Medical Service Study Areas (MSSA), these are geographic analysis units defined by the California Office of Statewide Health Planning and Development.[67]

Health Care Provider Available, 2013

Medical Service Study Area (MSSA) / Communities	Primary Care: population to physician ratio	Dentist: population to dental provider ratio	Psychiatrist: population to mental health provider ratio
Burbank South/Eagle Rock/Glendale Northwest	1,508	1,446	35,196
Atwater Village/Glendale Central/Glendale Southwest/Griffith Park	581	529	4,332
Altadena West/Pasadena Northwest	1,207	1,472	6,279
Pasadena South/San Marino/South Pasadena	375	668	1,992
Glendale Northeast/La Canada-Flintridge/La Crescenta/Montrose/Sunland/Tujunga/Verdugo City	2,469	1,862	14,197
MSSA Average	1,228	1,196	12,399
Los Angeles County	2,640	2,484	18,104

Data source: Office of Statewide Planning and Development
Data year: 2013
Source geography: MSSA

[67] Medical Service Study Areas (aka 'MSSA') are a geographic analysis unit defined by the California Office of Statewide Health Planning and Development. Based on US Census tract geography, the MSSA are a good foundation for needs assessment analysis, healthcare planning, and healthcare policy development. MSSA boundary geography is reproduced each decade following each new federal census survey. The boundaries are formally approved by the Health Manpower Policy Commission. Moreover, the US Department of Health and Human Services, Health Resources Serviced Administration (HRSA) formally recognizes California's MSSA unit of geography as the Rational Service Area (RSA) for medical service in California.

Disparities

Among all uninsured individuals in Los Angeles County, 9.5% were under the age of 18, 89.2% of the uninsured population were between the ages of 18 and 64, and 1.3% of the uninsured population was age 65 or older. In comparison to the state (11.0%), Los Angeles County had a lower percent of their population under age 18 uninsured (9.5%).

Uninsured, by Age, 2014

Age Group	Los Angeles County	California
Under 18	9.5%	11.0%
18–64	89.2%	87.8%
65 and above	1.3%	1.2%

Data source: American Community Survey
Data year: 2014
Source geography: County

Stakeholder Feedback

Through focus group interviews, key stakeholders including care providers shed additional insight into the root causes and consequences of barriers to care for the service area population. Specific cultural and language groups, low-income communities, the aging population and those lacking transportation face the greatest barriers to accessing care. For specific cultural and language groups, the barriers may arise during medical visits if providers are not familiar with the language or cultural norms of the patient, but may arise earlier in the health delivery pipeline if resources and information about health care resources are not made available in a culturally responsive way. Many stakeholders observed that in addition to the high rates of uninsured in the service area, Medi-Cal coverage is very basic: “a big issue—it covers barely anything. It is a very low level of coverage.” Furthermore, providers noted that in the service area “there are a lack of physicians that accept Medi-Cal.”

One of the most frequently mentioned consequences of low healthcare coverage in the service area is the heavy reliance on emergency (911) care for acute conditions. Stakeholders explained that “the emergency room, Fire Department and EMS staff takes care of everything.” It may be that the population relies more on emergency care because emergency services are more often covered (by emergency insurance) than scheduled office visits.

Stakeholders observed that the combined challenge of finding culturally responsive and affordable health care resulted in a disconnect between health care providers and potential patients. It may seem to health care providers that the community is reluctant to access health care or to respond to illness in appropriate ways, while certain communities may experience real obstacles in accessing affordable, responsive care. Stakeholders observed that overall, the service area population would benefit from additional outreach and education around the symptoms and underlying causes of cardiovascular disease. In clinical settings, providers observe that cardiovascular disease is linked to falls and shortness of breath, stroke and heart failure among the aging population in the service area.

Alcohol and Substance Abuse and Tobacco Use

Alcohol and substance abuse and tobacco use are listed in the 2016 CHNA as both health outcomes and health drivers. The above section included Alcohol and Substance Abuse and Tobacco Use under Health Outcomes reports key indicators for alcohol, substance abuse and tobacco use in the service area.

Substance use and abuse are key determinants of a number of downstream additional poor health outcomes. The effects of substance abuse contribute significantly to costly social, physical, mental, and public health problems, including teenage pregnancy, HIV/AIDS, STDs, domestic violence, child abuse, motor vehicle accidents (unintentional injuries), physical fights, crime, homicide, and suicide. [68] Heavy alcohol consumption is an important determinant of future health needs, including cirrhosis, cancers, and untreated mental and behavioral health needs.

Tobacco use is known to cause cancer, heart disease, lung disease (such as emphysema, bronchitis, and chronic airway obstruction), premature birth, low birth weight, stillbirth, and infant death.[69] Additionally, secondhand smoke has been known to cause heart disease and lung cancer in adults and severe asthma attacks, respiratory infections, ear infections, and sudden infant death syndrome (SIDS) in infants and children.[70] Smokeless tobacco use such as chewing tobacco can also cause a variety of oral health problems, like cancer of the mouth and gums, tooth loss, and periodontitis. In addition, cigar smoking may cause cancer of the larynx, mouth, esophagus, and lung.[71]

[68] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at https://www.healthypeople.gov/2020/topics-objectives/topic/substance-abuse. Accessed [August 2, 2016].

[69] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=41. Accessed [August 1, 2016].

[70] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=41. Accessed [August 1, 2016].

[71] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=41. Accessed [August 1, 2016].

Dental Care

Dental care is essential to overall health, and is relevant as a health need because engaging in preventive behaviors decreases the likelihood of developing future oral health and related health problems. In addition, oral diseases such as cavities and oral cancer cause pain and disability for many people.[72]

Behaviors that may lead to poor oral health include tobacco use, excessive alcohol consumption, and poor dietary choices. Barriers that prevent or limit a person's use of preventive intervention and treatments for oral health include limited access to and availability of dental services, a lack of awareness of the need, cost, and fear of dental procedures. Social factors associated with poor dental health include lower levels or lack of education, having a disability, and other health conditions such as diabetes.[73]

Access

In the USC VHH service area, over half the population (51.6%) did not have dental insurance coverage in 2011, a very similar rate as seen in Los Angeles County (51.8%). In SPA 4, a significantly larger percentage (61.1%) of the population lacked dental coverage, a percentage nearly 10% higher than the rest of the USC VHH service area.

Absence of Dental Insurance Coverage, Adults, 2011

Report Area	Percentage
SPA 2–San Fernando Valley	49.0%
SPA 3–San Gabriel Valley	51.0%
SPA 4–Metro	61.1%
USC VHH Service Area	51.6%
Los Angeles County	51.8%

Data source: Los Angeles County Health Survey
Data year: 2011
Source geography: SPA

As of May 2013, there are a total of 8,417 dentists in Los Angeles County, making up over a quarter (26.7%) of dentists in California.

To be determined as a Dental Health Professional Shortage Area, an area must have a population-to-dentist ratio of at least 5,000:1.[74] Los Angeles County does not meet this criterion, with a ratio of 2,484:1.

[72] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=32. Accessed [August 2, 2016].

[73] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=32. Accessed [August 2, 2016].

[74] United States Department of Health and Human Services (n.d.). Dental HPSA Designation Overview. Rockville, MD. Available at http://bhpr.hrsa.gov/shortage/hpsas/designationcriteria/dentalhpsaoverview.html. Accessed [August 2, 2016].

Dentist Availability, 2013

Report Area	Number	Population to Dentist Ratio
Los Angeles County	7,293	2,484:1

Data source: Office of Statewide Health and Planning and Development (OSHPD)
Data year: 2013
Source geography: County

Affordability

Often, dental insurance is limited and coverage is minimal, so people have to pay high out-of-pocket costs. In addition, many don't have dental insurance coverage and the cost of dental services is too high and therefore unattainable for the average person.

In the USC VHH service area, nearly a third (31.0%) of adults could not afford dental care—including regular check-ups—which is slightly higher when compared to Los Angeles County (30.3%). SPA 4 reported an even higher percentage (37.6%).

In Los Angeles County, a number of free or low-cost dental services are available for children through community clinics and state and county programs. However, many of those entities have fallen victim to budget cuts, which have significantly limited the availability of those services.

In 2015, the percentage of children in the USC VHH service area (11.2%) who were unable to afford dental care was slightly lower than Los Angeles County (11.5%). The percentage in SPA 4(15.5%) was significantly higher than both the service area and Los Angeles County. The percentage of children in the USC VHH service area overall who were unable to afford dental care decreased slightly since 2011 (11.2%).

Unable to Afford Dental Care, 2011, 2015

Report Area	Adult[1]	Child[2]
	Percentage	Percentage
SPA 2–San Fernando Valley	29.8%	10.3%
SPA 3–San Gabriel Valley	27.7%	9.9%
SPA 4–Metro	37.6%	15.5%
USC VHH Service Area	31.0%	11.2%
Los Angeles County	30.3%	11.5%

Data source: Los Angeles County Health Survey
[1]Data year: 2011
[2]Data year: 2015
Source geography: SPA

Disparities

In 2015, the percentage of children in Los Angeles County who were unable to afford dental care doubled from the age range of 3-5 years old (7.4%) to 12-17 years old (15.1%). The upward trend continues with age, reaching a high at the age bracket of 25-29 years old (38.7%) and steadily declining after that for each age bracket. In particular, the lowest percentage of those unable to afford dental care over the age of 18 occurs with residents over the age of 65 (19.1%).

Unable to Afford Dental Care by Age, 2011, 2015

Age Group	Percentage
3–5 years old[1]	7.4%

Age Group	Percentage
6–11 years old[1]	10.5%
12–17 years old[1]	15.1%
18–24 years old[2]	27.0%
25–29 years old[2]	38.7%
30–39 years old[2]	35.0%
40–49 years old[2]	30.4%
50–59 years old[2]	33.0%
60–64 years old[2]	27.0%
65 years old and older[2]	19.1%

Data source: Los Angeles County Health Survey
[1]Data year: 2015
[2]Data year: 2011
Source geography: County

By ethnicity, over a third of African-American (38.0%) and Latino (36.6%) adults were unable to afford dental care, as were over a quarter of Asian/Pacific Islanders (27.3%) and American Indian/Alaskan Native (25.6%) adults and close to a quarter of White (21.0%) adults.

Upon examining differences in ethnicity among children, larger percentages of Latino (12.6%), White (10.6%), and African-American (10.1%) children had a difficult time obtaining dental care due to affordability, along with smaller percentages of Asian/Pacific Islander (7.3%) children. Furthermore, data for American Indian/Alaskan Native children were either unavailable or reflected numbers that were too small to report.

Unable to Afford Dental Care by Ethnicity, 2011, 2015

	Adult[1]	Child[2]
Age Group	Percentage	Percentage
Latino	36.6%	12.6%
White	21.0%	10.6%
African-American	38.0%	10.1%
Asian/Pacific Islander	27.3%	7.3%
American Indian/Alaskan Native	25.6%	-

Data source: Los Angeles County Health Survey
[1]Data year: 2011
[2]Data year: 2015
Source geography: County

Associated Drivers of Dental Care

Poor oral health can be prevented by decreasing sugar intake and increasing healthy eating habits to prevent tooth decay and premature tooth loss; consuming more fruits and vegetables to protect against oral cancer; smoking cessation; decreased alcohol consumption to reduce the risk of oral cancers, perio-dontal disease, and tooth loss; using protective gear when playing sports; and living in a safe physical

environment.[75] In addition, oral health conditions such as periodontal (gum) disease have been linked to diabetes, heart disease, stroke, and premature, low-weight births.[76]

Stakeholder Feedback

Stakeholders identified dental care as one of the greatest unmet health needs in the Glendale community, particularly for children. It may be that dental care is a particular challenge for low-income, uninsured and underinsured residents, as major dental work is often costly and not covered by basic insurance.

[75] World Health Organization. Oral health Fact Sheet. Geneva, Switzerland. Available at http://www.who.int/mediacentre/factsheets/fs318/en/index.html. Accessed [August 2, 2016].

[76] Centers for Disease Control and Prevention. Mental Health and Chronic Diseases. Available at http://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2011/Oral-Health-AAG-PDF-508.pdf. Accessed [August 2, 2016].

Geriatric Support

Older adults have special healthcare needs that can make their medical care more complicated. More than half of adults age 65 and older have three or more medical problems, such as heart disease, diabetes, arthritis, Alzheimer's disease, or high blood pressure.[77] Geriatric care requires a team approach to care for older people and supporting families and other caregivers, often involving medical, social, emotional, and other needs. Some of the health concerns common in older people include incontinence, falls, memory problems, and managing multiple chronic conditions and medications.

To maintain good health and reduce risk of disease and disability, it is important to engage in exercise, maintain good nutrition, receive regular health screenings, maintain vaccines, get enough sleep, and participate in activities of interest.[78]

Overview

The USC VHH service area has a higher percentage of adults over 65 (14.8%, as a percent of the total population) relative to the Los Angeles County average (12.3%). Specifically, there are areas with much higher percentages: in 99105—Pasadena, one in four residents is over the age of 65 (25.7%), while in 91207—Glendale, one in five (21.9%). Other ZIP codes with high percentages of residents 65 and over include other areas of Glendale: 91208 (19.3%), 91206 (19.2%), and 91202 (18.1%), as well as 91101—La Cañada Flintridge (18.1%).

Within Los Angeles County, the population 65 years of age or older is distinct from the entire resident population in a few notable ways. The 65+ population reports very reduced rates of binge drinking (4.2% vs. 15.9%). The 65+ population reports an easier time obtaining medical care when needed (only 9.3% reported this is somewhat or very difficult, compared to 23.6% of the entire population). Additionally, 66.6% of the 65+ population reported seeing a dentist or visiting a dental clinic in the past year, compared to 59.3% of the Los Angeles County resident population.

However, when compared to the Los Angeles County resident population, specific needs among the 65+ population emerge. For example, a larger percentage of the 65+ population has been diagnosed with diabetes (21.2%), hypertension (54.2%) or high cholesterol (47.5%) than the Los Angeles County population in general (9.8%, 23.5% and 25.2%, respectively). Additionally, 47.7% of the 65+ population reports participating in low or no physical activity, compared to 34.8% of the general population.

[77] Health in Aging. Geriatrics: Basic Facts and Information. Available at http://www.healthinaging.org/aging-and-health-a-to-z/topic:geriatrics/. Accessed [August 2, 2016].
[78] https://www.nia.nih.gov/health/featured/healthy-aging-longevity. Accessed [August 2, 2016].

Overview of Health Indicators for Adults over the age of 65, 2015

Health Indicator	Percent Adults (65+ years old) In Los Angeles County	Percent of Overall Residents in Los Angeles County
Ever Diagnosed with Depression AND Either Currently Being Treated for Depression or Currently Having Symptoms of Depression	9.2%	8.6%
Ever Diagnosed with Diabetes	21.2%	9.8%
Ever Diagnosed with Hypertension	54.2%	23.5%
Ever Diagnosed with High Cholesterol	47.5%	25.2%
Obese	20.2%	23.5%
Overweight	40.7%	35.9%
Binge Drinking*	4.2%	15.9%
Physical Aerobic Activity: Activity Does not Meet Guidelines or Engage in No Activity**	47.7%	34.8%
Reported Receiving the Social and Emotional Support They Need (i.e., Always or Usually)	70.2%	64%
Reported Seeing a Dentist or Visited a Dental Clinic for Any Reason in the Past Year	66.6%	59.3%
Reported Having a Disability	41.9%	22.6%
Reported that Obtaining Medical Care When Needed Is Somewhat or Very Difficult	9.3%	23.6%
Reported Fair/Poor Health Status	30.8%	21.5%
Have a Regular Source of Care	94.2%	80.3%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

* Binge drinking for females is drinking 4 or more drinks and males 5 or more drinks on one occasion at least one time in the past month. Heavy drinking is males consuming more than 60 drinks and females more than 30 drinks in the previous month.

** To meet Physical Activity Guidelines for aerobic activity at least one of the following criteria must be fulfilled: 1) Vigorous activity for at least 75 minutes a week, 2) Moderate activity for at least 150 minutes a week, or 3) A combination of vigorous and moderate activity for at least 150 minutes a week

*** Disability is defined as a positive response to any one of the following: 1) Limited activity because of physical, mental, or emotional problem(s), 2) Health problem requiring use of special equipment, 3) Self-perception of being disabled.

Preventive Care

For pneumonia vaccinations, the percentage of residents over the age of 65 in the USC VHH service area (64.3%) was slightly higher than the rest of Los Angeles County (62.0%). Both SPA 2 (65.0%) and SPA 4 (65.8%) were slightly higher than average when compared to other service areas and the county.

Similarly, the population residing within USC VHH's service area (70.0%) reflected a slightly higher percentage of those receiving influenza vaccines than Los Angeles County (69.0%).

Vaccinations

Report Area	Pneumonia Vaccination (Age 65+)	Influenza Vaccination (Age 65+)
SPA 2–San Fernando Valley	65.0%	70.6%
SPA 3–San Gabriel Valley	59.5%	74.6%
SPA 4–Metro	65.8%	64.1%
USC VHH Service Area	64.3%	70.0%
Los Angeles County	62.0%	69.0%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

In Los Angeles County, the percentage of the population receiving a mammogram in the past two years indicates a slight increase with each age bracket. Individuals between the ages of 65-74 received the highest percentage of mammograms (82.6%).

Mammogram in the Past Two Years

Report Area	Ages 50-59	Ages 60-64	Ages 65-74	Overall
Los Angeles County	74.7%	75.4%	82.6%	77.3%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

Falls

In 2015, the USC VHH service area experienced a lower percentage of elderly hospitalized from falls (23.9%) than both Los Angeles County (28.0%) and California (28.5%).

In regards to changes in routines because of a fall in the past year, USC VHH's service area had a lower percentage (31.0%) than either Los Angeles County (33.5%) or California (33.3%). Differences among SPAs were marginal (less than 3%).

In the USC VHH service area, more physicians/professionals recommended physical therapy or exercise due to falls (84.3%) in comparison to Los Angeles County (83.9%) and California (80.4%). SPA 4 had the lowest percentage (69.8%) out of all service areas described.

A similar pattern emerges when examining the percentage of professionals who reviewed medication after a fall. The USC VHH service area (42.9%) was higher than both Los Angeles County (40.2%) and California (33.7%). SPA 4 (29.5%) was significantly lower than the rest of the service areas while SPA 3 showed the highest (68.3%).

Adults (65+) Falls in Past Year

Report Area	Was Hospitalized Due to Falls	Changed daily Routines because of fall in past year	Professional Recommended Physical Therapy/Exercise due to falls	Professional reviewed medication after fall
SPA 2–San Fernando Valley	21.6%	30.0%	86.7%	40.8%
SPA 3–San Gabriel Valley	47.2%	32.9%	92.0%	68.3%
SPA 4–Metro	12.8%	32.9%	69.8%	29.5%
USC VHH Service Area	23.9%	31.0%	84.3%	42.9%
Los Angeles County	28.0%	33.5%	83.9%	40.2%
California	28.5%	33.3%	80.4%	33.7%

Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

Osteoporosis

In the USC VHH service area, a higher percentage of adults (59.6%) were diagnosed with osteoporosis than in Los Angeles County (56.7%). SPA 2 experienced the highest percentage overall (61.4%) while SPA 4 had the lowest (53.5%).

Percent of Adults (Age 65+) Who Have Been Diagnosed with Osteoporosis

Report Area	Percent
SPA 2–San Fernando Valley	61.4%
SPA 3–San Gabriel Valley	59.2%
SPA 4–Metro	53.5%
USC VHH Service Area	59.6%
Los Angeles County	56.7%

Data source: Los Angeles County Health Survey
Data year: 2011
Source geography: County

Stakeholder Feedback

The proportion of the service area 45-64 and above 65 years is higher than the average for Los Angeles County. Stakeholders in the USC VHH observed that the aging population is often treated for acute incidents related to Alzheimer's and dementia, but lacks consistent ongoing care for these conditions. Similarly, providers observed that the aging population is susceptible to slips and falls at home resulting in injuries that bring them in to the healthcare system for acute treatment, but they are not always connected with ongoing care after such events. Aging individuals are often isolated and lack access to transportation to health care. Providers recommended targeted outreach and services to this population.

Homelessness and Housing

More than 20 percent of the nation's homeless population is now living in California, an estimated 115,738 people. More than 43,000 of them live in Los Angeles County—the largest concentration in the United States[79]. Ongoing, dedicated revenue and aggressive State action are critical to effectively addressing this crisis[80].

A homeless individual is defined as "an individual who lacks housing (without regard to whether the individual is a member of a family), including an individual whose primary residence during the night is a supervised public or private facility (e.g., shelters) that provides temporary living accommodations, and an individual who is a resident in transitional housing."[81]

Prevalence

The homeless counts in this section are for the entire SPAs that span the service area. In order to best approximate the USC VHH service area, the estimated total number of homeless people was calculated by multiplying the number of homeless residents in each SPA by the percentage of each SPA's population represented in USC VHH's service area. The estimated USC VHH service area homeless population in 2016 was slightly lower than the estimated homeless population in 2011 (8,645).

Total Homeless, 2016

Report Area	Number	Percent
SPA 2–San Fernando Valley	7,094	16.2%
SPA 3–San Gabriel Valley	2,612	6.0%
SPA 4–Metro	11,681	26.6%
USC VHH Service Area	7,267	16.6%
Los Angeles County	43,854	100.0%

Data source: Los Angeles Homeless Services Authority
Data year: 2016
Source geography: SPA

According to the Los Angeles Homeless Services Authority, "homeless individuals" include single adults, adult couples with no children, and groups of adults over the age of 18. Considering Los Angeles County, SPA 4–Metro had the greatest percentage of homeless individuals (27.7%), homeless families (22.7%) and homeless unaccompanied minors (31.2%).

[79] County of Los Angeles. Office of Countywide Communications. Los Angeles, CA. Available at http://priorities.lacounty.gov/homeless/. Accessed [September 2, 2016].

[80] County of Los Angeles. Office of Countywide Communications. Los Angeles, CA. Available at http://priorities.lacounty.gov/homeless/. Accessed [September 2, 2016].

[81] National Health Care for the Homeless Council. Nashville, TN. Available at: https://www.nhchc.org/faq/official-definition-homelessness/. Accessed: [August 29, 2016].

Homeless by Type, 2015

Report Area	Homeless Individuals		Homeless Families		Homeless Unaccompanied Minors	
	Number	Percent	Number	Percent	Number	Percent
SPA 2–San Fernando Valley	6,045	16.1%	1,030	16.8%	19	15.2%
SPA 3–San Gabriel Valley	2,123	5.6%	489	8.0%	0	0.0%
SPA 4–Metro	10,431	27.7%	1,390	22.7%	39	31.2%
USC VHH Service Area	6,268	16.7%	1,014	16.5%	20	16.0%
Los Angeles County	37,601	100.0%	6,128	100.0%	125	100.0%

Data source: Los Angeles Homeless Services Authority
Data year: 2016
Source geography: SPA

SPA 4–Metro had the highest percentage of homeless who are mentally ill (29.3%), have substance abuse issues (28.0%), are HIV-positive (45.2%), or are physically disabled (28.0%). These percentages are significantly higher than in Los Angeles County.

Homeless by Special Population, 2016

Report Area	Mentally Ill		With Substance Abuse Issues		With HIV		Physically Disabled	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
SPA 2–San Fernando Valley	2,464	18.9%	2,109	21.2%	151	24.0%	1,478	20.0%
SPA 3–San Gabriel Valley	793	6.1%	653	6.6%	16	2.5%	581	7.9%
SPA 4–Metro	3,815	29.3%	2,787	28.0%	284	45.2%	2,075	28.0%
USC VHH Service Area	2,461	18.9%	2,011	15.5%	156	24.8%	1,452	19.6%
Los Angeles County	13,006	29.7%	9,941	22.7%	629	1.4%	7,401	16.9%

Source: Los Angeles Homeless Services Authority,
Greater Los Angeles Homeless County Report, 2016, SPA

Associated Drivers

Housing instability among poor families is the result of multiple overlapping factors ranging from number of income-earning adults in the home, education level of income-earning adults in the home, health of family members, domestic violence exposure, substance use patterns and access to social support and health care.[82] Although Los Angeles is home to the largest health and social services system available to homeless people, given the size of the very poor and homeless population it faces significant challenges to provide cost effective integrated care for those facing housing instability.[83]

[82] A Secondary Analysis by ICPH utilizing data from the Fragile Families and Child Well-being Study.Institute for Children, Poverty & Homelessness. http://www.icphusa.org/index.asp?page=16&report=112&pg=110. Accessed: [September 2, 2016].

[83] Guerrero, E., Henwood, B. and Wenzel, S. (2014). Service Integration to Reduce Homelessness in Los Angeles County: Multiple Stakeholder Perspectives. *Human Service Organizations* 38(1):44-54.

Housing

In 2015, the average household income of residents in the USC VHH service area was $85,144, which is moderately higher than Los Angeles County ($78,309). Families and individuals are much more likely to become unstably housed or homeless if they are shouldering a high housing cost burden, typically defined as housing costs that exceed 30% of monthly income.

Individuals are also more likely to become unstably housed if living in substandard housing situations, defined as the following: a lack of complete plumbing facilities; a lack of complete kitchen facilities; 1.01 or more occupants per room; selected monthly owner costs as a percentage of household income greater than 30%; or gross rent as a percentage of household income greater than 30%.

Housing Conditions, 2010-2014

ZIP Code	Percentage of residents living in substandard housing situation	Percentage of residents whose monthly housing cost exceeds 30% of income
90041	1.7%	49.3%
90042	2.7%	56.2%
91001	1.0%	49.2%
91011	0.3%	45.8%
91020	4.5%	50.9%
91040	3.1%	54.4%
91042	1.5%	61.8%
91103	1.8%	54.5%
91105	2.0%	44.4%
91201	1.7%	62.5%
91202	1.5%	61.0%
91203	2.3%	66.9%
91204	3.1%	60.9%
91205	3.9%	65.3%
91206	1.9%	58.7%
91207	2.2%	47.9%
91208	1.1%	53.1%
91214	1.5%	51.9%
91342	1.3%	60.8%
USC VHH Service Area	2.1%	55.6%
Los Angeles County	2.1%	56.0%

Data source: U.S. Census Bureau, American Community Survey
Data year: 2010–14
Source geography: ZIP Code

Stakeholder Feedback

Stakeholders associated homelessness in the service area with poverty and a lack of affordable housing. They observed that the only consistent source of care for the homeless population is emergency (911) service, which puts a burden on those services. Because the homeless population suffers

disproportionately with mental health concerns, the reliance on emergency services fails to meet this long-term health care need. The high cost of living puts an undue burden on low-income families that spend a large proportion of their incomes on rent (vs. greater investment in healthy food or lifestyle). Stakeholders have also noted an increase in the homeless population and a lack of shelters. Homeless families face unique challenges in accessing education and health care, and there are insufficient social service providers in place to connect these families with homeless services. In focus groups, stakeholders also noted that veterans comprise an ever-increasing proportion of the homeless population.

Poverty

In 2015, the average household income of residents in the USC VHH service area ($85,144) was slightly higher than Los Angeles County ($78,309). The average household income was significantly lower in ZIP codes 91203 ($61,605), 91204 ($53,876), and 91205 ($50,806). There was no difference in the average household size (3.0) between populations in the USC VHH service area and Los Angeles County.

Household Descriptions

City	ZIP Code	Est. Average Household Income	Est. Average Household Size
Eagle Rock	90041	$83,193	2.7
Highland Park	90042	$68,120	3.0
Altadena	91001	$111,231	2.8
La Cañada Flintridge	91011	$188,863	3.0
Montrose	91020	$87,261	2.5
Sunland-Tujunga	91040	$83,241	2.8
Tujunga	91042	$74,533	2.8
Pasadena	91103	$86,201	3.1
Pasadena	91105	$144,908	2.1
Glendale	91201	$65,734	2.8
Glendale	91202	$87,410	2.6
Glendale	91203	$61,605	2.6
Glendale	91204	$53,876	2.7
Glendale	91205	$50,806	2.6
Glendale	91206	$82,785	2.5
Glendale	91207	$111,119	2.6
Glendale	91208	$123,718	2.6
La Crescenta-Montrose	91214	$108,071	2.9
Sylmar	91342	$70,126	3.9
USC VHH Service Area		$85,144	3.0
Los Angeles County		$78,309	3.0

Data source: Nielsen Claritas
Data year: 2015
Source geography: ZIP code

The U.S. Census Bureau issues poverty thresholds[84] with the purpose of calculating the number of people living in poverty. [85]

In 2015, a slightly lower percentage of families in the USC VHH service area lived below poverty (11.0%) relative to families in Los Angeles County (14.9%). Similarly, the percentage of families living below poverty with children (8.1%) was lower than Los Angeles County (11.7%).

Several areas with a higher concentration of families living below poverty include two ZIP codes in Glendale 91204 (19.0%), 91205 (19.0%), and 91042–Tujunga (14.5%). Families with children who were living below poverty were more prevalent in Glendale: 91204 (13.8%), 91205 (11.7%), and 91203 (11.5%). This is also the case for 90042–Highland Park (11.9%) and 91342–Sylmar (11.4%), which are two communities with that also have high percentages of absent-spouse households.

Poverty, 2015

City	ZIP Code	Families at or Above Poverty	Families at or Above Poverty with Children	Families Below Poverty	Families Below Poverty with Children
Eagle Rock	90041	90.9%	38.8%	9.1%	6.9%
Highland Park	90042	85.6%	42.5%	14.4%	11.9%
Altadena	91001	92.8%	42.7%	7.2%	5.7%
La Cañada Flintridge	91011	97.6%	46.4%	2.4%	1.5%
Montrose	91020	91.8%	42.7%	8.2%	3.4%
Sunland-Tujunga	91040	92.4%	38.9%	7.6%	6.1%
Tujunga	91042	85.5%	36.2%	14.5%	9.5%
Pasadena	91103	86.9%	40.9%	13.1%	10.7%
Pasadena	91105	96.9%	35.5%	3.1%	2.2%
Glendale	91201	87.2%	31.4%	12.8%	9.7%
Glendale	91202	91.3%	30.0%	8.7%	6.0%
Glendale	91203	86.6%	32.8%	13.4%	11.5%
Glendale	91204	81.0%	34.0%	19.0%	13.8%
Glendale	91205	81.0%	34.4%	19.0%	11.7%
Glendale	91206	90.5%	33.9%	9.5%	5.3%
Glendale	91207	94.7%	33.7%	5.3%	3.9%
Glendale	91208	93.5%	43.5%	6.5%	3.2%
La Crescenta-Montrose	91214	94.1%	45.5%	5.9%	3.1%
Sylmar	91342	86.8%	47.0%	13.2%	11.4%
USC VHH Service Area		89.0%	39.7%	11.0%	8.1%
Los Angeles County		85.2%	41.9%	14.9%	11.7%

Data source: Nielsen Claritas
Data year: 2015
Source geography: ZIP Code

[84] Detailed (48-cell) matrix of thresholds varies by family size, number of children, and, for 1- & 2-person units, whether or not elderly. Weighted average thresholds vary by family size and, for 1- & 2-person units, whether or not elderly. There is no geographic variation; the same figures are used for all 50 states and D.C.

[85] United States Department of Health and Human Services. Frequently Asked Questions Related To The Poverty Guidelines And Poverty. https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty#differences [Accessed September 8, 2013]

Disparities

Students Receiving Free or Reduced-Price Meals

Student eligibility for Free or Reduced Price School Meal (FRPM) serves as a proxy measure of family poverty, as the federal poverty threshold tends to underestimate the extent of poverty, particularly in high cost areas. Research indicates that families in California can earn two or more times the federal poverty level and still struggle to meet their needs.[86]

A child's family income must fall below 130% of the federal poverty guidelines ($31,005 for a family of four in 2014-2015) to qualify for free meals, or below 185% of the federal poverty guidelines ($44,123 for a family of four in 2014-2015) to qualify for reduced price meals.

In 2015, the percentage of children eligible for the FRPM program was 66.6%, which is an increase from 2011 (61.8%). Overall, these percentages are above that for California (58.6%).

Children Eligible for Free or Reduced-Price Lunch, 2015

Report Area	Percentage
Los Angeles County	66.6%
California	58.6%

Data source: California Department of Education (CDE)
Data year: 2015
Source geography: County

[86] As cited on kidsdata.org, *Self-Sufficiency Standard*. (2015). Insight Center for Community Economic Development and Dr. Diana Pearce, *California Family Economic Self-Sufficiency Standard*. Center for Women's Welfare, School of Social Work, University of Washington. Accessed [August 1, 2016].

Preventive Wellness

Along with access to health care, examination or check-ups and preventive practices such as having a regular source of care and timely physical and medical tests is important. Adequate, regular primary care can prevent the development of health problems and maintain positive health conditions.

Health Check-Ups

In 2015, the percentage of residents in the USC VHH service area who visited a doctor, nurse, or other health care professional was slightly higher (71.9%) than in Los Angeles County (70.7%). Similarly, a higher percentage of individuals residing in the USC VHH service area who visited a dentist or a dental clinic (63.0%) than in Los Angeles County (59.3%). In SPA 2, 74.3% of the population visited a doctor, nurse or other health professional and 65.1% saw a dentist or visited a dental clinic in the past year, with both percentages reflecting the highest for the area.

Visited Health Care Professional in Past Year, 2015

Report Area	Saw Doctor, Nurse, or Other Health Care Professional in the Past Year	Saw Dentist or Visited Dental Clinic in the Past Year
SPA 2–San Fernando Valley	74.3%	65.1%
SPA 3–San Gabriel Valley	70.6%	58.2%
SPA 4–Metro	64.6%	59.7%
USC VHH Service Area	71.9%	63.0%
Los Angeles County	70.7%	59.3%

Data Source: Los Angeles County Health Survey
Data Year: 2015
Source Geography: SPA

Health Activities

In terms of healthy activities directly influencing diet and physical activity, the USC VHH service area population indicated a higher percentage of children engaging in physical activity at least one hour a day (27.6%) than Los Angeles County (26.4%), but was lower than the percentage for the state of California (32.8%).

In addition, a lower percentage of teens (6.0%) in the USC VHH service area engaged in at least one hour of physical activity when compared to Los Angeles County (12.3%) and California (12.2%). This disparity stems from the low percentage of teens engaging in physical activity in SPA 2 (1.3%).

The percentage of children and teens who ate five or more servings of fruits and vegetables in the past day was slightly higher in the USC VHH service area (56.7%) than in Los Angeles County (55.4%) and California (50.7%). SPA 3 in particular had a higher percentage (62.2%) than other service areas.

In regards to unhealthy food consumption, a lower percentage (37.1%) of those residing in the USC VHH service area ate fast food more than once a week, relative to the rest of Los Angeles County (42.3%) and California (38.6%).

Soda consumption was significantly lower in the USC VHH service area (15.9%) than in Los Angeles County (18.2%) and California (20.6%). SPA 4 reflected the lowest percentage of children and teens who consumed soda in the past day (12.4%).

Health Activities Related to Diet and Physical Activity

Service Planning Area	Physically Active at Least One Hour Each Day in Last Week[1]		Ate Five or More Servings of Fruits and Vegetables in Past Day[2]	Ate Fast Food More Than Once in the Past Week[1]	Soda Consumption in Past Day[1]
	Children (0-11)	Teens (12-17)	Children and Teens (0-17)	Adults, Teens and Children	Children and Teens (0-17)
SPA 2–San Fernando Valley	22.8%	1.3%	55.9%	36.1%	16.1%
SPA 3–San Gabriel Valley	51.8%	11.8%	62.2%	37.1%	19.6%
SPA 4–Metro	24.0%	17.3%	54.7%	40.4%	12.4%
USC VHH Service Area	27.6%	6.0%	56.7%	37.1%	15.9%
Los Angeles County	26.4%	12.3%	55.4%	42.3%	18.2%
California	32.8%	12.2%	50.7%	38.6%	20.6%

Data Source: California Health Interview Survey
[1]Data Year: 2014
[2]Data Year: 2012
Source Geography: SPA

Preventable Hospitalizations

Potentially preventable hospitalizations are admissions to a hospital for certain acute illnesses (e.g., dehydration) or worsening chronic conditions (e.g., diabetes) that might not have required hospitalization had these conditions been managed successfully by primary care providers in outpatient settings[87]. Although not all such hospitalizations can be avoided, admission rates in populations and communities can vary depending on access to primary care, care-seeking behaviors, and the quality of care available[88]. Because hospitalization tends to be costlier than outpatient or primary care, potentially preventable hospitalizations often are tracked as markers of health system efficiency. The number and cost of potentially preventable hospitalizations also can be calculated to help identify potential cost savings associated with reducing these hospitalizations overall and for specific populations[89].

[87] Center for Disease Control and Prevention. Potentially Preventable Hospitalizations. Washington, DC. Available at: https://www.cdc.gov/mmwr/preview/mmwrhtml/su6203a23.htm. Accessed: [September 2, 2016].
[88] Center for Disease Control and Prevention. Potentially Preventable Hospitalizations. Washington, DC. Available at: https://www.cdc.gov/mmwr/preview/mmwrhtml/su6203a23.htm. Accessed: [September 2, 2016].
[89] Center for Disease Control and Prevention. Potentially Preventable Hospitalizations. Washington, DC. Available at: https://www.cdc.gov/mmwr/preview/mmwrhtml/su6203a23.htm. Accessed: [September 2, 2016].

In 2012, the rate at which preventable hospital events occurred (per 1,000) for individuals over the age of 18 in the USC VHH service area (13.3) was higher than the rest of Los Angeles County (11.7). In particular, ZIP codes 91103 (20.7), 91020 (19.0), 91205 (18.4), and 91204 (18.2) showed rates significantly higher than the rest of the USC VHH service area.

Preventable Hospital Events Rate per 1,000 Population (18+)

City	ZIP Code	Rate
Eagle Rock	90041	10.9
Highland Park	90042	9.4
Altadena	91001	11.0
La Cañada Flintridge	91011	6.9
Montrose	91020	19.0
Sunland-Tujunga	91040	13.9
Tujunga	91042	11.5
Pasadena	91103	20.7
Pasadena	91105	14.3
Glendale	91201	14.5
Glendale	91202	12.7
Glendale	91203	10.0
Glendale	91204	18.2
Glendale	91205	18.4
Glendale	91206	15.2
Glendale	91207	13.5
Glendale	91208	9.5
La Crescenta-Montrose	91214	8.6
Sylmar	91342	14.1
USC VHH Service Area		13.3
Los Angeles County		11.7

Source: California Office of Statewide Health Planning and Development
OSHPD Patient Discharge Data,
Data Year: 2012
Source Geography: ZIP Code

Disparities

Hospitalizations tend to be more costly than outpatient and primary care. Looking at the rates of access to regular sources of care and disparities in these rates of access lends insight into the populations that may be more likely to experience preventable hospitalization.

Have Regular Source of Care

Ethnicity	Percent
African American	83.8%
American Indian/Alaskan Native	65.4%
Asian	75.6%

Ethnicity	Percent
Latino	76.9%
White	86.4%
Los Angeles County	80.3%

Data Source: Los Angeles County Health Survey
Data Year: 2015
Source Geography: SPA

American Indian/Alaskan Native populations in Los Angeles County have the lowest percentage in terms of having a regular source of care (65.4%). Asians (75.6%) and Latinos (76.9%) also fall below the percent level reflected in Los Angeles County (80.3%).

Have Regular Source of Care, 2015

Ethnicity	Percent
African American	83.8%
American Indian/Alaskan Native	65.4%
Asian	75.6%
Latino	76.9%
White	86.4%
Los Angeles County	80.3%

Data Source: Los Angeles County Health Survey
Data Year: 2015
Source Geography: SPA

Individuals between the ages of 25 and 29 reflect the smallest percentage with a regular source of care (61.8%). Residents of Los Angeles County between the ages of 18 and 24 (71.7%) and between 30 and 39 years old (75.6%) also represent the lower half of the population having a regular source of care.

Have Regular Source of Care

Age Group	Percent
18-24 years old	71.7%
25-29 years old	61.8%
30-39 years old	75.6%
40-49 years old	81.5%
50-59 years old	85.7%
60-64 years old	89.3%
65+ years old	94.2%

Data Source: Los Angeles County Health Survey
Data Year: 2015
Source Geography: SPA

Stakeholder Feedback

Stakeholders observed that many subpopulations in the service area do not have access to, or do not access primary care providers and other preventive care services. This indicates a need to conduct greater outreach in the communities, and to provide culturally sensitive care that fits the needs and addresses the barriers faced by the service population.

Transportation

Transportation barriers are often cited as barriers to healthcare access. Transportation barriers can lead to rescheduled or missed appointments, delayed care, and missed or delayed medication use. These consequences may cause poorer management of chronic illness and thus poorer health outcomes. However, the significance of these barriers is uncertain based on existing literature due to wide variability in both study populations and transportation barrier measures[90].

Personal Transportation

In 2015, the average number of vehicles per household in the USC VHH service area (1.8) was the same as Los Angeles County (1.8). However, there were several ZIP codes with high percentages of households with zero cars. In particular, ZIP codes 91205 (18.3%), 91204 (17.5%), 91203 (16.4%), and 91206 (13.5%) had a significantly higher percentage of households with zero cars than the rest of the USC VHH service area (8.4%) and Los Angeles County (9.7%).

Number of vehicles per household

City	ZIP Code	Number of Vehicles Per Household			Average Vehicles Per Household
		Zero Cars	1 Car	2+ Cars	
Eagle Rock	90041	7.7%	32.7%	59.6%	1.9
Highland Park	90042	10.7%	37.2%	52.2%	1.7
Altadena	91001	3.7%	25.5%	70.7%	2.1
La Cañada Flintridge	91011	0.8%	16.1%	83.2%	2.4
Montrose	91020	7.5%	35.2%	57.4%	1.8
Sunland-Tujunga	91040	5.6%	24.9%	69.6%	2.1
Tujunga	91042	5.6%	30.0%	64.4%	2.0
Pasadena	91103	11.3%	34.7%	54.0%	1.8
Pasadena	91105	6.2%	36.8%	57.1%	1.7
Glendale	91201	10.2%	35.9%	54.0%	1.7
Glendale	91202	8.7%	36.2%	55.1%	1.7
Glendale	91203	16.4%	41.7%	41.9%	1.4
Glendale	91204	17.5%	42.7%	39.8%	1.4
Glendale	91205	18.3%	42.3%	39.4%	1.3
Glendale	91206	13.5%	37.3%	49.2%	1.6
Glendale	91207	5.8%	30.5%	63.7%	1.9
Glendale	91208	4.7%	33.6%	61.7%	2.0
La Crescenta-Montrose	91214	2.8%	21.8%	75.5%	2.2
Sylmar	91342	3.5%	23.4%	73.1%	2.2
USC VHH Service Area		8.4%	32.6%	38.1%	1.8

[90] Institute for Health and Research Policy. Traveling towards disease: transportation barriers to health care access. Chicago, IL. Available at: http://www.ihrp.uic.edu/content/traveling-towards-disease-transportation-barriers-health-care-access. Accessed: [September 2, 2016].

City	ZIP Code	Number of Vehicles Per Household			Average Vehicles Per Household
		Zero Cars	1 Car	2+ Cars	
Los Angeles County		9.7%	35.2%	35.2%	1.8

Data Source: Nielson Claritas
Data Year: 2015
Source Geography: ZIP

Stakeholder Feedback

Stakeholders acknowledged transportation-related barriers to accessing health care for families in the service area. The principal barriers are access to affordable and efficient public transportation. One stakeholder explained, "buses cost $2-3 and if you are a family of 4, that's $8-16 round trip – that's a lot of money." Furthermore, "the frequency and time is not efficient and the [bus] routing is not helpful." Additionally, for families without cars, calling 911 is the most efficient way to access health care quickly, as public transportation is often slow or unpredictable. Finally, for those who are chronically ill and living alone, neither driving one's self to appointments nor using public transportation are feasible means of accessing health care.

Violence/Injury/Safety

Injuries can result from many unintentional or intentional events including motor vehicle accidents, falls, job-related accidents, gunshot and blast wounds, and sports injuries. Common diagnoses include brain injury, spinal cord injury, amputation, anoxia, and muscular-skeletal injury.[91]. Injuries affect everyone, regardless of age, gender, ethnicity, or economic status[92]. Although injuries are often unavoidable, there are steps that can be taken to lessen the consequences of injuries, including wearing seat belts, violence prevention education, ignition interlock and in-car breathalyzers to prevent drunk driving, pro-active job site safety precautions and regular physical activity[93].

Unintentional Injury

In 2012, the USC VHH service area experienced 97 unintentional injuries leading to death. This total accounted for 2.7% of deaths within the service area, a percentage slightly lower than that experienced in Los Angeles County (3.5%) and California (4.4%). In particular, ZIP codes 91203 (5.0), 90041 (2.8), 91105 (2.6), 91042 (2.5), and 91208 (2.5) had the highest rates within the USC VHH service area.

[91] Centers for Disease Control and Prevention. (2014). *Injury Prevention and Control*. Atlanta, GA. Available at http://www.cdc.gov/injury/overview/index.html. Accessed [August 2, 2016].
[92] Centers for Disease Control and Prevention. (2014). *Injury Prevention and Control*. Atlanta, GA. Available at http://www.cdc.gov/injury/overview/index.html. Accessed [August 2, 2016].
[93] Centers for Disease Control and Prevention. (2014). *Injury Prevention and Control*. Atlanta, GA. Available at http://www.cdc.gov/injury/overview/index.html. Accessed [August 2, 2016].

Unintentional Injuries Leading to Death

City	ZIP Code	Number	Percent	Rate
Eagle Rock	90041	8	4.4%	2.8
Highland Park	90042	9	3.4%	1.5
Altadena	91001	8	3.0%	2.2
La Cañada Flintridge	91011	2	1.5%	1.0
Montrose	91020	1	1.4%	1.2
Sunland-Tujunga	91040	5	2.7%	2.2
Tujunga	91042	7	3.9%	2.5
Pasadena	91103	5	1.9%	1.8
Pasadena	91105	3	2.7%	2.6
Glendale	91201	3	1.7%	1.4
Glendale	91202	0	0.0%	0.0
Glendale	91203	7	8.1%	5.0
Glendale	91204	3	2.1%	1.9
Glendale	91205	8	3.0%	2.1
Glendale	91206	5	2.0%	1.5
Glendale	91207	1	1.3%	1.1
Glendale	91208	4	3.7%	2.5
La Crescenta-Montrose	91214	3	1.7%	1.0
Sylmar	91342	15	2.9%	1.6
USC VHH Service Area		97	2.7%	1.9
Los Angeles County		2,060	3.5%	-
California		10,750	4.4%	2.8

Source: California Department of Public Health
Data Year: 2012
Source Geography: ZIP

Teens Perception of Injury

In 2012, the number of teens who received threats of violence or physical harm from their peers was lower in the USC VHH service area (10.2%) than in Los Angeles County (14.7%) and California (16.2%). Conversely, the percentage of teens in the Metro service area (21.5%) who received threats was much higher.

In contrast, there were a much higher percentage of teens that feared being attacked at school than those who actually received threats. In particular, the USC VHH service area had a higher percentage (20.0%) than Los Angeles County (17.1%) and California (14.3%). SPA 3 had the highest percentage of teens that feared being attacked at school (21.5%).

Teens Perception of Neighborhood and School Safety, 2012, 2014

Report Area	Received threats of violence or physical harm from peers in past year[1]	Feared of being attacked at school in the past year[1]	Felt unsafe in nearby park or playground during the day[2]
SPA 2–San Fernando	8.7%	21.5%	*
SPA 3–San Gabriel Valley	2.4%	15.1%	11.6%
SPA 4–Metro	21.5%	18.7%	7.0%
USC VHH Service Area	10.2%	20.0%	-
Los Angeles County	14.7%	17.1%	11.7%
California	16.2%	14.3%	9.5%

Source:
[1]California Health interview Survey, 2012, SPA
[2]California Health interview Survey, 2014, SPA
*SPA Data Unavailable—Estimation for USC VHH Service Area not applicable

Stakeholder Feedback

In focus groups, stakeholders expressed concerns about safety largely linked to transportation and pedestrian access. Distracted drivers causing pedestrian accidents as well as dangerous conditions for bicyclists (tied to a shortage of bike lanes) are principal among the concerns for physical safety, particularly in the more congested areas of South Glendale. Stakeholders also discussed the need for additional services for victims of domestic violence and sexual assault, as budget cuts often impact these services.

VIII. Community-Specific Trends in Health Care Access

During focus group interviews and through survey feedback, USC VHH health care providers shared insights concerning sub-geographies and sub-populations facing barriers to access to health care and wellness.

Providers identified the geographic communities located in the central core and South Glendale as communities where economic factors most seriously impact health and access to health care given their overall lower incomes, greater housing density and lower employment rates. The communities defined by Glendale ZIP codes 91204, 91205 and 91203 have significantly below average household incomes, above average or significantly above average unemployment and poverty rates, and significantly below average access to private vehicles.

Highland Park (90042) is impacted by low household income, low education (17.3% of the population has below a 9th grade education), and few economic resources to support growing families (based on proportion of families living below the Federal Poverty Line and average birth rate). During focus groups, providers explained that lower-income families and individuals–often concentrated in lower-income communities – experience restricted access to: (affordable) healthy food; recreational spaces and activities; stable and safe housing; sufficient free time (outside of work) to focus on the developmental health of children; available funds to maintain chronic conditions (like diabetes); transportation to health care facilities; more costly office visits (as compared to emergency services more often covered by insurance); and doctors that accept low-cost insurance including Medi-Cal.

Providers also identified specific sub-populations facing unique linguistic, cultural, economic and social barriers to health care. Whereas communities in South Glendale are characterized by largely Indo-European-only speaking households (ZIP codes 91201, 91202, 91203, 91204, 91205, 91206 and 91207), other communities are characterized by large Asian-only speaking households (90041, 91020, and 91203 and 91204) and Spanish-only speaking households (90042). As language spoken at home is a key marker of acculturation level, it follows that communities with high concentrations of households speaking foreign languages are also communities whose cultural norms and practices may differ from mainstream American norms and values. During focus groups, health care providers called attention to the need for greater understanding of the cultural norms, values and practices of the ethnic communities in their service area. As one provider explained, “we have so many different cultures in this area. There is a need for education on different cultures: who is here, how do different cultures do things, and what is “normal” to another community.” The importance of recognizing and working across cultural barriers to care was highlighted in providers’ observations that stigma around seeking and receiving medical care or mental health care complicates their efforts to serve the Armenian, Latino and Asian populations in their service area.

It is important to note that a few sub-geographies, including 90042 (Spanish-speaking) and 91201, 91203, 91204, and 91205 (Indo-European-speaking) are characterized by both low-income and high proportions of foreign-language speaking households. Providers highlighted that members of these communities may confront additional barriers to care including lack of access to interpreters that can help explain health conditions in culturally responsive ways and serve as guides through the complex process of accessing health care coverage. Providers also mentioned that overall, the service area consists of a large undocumented population that faces barriers accessing social services. One provider explained that serving the undocumented population “is a big problem here.” Another provider explained that there is a notable population of children of incarcerated parents who face barriers to care

because current policies do not allow grandparents or other guardians to authorize care when parents are not available.

Appendix A—Scorecard

2016 Glendale Collaborative CHNA - Health Needs and Drivers Summary Scorecard

DATA INDICATORS Legend †Data from secondary sources aggregated using ZIP codes in the hospital service area ^Data from secondary sources reflecting the entire Service Planning Area (SPA) Comparison levels: CA - California LAC - LA County	Year of Data	Healthy People 2020 Target	Comparison Level	Comparison	GAMC Service Area Average	GMHHC Service Area Average	USC- VHH Service Area Average	Focus Group**
HEALTH OUTCOMES								
Alcohol and Substance Abuse								*
Percent of adults and teens who are currently smoking^	2014		LAC	10.0%	**11.7%**	**12.0%**	**11.6%**	
Percent of adults 18 and older who reported alcohol use in the past month^	2015		LAC	51.9%	51.7%	50.0%	53.0%	
Percent of adults 18 and older who reported binge drinking in the past month^	2015		LAC	15.9%	15.7%	**16.0%**	15.1%	
Breast Cancer								
Breast cancer mortality per 100,000 females†	2008		LAC	21.2	**28.9**	**25.9**	**30.0**	
Cancer								*
Cancer deaths †	2012		CA	57,514	520	859	918	
Cardiovascular Disease								*
Percent of heart disease prevalence^	2014		LAC	5.7%	3.6%	3.0%	4.5%	
Heart disease deaths †	2012		CA	59,052	544	932	985	
Heart disease mortality rate per 10,000 persons†	2012		CA	15.5	**19.1**	**18.3**	**20.0**	
Cholesterol								
High cholesterol prevalence	2015		LAC	25.2%	25.2%	25.0%	25.1%	
Diabetes								*
Diagnosed with diabetes^	2015		LAC	9.8%	9.7%	**10.0%**	9.0%	
Mortality Rate per 10,000 persons^	2012		CA	2.1	2.1	2.1	**2.3**	
Diabetes deaths †	2012		CA	7,877	64	123	133	
HIV/AIDS								
Rate of HIV hospitalizations per 100,000 pop.†	2010		CA	11.0	8.8	**15.6**	7.0	
Infant Birth								
Number of infants with low birth weight (1500-2499 grams)†	2012		CA	28,034	203	330	336	
Number of infants with very low birth weight (<1500 grams)†	2012		CA	5,689	56	77	74	

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2016 Glendale Collaborative CHNA - Health Needs and Drivers Summary Scorecard

DATA INDICATORS

Legend
†Data from secondary sources aggregated using ZIP codes in the hospital service area
^Data from secondary sources reflecting the entire Service Planning Area (SPA)
Comparison levels: CA - California LAC - LA County

	Year of Data	Healthy People 2020 Target	Comparison Level	Comparison	GAMC Service Area Average	GMHHC Service Area Average	USC- VHH Service Area Average	Focus Group**
Mental Health								*
Rate of adult hospitalizations per 100,000 pop.†	2012		LAC	677.0	**774.5**	629.6	**847.0**	
Rate of suicides per 10,000 pop.†	2012	<=1.0	CA	1.0	1.0	0.8	1.0	
Obesity/Overweight								*
Percent of adults who are obese^	2014	<=30.5%	LAC	23.5%	20.8%	21.0%	20.3%	
Overweight for age youth^	2014		LAC	13.1%	12.0%	**14.5%**	11.5%	
Sexually Transmitted Diseases								*
Chlamydia incidence per 100,000 pop.^	2013		LAC	512.9	434.7	474.9	376.5	
Stroke								*
Stroke mortality per 10,000 pop. ^	2012		CA	3.5	**3.7**	**4.6**	**4.3**	
HEALTH DRIVERS								
Alcohol and Substance Use								*
Alcohol outlets (active off-sale retail licenses) (e.g. liquor stores, grocery stores) †	2016		LAC	6,370	211	352	300	
Cultural Competency								
Percent who have a hard time understanding doctor^	2014		LAC	3.2%	2.7%	3.0%	2.6%	
Dental Care Access								*
Percent of adults 18 and older who do not have dental insurance^	2011		LAC	51.8%	**54.2%**	**56.0%**	51.6%	
Percent of children (3-17 years old) who were unable to afford dental care ^	2014		LAC	11.5%	**12.5%**	**13.0%**	11.2%	
Health Care Access								*
Percent of adults 18 and older who are uninsured^	2014		LAC	16.1%	**19.6%**	**21.0%**	**17.4%**	
Percent of children who are uninsured^	2014		LAC	4.4%	2.6%	3.0%	2.8%	
Mental Health Care Access								
Unable to afford mental health care	2011		LAC	6.1%	**6.7%**	**7.0%**	**6.5%**	
Homelessness								*
Number of homeless persons^	2016		LAC	43,854	9,066	9,745	7,302	
Physical Environment								*
Open space (square miles) per 10,000 pop.†	2013		CA	21.0	**0.3**	**2.5**	**2.9**	

2016 Glendale Collaborative CHNA - Health Needs and Drivers Summary Scorecard

DATA INDICATORS

Legend
†Data from secondary sources aggregated using ZIP codes in the hospital service area
^Data from secondary sources reflecting the entire Service Planning Area (SPA)
Comparison levels: CA - California LAC - LA County

	Year of Data	Healthy People 2020 Target	Comparison Level	Comparison	GAMC Service Area Average	GMHHC Service Area Average	USC- VHH Service Area Average	Focus Group**

FOOTNOTES
* = health need identified during focus groups

GLENDALE ADVENTIST MEDICAL CENTER SERVICE AREA:
90041 (Eagle Rock, SPA 4)
91201 (Glendale, SPA 2)
91202 (Glendale, SPA 2)
91203 (Glendale, SPA 2)
91204 (Glendale, SPA 2)
91205 (Glendale, SPA 2)
91206 (Glendale, SPA 2)
91207 (Glendale, SPA 2)
91208 (Glendale, SPA 2)
91020 (Montrose, SPA 2)
90065 (Glassell Park, SPA 4)
90042 (Highland Park, SPA 4)

GLENDALE MEMORIAL HOSPITAL AND HEALTH CENTER SERVICE AREA:
90041 (Eagle Rock, SPA 4)
90042 (Tujunga, SPA 2)
91201 (Glendale, SPA 2)
91202 (Glendale, SPA 2)
91203 (Glendale, SPA 2)
91204 (Glendale, SPA 2)
91205 (Glendale, SPA 2)
91206 (Glendale, SPA 2)
91207 (Glendale, SPA 2)
91208 (Glendale, SPA 2)
90065 (Glassell Park, SPA 4)
90042 (Highland Park, SPA 4)
91214 (La Crescenta, SPA 2)
91042 (Tujunga, SPA 2)
90039 (Griffith Park, SPA 4)
90026 (Hollywood, SPA 4)
90029 (Hollywood, SPA 4)

USC VERDUGO HILLS HOSPITAL SERVICE AREA:
90041 (Eagle Rock, SPA 4)
90042 (Tujunga, SPA 2) (NEW TO UVHH)
91001 (Altadena , SPA 3) (NEW TO UVHH)
91011 (La Canada/Flintridge ,SPA 3)
91020 (Montrose, SPA 2)
91040 (Sunland, SPA 2)
91042 (Tujunga), SPA 2)
91046 (Verdugo City, SPA 2)
91103 (Pasadena, SPA 3)
91105 (Pasadena , SPA 4) (NEW TO UVHH)
91201 (Glendale, SPA 2)
91202 (Glendale, SPA 2)
91203 (Glendale, SPA 2)
91204 (Glendale, SPA 2)
91205 (Glendale, SPA 2)
91206 (Glendale, SPA 2)
91207 (Glendale, SPA 2)
91208 (Glendale, SPA 2)
91214 (La Crescenta, SPA 2)
91342 (Sylmar , SPA 2) (NEW TO UVHH)

Appendix B— Primary Data Gathering Tools

GLENDALE HOSPITALS – 2016 COMMUNITY HEALTH NEEDS ASSESSMENT
FOCUS GROUP QUESTIONS

1. Please introduce yourself and your organization (15 to 20 secs max.)

2. *Small Group Discussion 1:* important factors for a healthy community

    a. What are the most important health problems or needs in our community?

    b. What are some of the drivers, conditions influencing health conditions in the community?

    c. Which populations or particular neighborhoods within the community are most affected by these needs, or where the needs are most acute or prevalent?

3. *Small Group Discussion 1:* report-out and consultants take notes on flip charts

4. *Small Group Discussion 2:* assets, gaps and barriers in the community

    a. What kinds of resources or assets exist to address these needs? What are particular strengths or assets in Glendale that contribute to community health?

    b. What kinds of gaps in service are you aware of?

    c. What are the major barriers to improving the health/quality of life in Glendale?

5. *Small Group Discussion 2:* report-out and consultants take notes on flip charts

6. What else is important for us to know about your organization or the community you serve?

Glendale Hospitals
2016 Community Health Needs Assessment
Prioritization Community Forum: Discussion Questions

Please complete the table below based on the data presented today, along with your experience in the community on which issues impact the community most and how.

Health Need / Issue	Specific Geography Impacted (Specify)	Specific Populations Impacted (Specify)	Which organizations or specific programs are focused on this need?	Gaps in Resources (Specify)

Health Need / Issue	Specific Geography Impacted (Specify)	Specific Populations Impacted (Specify)	Which organizations or specific programs are focused on this need?	Gaps in Resources (Specify)

GLENDALE HOSPITALS – 2016 COMMUNITY HEALTH NEEDS ASSESSMENT PRIORITIZATION SURVEY

The Center for Nonprofit Management (CNM) is conducting the 2016 Community Health Needs Assessment (CHNA) for Glendale Adventist Medical Center, Dignity Health Glendale Memorial Hospital and USC Verdugo Hills Hospital and we need your help. In April 2016, CNM and the Glendale hospitals convened more than 80 people from the community to obtain input on important local and regional health issues, gaining valuable insights about the communities served by the three hospitals. After reviewing this input, in conjunction with a range of health indicators from public and private data sources, the CNM CHNA team developed the following list of prominent health needs and drivers. Please note that the health needs are listed in alphabetical order, and NOT by order of importance.

We need your input to help prioritize these health needs and drivers and determine which represent the areas of greatest need. The following confidential survey should take about 10 minutes to complete. When considering your responses, please keep your specific service area and community in mind. If you believe some pertinent issues in your community are not included in the survey, please let us know about these in the final section of the survey.

Please refer to the Community Health Needs Assessment Prioritization Criteria Scale when completing this survey. (Provided as an attachment.)

The results from this survey will inform Glendale Adventist Medical Center, Dignity Health Glendale Memorial Hospital and USC Verdugo Hills Hospital in developing strategies for their Community Benefits Plans.

Please complete this survey by 5 pm, Wednesday, June 15, 2016. Thank you very much for your time and assistance!

Please contact Maura Harrington at mharrington@cnmsocal.org or Gigi Nang at gnang@cnmsocal.org with any questions about this survey.

1. Please tell us about yourself (for analysis purposes).

Name	
Organization	
Email	

2. Please define your service area by selecting from the list of hospital service areas and cities/communitiesbelow. (Select all that apply.)

- ☐ Glendale Adventist Medical Center
- ☐ Dignity Health Glendale Memorial Hospital
- ☐ USC Verdugo Hills Hospital
- ☐ Altadena
- ☐ Eagle Rock
- ☐ Glassell Park
- ☐ Glendale
- ☐ Griffith Park
- ☐ Highland Park
- ☐ Hollywood
- ☐ La Canada/Flintridge
- ☐ La Crescenta
- ☐ Los Feliz
- ☐ Montrose
- ☐ Pasadena
- ☐ Sunland
- ☐ Sylmar
- ☐ Tujunga
- ☐ Verdugo City

2016 Glendale CHNA Prioritization

Identified Health Needs

Please refer to the Prioritization Criteria Scale when selecting your responses.

3. Cancer

	1	2	3	4	Don't know
SEVERITY- How severely does this health need impact the community?	○	○	○	○	○
CHANGE OVER TIME - Has the health need improved or is it getting worse over time?	○	○	○	○	○
RESOURCES - The availability of community resources and assets to address this health need.	○	○	○	○	○
COMMUNITY READINESS- Community readiness to effectively implement and support programs to address this health need.	○	○	○	○	○

4. Cardiovascular Disease

	1	2	3	4	Don't know
SEVERITY- How severely does this health need impact the community?	◯	◯	◯	◯	◯
CHANGE OVER TIME - Has the health need improved or is it getting worse over time?	◯	◯	◯	◯	◯
RESOURCES - The availability of community resources and assets to address this health need.	◯	◯	◯	◯	◯
COMMUNITY READINESS- Community readiness to effectively implement and support programs to address this health need.	◯	◯	◯	◯	◯

5. Communicable/Infectious Diseases

	1	2	3	4	Don't know
SEVERITY- How severely does this health need impact the community?	◯	◯	◯	◯	◯
CHANGE OVER TIME - Has the health need improved or is it getting worse over time?	◯	◯	◯	◯	◯
RESOURCES - The availability of community resources and assets to address this health need.	◯	◯	◯	◯	◯
COMMUNITY READINESS- Community readiness to effectively implement and support programs to address this health need.	◯	◯	◯	◯	◯

6. Diabetes

	1	2	3	4	Don't know
SEVERITY- How severely does this health need impact the community?	◯	◯	◯	◯	◯
CHANGE OVER TIME - Has the health need improved or is it getting worse over time?	◯	◯	◯	◯	◯
RESOURCES - The availability of community resources and assets to address this health need.	◯	◯	◯	◯	◯
COMMUNITY READINESS- Community readiness to effectively implement and support programs to address this health need.	◯	◯	◯	◯	◯

7. Mental Health

	1	2	3	4	Don't know
SEVERITY- How severely does this health need impact the community?	○	○	○	○	○
CHANGE OVER TIME - Has the health need improved or is it getting worse over time?	○	○	○	○	○
RESOURCES - The availability of community resources and assets to address this health need.	○	○	○	○	○
COMMUNITY READINESS- Community readiness to effectively implement and support programs to address this health need.	○	○	○	○	○

8. Obesity

	1	2	3	4	Don't know
SEVERITY- How severely does this health need impact the community?	○	○	○	○	○
CHANGE OVER TIME - Has the health need improved or is it getting worse over time?	○	○	○	○	○
RESOURCES - The availability of community resources and assets to address this health need.	○	○	○	○	○
COMMUNITY READINESS- Community readiness to effectively implement and support programs to address this health need.	○	○	○	○	○

9. Sexual Health/STDs

	1	2	3	4	Don't know
SEVERITY- How severely does this health need impact the community?	○	○	○	○	○
CHANGE OVER TIME - Has the health need improved or is it getting worse over time?	○	○	○	○	○
RESOURCES - The availability of community resources and assets to address this health need.	○	○	○	○	○
COMMUNITY READINESS- Community readiness to effectively implement and support programs to address this health need.	○	○	○	○	○

10. Stroke

	1	2	3	4	Don't know
SEVERITY- How severely does this health need impact the community?	○	○	○	○	○
CHANGE OVER TIME - Has the health need improved or is it getting worse over time?	○	○	○	○	○
RESOURCES - The availability of community resources and assets to address this health need.	○	○	○	○	○
COMMUNITY READINESS- Community readiness to effectively implement and support programs to address this health need.	○	○	○	○	○

2016 Glendale CHNA Prioritization

Drivers of Health

Please refer to the Prioritization Criteria Scale when selecting your responses.

11. Access to Health Care

	1	2	3	4	Don't know
SEVERITY- How severely does this health need impact the community?	○	○	○	○	○
CHANGE OVER TIME - Has the health need improved or is it getting worse over time?	○	○	○	○	○
RESOURCES - The availability of community resources and assets to address this health need.	○	○	○	○	○
COMMUNITY READINESS- Community readiness to effectively implement and support programs to address this health need.	○	○	○	○	○

12. Dental Care

	1	2	3	4	Don't know
SEVERITY- How severely does this health need impact the community?	○	○	○	○	○
CHANGE OVER TIME - Has the health need improved or is it getting worse over time?	○	○	○	○	○
RESOURCES - The availability of community resources and assets to address this health need.	○	○	○	○	○
COMMUNITY READINESS- Community readiness to effectively implement and support programs to address this health need.	○	○	○	○	○

13. Geriatric Support

	1	2	3	4	Don't know
SEVERITY- How severely does this health need impact the community?	○	○	○	○	○
CHANGE OVER TIME - Has the health need improved or is it getting worse over time?	○	○	○	○	○
RESOURCES - The availability of community resources and assets to address this health need.	○	○	○	○	○
COMMUNITY READINESS- Community readiness to effectively implement and support programs to address this health need.	○	○	○	○	○

14. Homelessness and Housing

	1	2	3	4	Don't know
SEVERITY- How severely does this health need impact the community?	○	○	○	○	○
CHANGE OVER TIME - Has the health need improved or is it getting worse over time?	○	○	○	○	○
RESOURCES - The availability of community resources and assets to address this health need.	○	○	○	○	○
COMMUNITY READINESS- Community readiness to effectively implement and support programs to address this health need.	○	○	○	○	○

15. Poverty

	1	2	3	4	Don't know
SEVERITY- How severely does this health need impact the community?	○	○	○	○	○
CHANGE OVER TIME - Has the health need improved or is it getting worse over time?	○	○	○	○	○
RESOURCES - The availability of community resources and assets to address this health need.	○	○	○	○	○
COMMUNITY READINESS- Community readiness to effectively implement and support programs to address this health need.	○	○	○	○	○

16. Preventative Wellness

	1	2	3	4	Don't know
SEVERITY- How severely does this health need impact the community?	○	○	○	○	○
CHANGE OVER TIME - Has the health need improved or is it getting worse over time?	○	○	○	○	○
RESOURCES - The availability of community resources and assets to address this health need.	○	○	○	○	○
COMMUNITY READINESS- Community readiness to effectively implement and support programs to address this health need.	○	○	○	○	○

17. Substance Abuse

	1	2	3	4	Don't know
SEVERITY- How severely does this health need impact the community?	○	○	○	○	○
CHANGE OVER TIME - Has the health need improved or is it getting worse over time?	○	○	○	○	○
RESOURCES - The availability of community resources and assets to address this health need.	○	○	○	○	○
COMMUNITY READINESS- Community readiness to effectively implement and support programs to address this health need.	○	○	○	○	○

18. Transportation

	1	2	3	4	Don't know
SEVERITY- How severely does this health need impact the community?	○	○	○	○	○
CHANGE OVER TIME - Has the health need improved or is it getting worse over time?	○	○	○	○	○
RESOURCES - The availability of community resources and assets to address this health need.	○	○	○	○	○
COMMUNITY READINESS- Community readiness to effectively implement and support programs to address this health need.	○	○	○	○	○

19. Violence/Injury/Safety

	1	2	3	4	Don't know
SEVERITY- How severely does this health need impact the community?	○	○	○	○	○
CHANGE OVER TIME - Has the health need improved or is it getting worse over time?	○	○	○	○	○
RESOURCES - The availability of community resources and assets to address this health need.	○	○	○	○	○
COMMUNITY READINESS- Community readiness to effectively implement and support programs to address this health need.	○	○	○	○	○

20. Are there any health needs or drivers you feel have been overlooked that need to be represented? (Please remark on the severity, change over time, resources, and community readiness to support as it relates to this need or driver.)

Health Need or Driver:

Health Need or Driver:

21. Please indicate if you attended the CHNA Prioritization Session on May 24, 2016

☐ Yes, I attended the CHNA Prioritization Session on May 24, 2016

☐ No, I was not able to attend the session

Thank you for your participation in the 2016 Community Health Needs Assessment.
(If completing this survey online, please click "Done" to submit your responses.)

Community Health Needs Assessment
Prioritization Criteria Scale

SEVERITY

1 (Not Severe)	2 (Moderately Severe)	3 (Severe)	4 (Very Severe)
The community is slightly impacted and the health need does not generally impact the lives of those affected by it.	The community is slightly impacted and the health need slightly impacts the lives of those affected by it.	The community is greatly impacted but the health need does not generally impact the lives of those affected by it.	The community is greatly impacted and the health need greatly impacts the lives of those affected by it.

CHANGE OVER TIME

1 (Great Improvements)	2 (Moderate Improvements)	3 (No improvements)	4 (Getting Worse)
The health need has greatly improved and will likely continue to improve in the future.	The health need has remained the same will either stay the same or improve in the future.	The health need has remained the same but will likely get worse in the future.	The health need has gotten worse and will likely continue to do so.

RESOURCES

1 (Vast Resources)	2 (Moderate Resources)	3 (Gaps in Resources)	4 (Serious Shortage of Resources)
There are extensive resources in the community that address this health need and community members are aware of them.	There are moderate resources in the community that address this health need but not many community members are aware of them.	There are few resources in the community to address this health need but there is a potential to leverage existing resources to create interventions.	There are little to no resources available in the community to address this health need and no existing resources to create interventions.

COMMUNITY'S READINESS TO SUPPORT

1 (Not Supportive)	2 (Somewhat Supportive)	3 (Supportive)	4 (Extremely Supportive)
Community is not ready to address the issue.	Community is interested in the issue, but unlikely to be able to support efforts.	Community is supportive, but has limited ability to effectively implement programs.	Community is ready to effectively implement programs to address this need.

Appendix C—Stakeholders

Last Name	First Name	Organization	Area of Expertise	Focus Group	Prioritization
Alvarez	Frank	Los Angeles County Department of Public Health, SPA 1 & 2	Public Health	4/7/2016	5/24/2016
Avedissian	Knar	Armenian Relief Society, Sepan Chapter	Armenian Community and Services	4/5/2016	
Bigay	Patricia	Blue Shield of California	Health Care Access		5/24/2016
Boghossian	Raffi	USC Verdugo Hills Hospital	Intensive Care	4/5/2016	5/24/2016
Brooks	Debra	Dignity Health Glendale Memorial Hospital	Cardiovascular/Neurology	4/7/2016	
Bulanikian	Onnig	Glendale Community Services and Parks	Community Services and Youth	4/5/2016	5/24/2016
Cambaliza	Jordan	Los Angeles County Department of Public Health	Health Education		5/24/2016
Carranza	Socorro	Dignity Health Glendale Memorial Hospital	Outpatient Registered Dietician & Diabetes Educator	4/7/2016	
Carrillo	Moises	City of Glendale	Senior Community Development	4/5/2016	
Contreras	Sandy	The Campbell Center	Adult Developmental Disabilities	4/5/2016	
Duncan	Laura	Ascencia	Homeless Services		5/24/2016
Duroff	Deb	Dignity Health Glendale Memorial Hospital	Business Development Strategies	4/7/2016	
Emmett	Andrew	American Cancer Society	Marketing and Community Engagement	4/5/2016	
Engel	Sam	Boy Scouts of America Verdugo Hills Council	Community Outreach		5/24/2016
Farina	Ron	American Red Cross--Glendale chapter	Human Services	4/7/2016	
Filipian	Marie	Dignity Health Glendale Memorial Hospital	Community Relations	4/5/2016	5/24/2016

Last Name	First Name	Organization	Area of Expertise	Focus Group	Prioritization
Fish	Gregory	Glendale Fire Department	Chief, Fire Department and First Responder	4/5/2016	
Gonzalez	Karyna	YWCA of Glendale	Domestic Violence	4/7/2016	
Hernandez	Albert	Family Promise of the Verdugos	Nonprofits / Homeless		5/24/2016
Herron	Wayne	Dignity Health Glendale Memorial Hospital	Philanthropy	4/5/2016	
Hill	Andaye	Glendale Adventist Medical Center	Community Services - Health	4/7/2016	
Hines	Julianne	Planned Parenthood, Pasadena & San Gabriel Valley	Public Policy and Health Education		5/24/2016
Judge	Emelyn	Glendale Community College	Nursing	4/5/2016	
Karinski	Edna	Community Foundation of the Verdugos	Philanthropy	4/7/2016	
Kendall	Judee	Glendale Chamber of Commerce	Business and Community Relations	4/5/2016	
Khnojayan	Seda	City of Glendale	Community Status of Women		5/24/2016
Komuro	Natalie	Ascencia	Homeless Services	4/7/2016	
Kossakian	Talar	California State University, Northridge	Public Health	4/7/2016	
Law	Sharon	Didi Hirsch Mental Health Services	Mental Health	4/5/2016	
Leuken	Mark	Dignity Health Glendale Memorial Hospital	Quality Management	4/7/2016	
Loftus	Sylvia	Glendale Community Free Health Clinic	Free Clinic Services	4/7/2016	
Lynch	Kathy	Wellness Works	Therapist/Wellness for Veterans	4/7/2016	
Macias	Mireya	American Diabetes Association	Diabetes and Community Outreach		5/24/2016
Mathewsian	Nairi	Didi Hirsch Mental Health Services	Mental Health		5/24/2016
Matinyan	Narine	Partners in Care Foundation (PICF)	Health Services		5/24/2016
McCarty	Cassie	Dignity Health Glendale Memorial Hospital	Mission/Spiritual Care	4/5 and 4/7/2016	5/24/2016
Mettler	Markus	Healthcare Management Services	Healthcare Management	4/5/2016	5/24/2016

Last Name	First Name	Organization	Area of Expertise	Focus Group	Prioritization
Mikailian	Arin	Glendale News Press	Glendale Community, Press		
Miller	Denise	Glendale Adventist Medical Center	Seniors, Employees, Policy and Regulation		5/24/2016
Momjian	Manuel	Armenian American Medical Society	Family Medicine	4/7/2016	
Moradian	Claud	Los Angeles County Department of Public Health, SPA 1 & 2	Public Health	4/7/2016	5/24/2016
Moreno	Francisco	Partners in Care Foundation	Healthcare Transitions	4/5/2016	
Mozian	Rita	Los Angeles County Department of Public Health, SPA 1 & 2	Public Health		5/24/2016
Murphy	Theresa	USC Verdugo Hills Hospital	Acute Health Care	4/5/2016	5/24/2016
Nelson	Bruce	Glendale Adventist Medical Center	Health Promotion and Community Development	4/5/2016	
Paddock	Nina	Pacific Clinics	Child Health and Public Health	4/7/2016	5/24/2016
Pastrano	Michelle	Health Services Advisory Group	Care Coordination	4/7/2016	5/24/2016
Peters	Tim	Door of Hope	Homeless Services and Domestic Violence	4/5/2016	
Peters	Nicole	Door of Hope	Homeless Services and Domestic Violence		5/24/2016
Povilaitis	Carl	Glendale Police Department	Division Captain, Law Enforcement and First Responder	4/7/2016	
Powers	Christine	City of Glendale	Local Government	4/5/2016	5/24/2016
Pyzow	Cecilia	USC Verdugo Hills Hospital	Business Development		5/24/2016
Reyes	Toni	Glendale Community College	Student Perspective	4/7/2016	
Rice	Teri	USC Verdugo Hills Hospital	Family Education		5/24/2016
Rivera	Martha	Glendale Adventist Medical Center	Community Outreach	4/5/2016	
Round	George	USC Verdugo Hills Hospital	Clinical Data	4/7/2016	
Saikali	George	YMCA of Glendale	Community Health	4/7/2016	
Salmasian	Emma	Armenian Relief Society, Sepan Chapter	Armenian Community and Services	4/5/2016	

Last Name	First Name	Organization	Area of Expertise	Focus Group	Prioritization
Schaefer	Ana-Marie	YMCA of the Foothills	Healthy Living	4/5/2016	
Schlatter	Jason	Glendale Communities Initiative	Poverty and Stakeholder Engagement	4/5/2016	5/24/2016
Townsend	Sharon	Glendale Healthy Kids	Children's Health	4/7/2016	5/24/2016
Tweedy	Craig	Glendale Police Department	Sergeant, Law Enforcement and First Responder	4/7/2016	
Williams	Andrea	YWCA	Development	4/5/2016	
Zakarian	Salpi	Dignity Health Glendale Memorial Hospital	Chronic Disease Management	4/7/2016	

Appendix D—Data Sources

Category	Indicator	Data Source	Geography	Benchmark
Demographic Overview	Estimated Population	Nielsen Claritas, 2015	ZIP Code	County Average
Demographic Overview	Gender	Nielsen Claritas, 2015	ZIP Code	County Average
Demographic Overview	Age Distribution	Nielsen Claritas, 2015	ZIP Code	County Average
Demographic Overview	Median and Average Age	Nielsen Claritas, 2015	ZIP Code	County Average
Demographic Overview	Race/Ethnicity	Nielsen Claritas, 2015	ZIP Code	County Average
Demographic Overview	Language Spoken at Home	Nielsen Claritas, 2015	ZIP Code	County Average
Demographic Overview	Educational Attainment	Nielsen Claritas, 2015	ZIP Code	County Average
Demographic Overview	Marital Status	Nielsen Claritas, 2015	ZIP Code	County Average
Demographic Overview	Household Income	Nielsen Claritas, 2015	ZIP Code	County Average
Demographic Overview	Employment Status	Nielsen Claritas, 2015	ZIP Code	County Average
Demographic Overview	Percentage of Households Earned Below 100% FPL	California Health Interview Survey, 2015	SPA Level	County Average
Demographic Overview	Percentage of Households Earned Below 200% FPL	California Health Interview Survey, 2015	SPA Level	County Average

Category	Indicator	Data Source	Geography	Benchmark
Demographic Overview	Children Eligible for Free or Reduced-Price Lunch	California Department of Education (CDE), 2015	Los Angeles County	State Average
Natality	Births	California Department of Public Health, 2012	ZIP Code	State Total
Natality	Births by Mother's Age	California Department of Public Health, 2012	ZIP Code	County Average
Natality	Births by Mother's Ethnicity	California Department of Public Health, 2012	ZIP Code	County Average
Natality	Birth Weight	California Department of Public Health, 2012	ZIP Code	County Average
Natality	Breastfeeding at Least 6 Months	Los Angeles County Health Survey, 2015	SPA Level	County Average
Natality	Breastfeeding at Least 12 Months	Los Angeles County Health Survey, 2015	SPA Level	County Average
Disability	Disability Status Due To Physical, Mental Or Emotional Condition, Adults	California Department of Public Health, 2014	SPA Level	County Average
Disability	Adults Who Have Provided Care or Assistance to Another Adult In The Past Month	Los Angeles County Health Survey, 2011	SPA Level	County Average
Disability	Children 0–17 Years old with Special Health Care Needs	Los Angeles County Health Survey, 2015	SPA Level	County Average
Disability	Children 0 to 17 Years old with Special Health Care Needs by Age	Los Angeles County Health Survey, 2015	County Average	County Average
Mortality	Total Deaths	California Department of Public Health (CDPH), 2012	ZIP Code	County Average
Mortality	Total Deaths, by Age Group	California Department of Public Health (CDPH), 2010, 2012	ZIP Code	County Average

Category	Indicator	Data Source	Geography	Benchmark
Mortality	Total Deaths, by Cause,	California Department of Public Health (CDPH), 2010, 2012	ZIP Code	County Average
Alcohol and Substance Abuse and Tobacco Use	Adult Alcohol Use in the Past Month	Los Angeles County Health Survey, 2015	SPA Level	County Average
Alcohol and Substance Abuse and Tobacco Use	Number of Alcohol Outlets per 1,000 Persons	California Department of Alcoholic Beverage Control (ABC), 2016	ZIP Code	County Average
Alcohol and Substance Abuse and Tobacco Use	Adults Who Reported Misusing Any Form of Prescription Drugs in the Past Year	Los Angeles County Health Survey, 2015	SPA Level	County Average
Alcohol and Substance Abuse and Tobacco Use	Adults Who Reported Using Any Form of Marijuana in the Past Year1	Los Angeles County Health Survey, 2015	SPA Level	County Average
Alcohol and Substance Abuse and Tobacco Use	Teens Who Have Ever Tried Marijuana, Cocaine, Sniffing Glue, Other Drugs	Los Angeles County Health Survey, 2012	SPA Level	County Average
Alcohol and Substance Abuse and Tobacco Use	Needed or Wanted Treatment for Alcohol or Drug Issues in the Past Five Years	Los Angeles County Health Survey, 2011	SPA Level	County Average
Alcohol and Substance Abuse and Tobacco Use	Needed Help for Mental, Emotional, or Alcohol/Drug Issues	Los Angeles County Health Survey, 2011	SPA Level	County Average
Alcohol and Substance Abuse and Tobacco Use	Currently Smoking	Los Angeles County Health Survey, 2015	SPA Level	County Average
Alcohol and Substance Abuse and Tobacco Use	Tobacco Use by Age	Los Angeles County Health Survey, 2015	County Average	County Average

Category	Indicator	Data Source	Geography	Benchmark
Alcohol and Substance Abuse and Tobacco Use	Tobacco Use by Ethnicity	Los Angeles County Health Survey, 2015	County Average	County Average
Cancer	Top 10 Cancer Sites Rates	Centers for Disease Control, United States Cancer Statistics (USCS), 2013	County Average	County Average
Cancer	Volume of Cancer Surgeries Performed	Office of Statewide Health Planning and Development (OSHPD), 2014	Hospital Level	County Average
Cancer	Cervical cancer screening (pap smear) in last 3 years	Los Angeles County Health Survey, 2015	SPA Level	County Average
Cancer	Breast cancer screening (mammogram) in the last 2 years	Los Angeles County Health Survey, 2015	SPA Level	County Average
Cancer	Total Cancer-Related Deaths	California Department of Public Health, 2012	ZIP Code	State Average
Cancer	Top 10 Cancer Sites Rates per 100,000 pop., by Race	Centers for Disease Control, United States Cancer Statistics (USCS), 2013	County Average	County Average
Cardiovascular Disease	Heart Disease Prevalence	Los Angeles County Health Survey, 2014	SPA Level	County Average
Cardiovascular Disease	Heart Disease Management	Los Angeles County Health Survey, 2014	SPA Level	County Average
Cardiovascular Disease	Hospitalizations Resulting from Heart Failure	Office of Statewide Health Planning and Development (OSHPD), 2012	ZIP Code	County Average
Cardiovascular Disease	Heart Disease Mortality	California Department of Public Health (CDPH), 2012	ZIP Code	State Average

Category	Indicator	Data Source	Geography	Benchmark
Cardiovascular Disease	Cholesterol Prevalence	Los Angeles County Health Survey, 2015	SPA Level	County Average
Cardiovascular Disease	Cholesterol Management	California Health Interview Survey, 2014	SPA Level	County Average
Cardiovascular Disease	Hypertension Prevalence	Los Angeles County Health Survey, 2015	SPA Level	County Average
Cardiovascular Disease	Hypertension Management	Los Angeles County Health Survey, 2014	SPA Level	County Average
Cardiovascular Disease	Hypertension Mortality	California Department of Public Health (CDPH), 2012	ZIP Code	County Average
Cardiovascular Disease	Hypertension Prevalence by Age	Los Angeles County Health Survey, 2015	County Average	County Average
Cardiovascular Disease	Hypertension Prevalence by Ethnicity	Los Angeles County Health Survey, 2015	County Average	County Average
Cardiovascular Disease	Cholesterol Prevalence by Age	Los Angeles County Health Survey, 2015	County Average	County Average
Communicable and Infectious Diseases	Hepatitis B Prevalence	Los Angeles County Department of Public Health, Acute Communicable Disease Control Program, Annual Morbidity Report and Special Studies Report, 2013	SPA Level	County Average
Communicable and Infectious Diseases	Proportion of Tuberculosis Cases by Service Planning Area	Los Angeles County Department of Public Health, Acute Communicable Disease Control Program, Annual Morbidity Report and Special Studies Report, 2013	SPA Level	County Average

Category	Indicator	Data Source	Geography	Benchmark
Diabetes	Diabetes Prevalence	Los Angeles County Health Survey, 2015	SPA Level	County Average
Diabetes	Diabetes Management	California Health Interview Survey, 2014	SPA Level	County Average
Diabetes	Diabetes Hospitalizations (Youth)	Office of Statewide Health Planning and Development (OSHPD), 2012	ZIP Code	State Average
Diabetes	Diabetes Hospitalizations (Adults)	Office of Statewide Health Planning and Development (OSHPD), 2012	ZIP Code	State Average
Diabetes	Hospitalizations Resulting from Uncontrolled Diabetes	Office of Statewide Health Planning and Development (OSHPD), 2012	ZIP Code	State Average
Diabetes	Diabetes Mortality	California Department of Public Health (CDPH), 2012	ZIP Code	State Average
Diabetes	Diabetes Prevalence by Age	Los Angeles County Health Survey, 2015	County Average	County Average
Diabetes	Diabetes Prevalence by Ethnicity	Los Angeles County Health Survey, 2015	County Average	County Average
Mental Health	Unhealthy Days Resulting from Poor Mental Health	Los Angeles County Health Survey, 2015	SPA Level	County Average
Mental Health	Adults with Serious Psychological Distress in the Last Year	California Health Interview Survey (CHIS), 2014	SPA Level	County Average
Mental Health	Adequate Social and Emotional Support	Los Angeles County Health Survey, 2015	SPA Level	County Average
Mental Health	Anxiety Prevalence	Los Angeles County Health Survey, 2011	SPA Level	County Average
Mental Health	Depression Prevalence	Los Angeles County Health Survey, 2015	SPA Level	County Average

Category	Indicator	Data Source	Geography	Benchmark
Mental Health	Alcohol- and Drug-Induced Mental Illness Rate	Office of Statewide Health Planning and Development (OSHPD), 2012	ZIP Code	State Average
Mental Health	Needed Help for Mental, Emotional, or Alcohol/Drug Issues	Los Angeles County Health Survey, 2011	SPA Level	County Average
Mental Health	Mental Health Hospitalization Rate per 100,000 persons	Office of Statewide Health Planning and Development (OSHPD), 2012	ZIP Code	State Average
Mental Health	Suicide Rate	California Department of Public Health (CDPH), 2012	ZIP Code	State Average
Mental Health	Depression Prevalence by Age	Los Angeles County Health Survey, 2015	County Average	County Average
Mental Health	Depression Prevalence by Ethnicity	Los Angeles County Health Survey, 2015	County Average	County Average
Obesity/Overweight	Overweight Adults (Age 18+)	Los Angeles County Health Survey, 2015	SPA Level	County Average
Obesity/Overweight	Obese Adults (Age 18+)	Los Angeles County Health Survey, 2015	SPA Level	County Average
Obesity/Overweight	Overweight or Obese Population (Age 12+)	California Health Interview Survey, 2012	SPA Level	County Average
Obesity/Overweight	Children Overweight for Age (Age 0-11)	California Health Interview Survey, 2012	SPA Level	County Average
Obesity/Overweight	Percent Overweight	California Health Interview Survey, 2009	ZIP Code	County Average
Obesity/Overweight	Percent Obese	California Health Interview Survey, 2009	ZIP Code	County Average
Obesity/Overweight	Overweight/Obesity Prevalence by Age	Los Angeles County Health Survey, 2015	County Level	County Average

Category	Indicator	Data Source	Geography	Benchmark
Obesity/Overweight	Overweight/Obesity Prevalence by Ethnicity	Los Angeles County Health Survey, 2015	County Level	County Average
Sexual Health / Sexually Transmitted Diseases	More than one sexual partner in the past 12 months	California Health Interview Survey, 2012	ZIP Code	County Average
Sexual Health / Sexually Transmitted Diseases	Have ever been tested for HIV – Adults	California Health Interview Survey, 2014	ZIP Code	County Average
Sexual Health / Sexually Transmitted Diseases	Chlamydia Incidence per 100,000	California Health Interview Survey, 2013	ZIP Code	County Average
Sexual Health / Sexually Transmitted Diseases	Gonorrhea Incidence per 100,000	California Health Interview Survey, 2013	ZIP Code	County Average
Sexual Health / Sexually Transmitted Diseases	HIV Hospitalizations per 100,000 Population	Office of Statewide Health Planning and Development, 2010	ZIP Code	State Average
Stroke	Stroke Prevalence (Age 65+)	California Health Interview Survey, 2012	SPA Level	County Average
Stroke	Stroke Mortality Rate per 10,000 Adults	California Department of Public Health, Death Statistical Master File, 2012	ZIP Code	State Average
Access to Healthcare	Medicare Beneficiaries	Managed Risk Medical Insurance Board, 2012	ZIP Code	County Average
Access to Healthcare	Medi-Cal Enrollment	California Department of Health Care Services (DHCS), 2011	ZIP Code	County Average
Access to Healthcare	Healthy Families Enrollment	California Department of Health Care Services (DHCS), 2012	ZIP Code	County Average

Category	Indicator	Data Source	Geography	Benchmark
Access to Healthcare	Federally Qualified Health Centers	U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), 2012	SPA Level	County Average
Access to Healthcare	Uninsured Adults	Los Angeles County Health Survey, 2014	SPA Level	County Average
Access to Healthcare	Uninsured Children	Los Angeles County Health Survey, 2011	SPA Level	County Average
Access to Healthcare	Uninsured Population	California Health Interview Survey, 2012	ZIP Level	County Average
Access to Healthcare	Lack of a Consistent Source of Primary Care for Adults	Los Angeles County Health Survey, 2015	SPA Level	County Average
Access to Healthcare	Difficulty Accessing Medical Care	Los Angeles County Health Survey, 2015	SPA Level	County Average
Access to Healthcare	Primary Care: population to physician ratio	Office of Statewide Planning and Development, 2013	Medical Service Study Area	County Average
Access to Healthcare	Dentist: population to dental provider ratio	Office of Statewide Planning and Development, 2013	Medical Service Study Area	County Average
Access to Healthcare	Psychiatrist: population to mental health provider ratio	Office of Statewide Planning and Development, 2013	Medical Service Study Area	County Average
Access to Healthcare	Uninsured, by Age	American Community Survey, 2014	County Level	County Average
Dental Care	Absence of Dental Insurance Coverage, Adults	Los Angeles County Health Survey, 2011	SPA Level	County Average
Dental Care	Dentist Availability	Office of Statewide Health and Planning and Development (OSHPD), 2013	County Level	County Total
Dental Care	Unable to Afford Dental Care, Adult	Los Angeles County Health Survey, 2011	SPA Level	County Average

Category	Indicator	Data Source	Geography	Benchmark
Dental Care	Unable to Afford Dental Care, Child	Los Angeles County Health Survey, 2015	SPA Level	County Average
Dental Care	Unable to Afford Dental Care by Age	Los Angeles County Health Survey, 2011	County Level	County Average
Dental Care	Unable to Afford Dental Care by Ethnicity, Adult	Los Angeles County Health Survey, 2011	County Level	County Average
Dental Care	Unable to Afford Dental Care by Ethnicity, Child	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Ever Diagnosed with Depression AND Either Currently Being Treated for Depression or Currently Having Symptoms of Depression	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Ever Diagnosed with Diabetes	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Ever Diagnosed with Hypertension	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Ever Diagnosed with High Cholesterol	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Obese	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Overweight	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Binge Drinking	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Physical Aerobic Activity: Activity Does not Meet Guidelines or Engage in No Activity	Los Angeles County Health Survey, 2015	County Level	County Average

Category	Indicator	Data Source	Geography	Benchmark
Geriatric Support	Reported Receiving the Social and Emotional Support They Need (i.e., Always or Usually)	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Reported Seeing a Dentist or Visited a Dental Clinic for Any Reason in the Past Year	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Reported Having a Disability	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Reported that Obtaining Medical Care When Needed Is Somewhat or Very Difficult	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Reported Fair/Poor Health Status	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Have a Regular Source of Care	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Pneumonia Vaccination (Age 65+)	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Influenza Vaccination (Age 65+)	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Mammogram in the Past Two Years	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Was Hospitalized Due to Falls	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Changed daily Routines because of fall in past year	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Professional Recommended Physical Therapy/Exercise due to falls	Los Angeles County Health Survey, 2015	County Level	County Average

Category	Indicator	Data Source	Geography	Benchmark
Geriatric Support	Professional reviewed medication after fall	Los Angeles County Health Survey, 2015	County Level	County Average
Geriatric Support	Percent of Adults (Age 65+) Who Have Been Diagnosed with Osteoporosis	Los Angeles County Health Survey, 2015	County Level	County Average
Homelessness and Housing	Total Homeless	Los Angeles Homeless Services Authority, 2016	SPA Level	County Average
Homelessness and Housing	Homeless Individuals	Los Angeles Homeless Services Authority, 2016	SPA Level	County Average
Homelessness and Housing	Homeless Families	Los Angeles Homeless Services Authority, 2016	SPA Level	County Average
Homelessness and Housing	Homeless Unaccompanied Minors	Los Angeles Homeless Services Authority, 2016	SPA Level	County Average
Homelessness and Housing	Homeless Mentally Ill	Los Angeles Homeless Services Authority, 2016	SPA Level	County Average
Homelessness and Housing	Homeless With Substance Abuse Issues	Los Angeles Homeless Services Authority, 2016	SPA Level	County Average
Homelessness and Housing	Homeless With HIV	Los Angeles Homeless Services Authority, 2016	SPA Level	County Average
Housing	Household by Est. Average Household Income	Nielsen Claritas, 2015	Zip Code	County Average
Housing	Household by Est. Average Household Size	Nielsen Claritas, 2015	Zip Code	County Average
Preventive Wellness	Saw Doctor, Nurse, or Other Health Care Professional in the Past Year	Los Angeles County Health Survey, 2015	SPA Level	County Average
Preventive Wellness	Saw Dentist or Visited Dental Clinic in the Past Year	Los Angeles County Health Survey, 2015	SPA Level	County Average

Category	Indicator	Data Source	Geography	Benchmark
Preventive Wellness	Physically Active at Least One Hour Each Day in Last Week1	California Health Interview Survey, 2014 and 2012	SPA Level	County Average
Preventive Wellness	Ate Five or More Servings of Fruits and Vegetables in Past Day2	California Health Interview Survey, 2014 and 2012	SPA Level	County Average
Preventive Wellness	Ate Fast Food More Than Once in the Past Week1	California Health Interview Survey, 2014 and 2012	SPA Level	County Average
Preventive Wellness	Soda Consumption in Past Day1	California Health Interview Survey, 2014 and 2012	SPA Level	County Average
Preventive Wellness	Preventable Hospital Events Rate per 1,000 Population (18+)	California Office of Statewide Health Planning and Development, 2012	Zip Code	County Average
Preventive Wellness	Have Regular Source of Care Ethnicity	Los Angeles County Health Survey, 2015	SPA Level	County Average
Preventive Wellness	Have Regular Source of Care Age Group	Los Angeles County Health Survey, 2015	SPA Level	County Average
Transportation	Number of Vehicles Per Household	Nielson Claritas , 2015	Zip Code	County Average
Transportation	Average Vehicles Per Household	Nielson Claritas , 2015	Zip Code	County Average
Violence/Injury/Safety	Unintentional Injuries Leading to Death	California Department of Public Health, 2012	Zip Code	State Average
Violence/Injury/Safety	Received threats of violence or physical harm from peers in past year1	[1]California Health interview Survey, 2012, SPA	SPA Level	State Average
Violence/Injury/Safety	Feared of being attacked at school in the past year1	[1]California Health interview Survey, 2012, SPA	SPA Level	State Average
Violence/Injury/Safety	Felt unsafe in nearby park or playground during the day[2]	[2]California Health interview Survey, 2014, SPA	SPA Level	State Average

Appendix E—Health Need Profiles

Access to Care (Health Care, Dental Care, and Preventive Health Care)

About Access to Health Care

Access to health care services is important for everyone's quality of life, which requires the ability to navigate the health care system, access a health care location where needed services are provided, and find a health care provider with whom the patient can communicate and trust.[94] Access to health care impacts overall physical, social, and mental health status, the prevention of disease and disability, the detection and treatment of health conditions, quality of life, preventable death, and life expectancy for individuals.[95]

Access to dental care is essential to overall health. Oral diseases such as cavities and oral cancer cause pain and disability for many Americans.[1] Barriers that prevent or limit a person's use of preventive intervention and treatments for oral health include limited access to and availability of dental services, a lack of awareness of the need, cost, and fear of dental procedures. Social factors associated with poor dental health include lower levels or lack of education, having a disability, and other health conditions such as diabetes.[2]

Along with access to health care, following preventive practices such as having a regular source of care and timely physical and medical tests is important. Adequate, regular primary care can prevent the development of health problems and maintain positive health conditions.

Transportation barriers are often cited as barriers to both preventive care and treatment. Lack of efficient and affordable transportation can lead to rescheduled or missed appointments, delayed care, and missed or delayed medication use. These consequences may cause poorer management of chronic illness and thus poorer health outcomes.

[94] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=1. Accessed [August 1, 2016].

[95] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=1. Accessed [August 1, 2016].

Statistical data

Access to Healthcare, Dental Care and Preventive Wellness Indicators

Indicators	Year	Comparison		GAMC[3] Service Area	GMHHC[4] Service Area	USC VHH[5] Service Area
		Level	Avg.			
Medicare Beneficiaries[1]	2012	LAC	1.4%	2.2%	2.3%	1.8%
Uninsured Adults[2]	2014	LAC	16.1%	16.2%	17.7%	14.2%
Uninsured Children[3]	2011	LAC	6.4%	5.8%	5.9%	5.8%
Percent of adults 18 and older who do not have dental insurance[1]	2011	LAC	51.8%	54.2%	56.0%	51.6%
Percent of adults 18 and older unable to obtain dental care, including check-ups, in the past year because of affordability[3]	2011	LAC	30.3%	33.2%	34.3%	31.0%
Percent of children (3–17 years old) who were unable to afford dental care and check-ups in the past year[3]	2015	LAC	11.5%	12.5%	13.3%	11.2%
Saw Doctor, Nurse, or Other Health Care Professional in the Past Year[4]	2015	LAC	70.7%	70.1%	68.7%	71.9%
Saw Dentist or Visited Dental Clinic in the Past Year[4]	2015	LAC	59.3%	62.8%	62.0%	63%
Physically Active at Least One Hour Each Day in Last Week (Children 0-11)[5]	2014	LAC	26.4%	23.3%	23.5%	27.6%
Physically Active at Least One Hour Each Day in Last Week (Teens 12-17)[5]	2014	LAC	12.3%	8.2%	10.5%	6.0%
Ate Five or More Servings of Fruits and Vegetables in Past Day[6]	2012	LAC	55.4%	55.4%	55.2%	56.7%
Ate Fast Food More Than Once in the Past Week[5]	2014	LAC	42.3%	38.0%	38.6%	37.1%
Soda Consumption in Past Day[5]	2014	LAC	18.2%	14.5%	14.0%	15.9%
Percent of households with zero cars[6]	2015	LAC	9.7%	10.9%	11.8%	8.4%

[1]Data source: Managed Risk Medical Insurance Board
Data year: 2012
Source geography: ZIP Code
[2]Data source: Los Angeles County Health Survey
Data year: 2011
Source geography: SPA
[3]Data source: Los Angeles County Health Survey
Data year: 2014
Source geography: SPA
LAC=Los Angeles County
CA=California
[1]Data source: Los Angeles County Health Survey
Data year: 2011
Source geography: SPA
Data source: Los Angeles County Health Survey
Data year: 2011
Source geography: SPA
[3]Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA
[4] Data Source: Los Angeles County Health Survey
Data Year: 2015
Source Geography: SPA
LAC=Los Angeles County
[6]Data Source: Nielson Claritas Demographic Data
Data Year: 2015
Source Geography: ZIP

Geographic areas/subpopulations of greatest impact

- The ZIP codes where nearly a quarter or more of the population is uninsured are listed below:.

GAMC Service Area	GMHHC Service Area	USC VHH Service Area
90042—Highland Park (25.6%) 90065—Glassell Park (24.6%)	90026—Echo Park (26.0%) 90029—East Hollywood (27.7%) 90042—Highland Park (25.6%) 90065—Glassell Park (24.6%)	90042—Highland Park (25.6%)

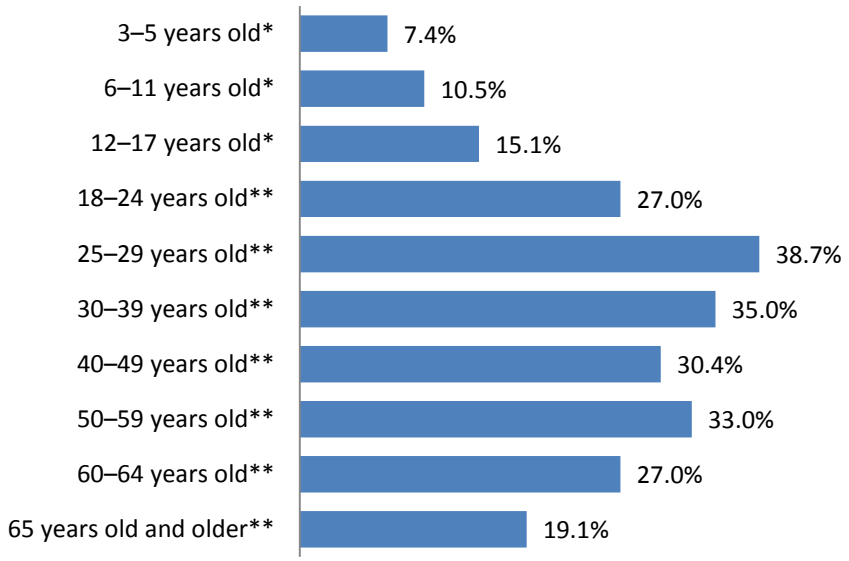
Data source: California Health Interview Survey
Data year: 2012
Source geography: ZIP Code

- The ZIP codes with the highest rates of preventable hospitalizations per 1,000 residents are listed below:.

GAMC Service Area	GMHHC Service Area	USC VHH Service Area
91020—Montrose (19.0) 91204—Glendale (18.2) 91205—Glendale (18.4)	91204—Glendale (18.2) 91205—Glendale (18.4)	91020—Montrose (19.0) 91103—Pasadena (20.7) 91204—Glendale (18.2) 91205—Glendale (18.4)

Source: California Office of Statewide Health Planning and Development
OSHPD Patient Discharge Data,
Data Year: 2012
Source Geography: ZIP Code

Unable to Afford Dental Care by Age, 2011, 2015



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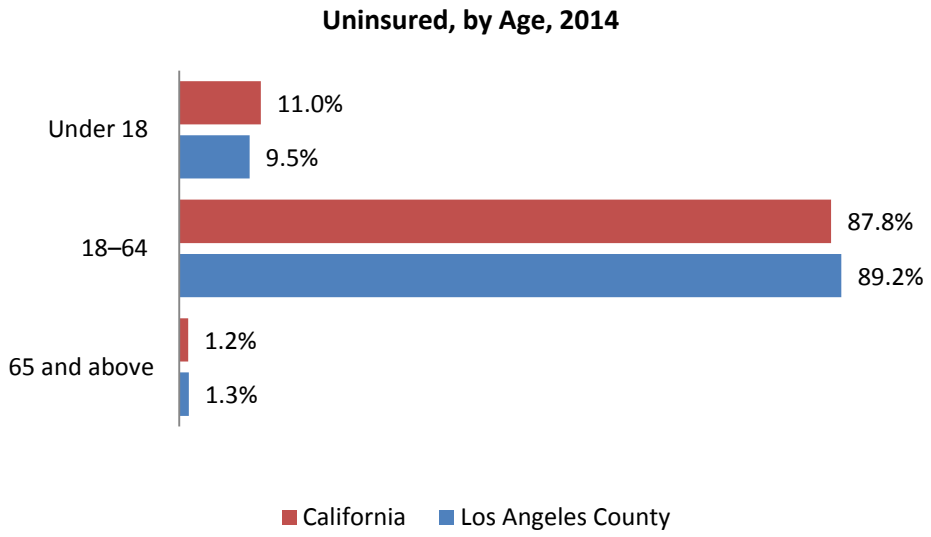
Data source: Los Angeles County Health Survey
*Data year: 2011
**Data year: 2015
Source geography: SPA

Community input

Through focus group interviews, key stakeholders including care providers shed additional insight into the root causes and consequences of barriers to care for the service area population. Specific cultural and language groups, low-income communities, the aging population and those lacking transportation face the greatest barriers to accessing care. For specific cultural and language groups, the barriers may arise during medical visits if providers are not familiar with the language or cultural norms of the patient, but may arise earlier in the health delivery pipeline if resources and information about health



Data source: American Community Survey
Data year: 2014
Source geography: County

care resources are not made available in a culturally responsive way. Many stakeholders observed that in addition to the high rates of uninsured in the service area, Medi-Cal coverage is very basic: “a big issue—it covers barely anything. It is a very low level of coverage.” Furthermore, providers noted that in the service area “there are a lack of physicians that accept Medi-Cal.”

One of the most frequently mentioned consequences of low healthcare coverage in the service area is the heavy reliance on emergency (911) care for acute conditions. Stakeholders explained that, “the emergency room, Fire Department and EMS staff take everything.” It may be that the population relies more on emergency care because emergency services are more often covered (by emergency insurance) than scheduled office visits.

[1] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=32. Accessed [February 26, 2013].
[2] Ibid.
[3] Glendale Adventist Medical Center
[4] Glendale Memorial Hospital and Health Center
[5] Verdugo Hills Hospital

Cancer

About Cancer

Cancer is the second leading cause of death in the United States, claiming the lives of more than half a million Americans every year[96]. In 2009, cancer incidence rates per 100,000 persons indicate that the three most common cancers among men in the United States are prostate cancer (137.7), lung cancer (64.3), and colorectal cancer (42.5). Among women, the leading causes of cancer deaths are breast cancer (123.1), lung cancer (54.1), and colorectal cancer (37.1).[97] Research has shown that early detection through regular cancer screenings can help reduce the number of new cancer cases and, ultimately, deaths.[98] Research has also shown that cancer is associated with certain diseases and behaviors including obesity, tobacco, alcohol, certain chemicals, some viruses and bacteria, a family history of cancer, poor diet, and lack of physical activity.[99]

Statistical data

Volume of Cancer Surgeries Performed, 2014

Type of Cancer	Comparison		GAMC[1] Service Area	GMHHC[2] Service Area	USC VHH[3] Service Area
	Level	Avg.			
Breast	LAC	43.2%	45.7%	30.5%	60.0%
Prostate	LAC	14.8%	6.8%	0.0%	8.9%
Colon	LAC	13.8%	22.8%	29.7%	17.8%
Lung	LAC	6.4%	4.3%	14.1%	2.2%
Brain	LAC	5.4%	6.8%	1.6%	2.2%
Rectum	LAC	4.5%	4.9%	20.3%	8.9%
Liver	LAC	3.5%	0.6%	0.0%	0.0%
Stomach	LAC	3.1%	3.1%	3.9%	0.0%
Bladder	LAC	2.5%	1.9%	0.0%	0.0%
Pancreas	LAC	2.0%	2.5%	0.0%	0.0%
Total		99.2%	99.4%	100.0%	100.0%

Data source: Office of Statewide Health Planning and Development (OSHPD)
Data year: 2014
Source geography: Hospital

[96] Centers for Disease Control and Prevention. (2015). *Using Science to Reduce the Burden of Cancer.* Atlanta, GA. Available at http://www.cdc.gov/Features/CancerResearch/. Accessed [August 1, 2016].

[97] Centers for Disease Control and Prevention. (2013). *Invasive Cancer Incidence.* Atlanta, GA. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6207a1.htm. Accessed [August 1, 2016].

[98] Centers for Disease Control and Prevention. (2015). *Cancer Prevention*. Atlanta, GA. Available at http://www.cdc.gov/cancer/dcpc/prevention/index.htm. Accessed [August 1, 2016].

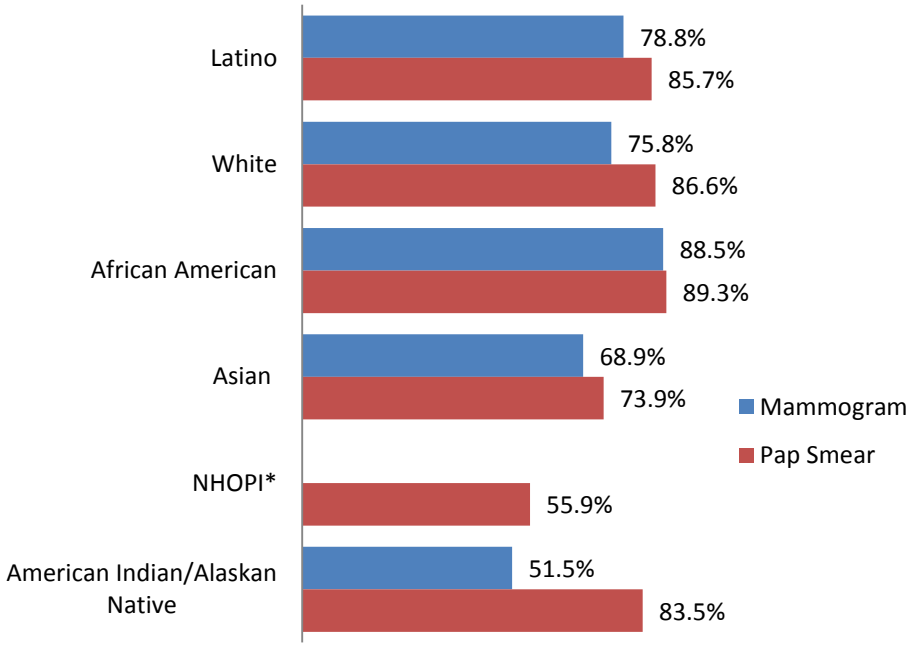
[99] National Cancer Institute. (2015). *Cancer Prevention Overview*. Available at http://www.cancer.gov/cancertopics/pdq/prevention/overview/patient/page3. Bethesda, MD. Accessed [August 1, 2016].

Geographic areas/subpopulations of greatest impact

- Cancer mortality rates (by percent of deaths cancer-related) are highest in the ZIP codes listed below. In the state of California, 23.7% of deaths in 2012 were cancer-related.

GAMC Service Area	GMHHC Service Area	USC VHH Service Area
90041—Eagle Rock (27.2%)	90029—East Hollywood (27.8%)	90041—Eagle Rock (27.2%)
90065—Glassell Park (27.6%)	90041—Eagle Rock (27.2%)	91001—Altadena (28.2%)
91203—Glendale (30.2%)	90065—Glassell Park (27.6%)	91011—La Canada-Flintridge (29.9%)
91205—Glendale (28.4%)	91203—Glendale (30.2%)	91203—Glendale (30.2%)
	91205—Glendale (28.4%)	91205—Glendale (28.4%)

Percent of Women Who Reported Having a Pap Smear or Mammogram in the Past 3 or 2 Years, Respectively, 2015



*Data unavailable
Data Source: Los Angeles County Health Survey
Data Year: 2015
Source Geography: SPA

Associated drivers and risk factors

A primary method of preventing cancer is screening for cervical, colorectal, and breast cancers[100]. The most common risk factors for cancer include growing older, obesity, tobacco, alcohol, sunlight exposure, certain chemicals, some viruses and bacteria, family history of cancer, poor diet, and lack of physical activity[101].

[100] Centers for Disease Control and Prevention. Cancer Prevention. Atlanta, GA. Available at http://www.cdc.gov/cancer/dcpc/prevention/index.htm. Accessed [August 7, 2016].
[101] National Cancer Institute. Risk Factors for Cancer. Bethesda, MD. Available at http://www.cancer.gov/about-cancer/causes-prevention/risk. Accessed [August 7, 2016].

Community input

Stakeholders recognize a disconnect between preventive cancer services and the communities served. Specifically, stakeholders observed that the Armenian community, African American communities and Hispanic/Latino communities do not actively participate in preventive cancer care, signaling a need for additional engagement in and outreach to these communities.

Cardiovascular Disease and Stroke

About cardiovascular disease

Cardiovascular disease—also called heart disease and coronary heart disease—includes several health conditions related to plaque buildup in the walls of the arteries, or atherosclerosis. As plaque builds up, the arteries narrow, restricting blood flow and creating the risk of heart attack. Currently, more than one in three adults (81.1 million) in the United States lives with one or more types of cardiovascular disease. In addition to being one of the leading causes of death in the United States, heart disease results in serious illness and disability, decreased quality of life, and hundreds of billions of dollars in economic loss every year.[4]

Cardiovascular disease encompasses and/or is closely linked to a number of health conditions that include arrhythmia, atrial fibrillation, cardiac arrest, cardiac rehab, cardiomyopathy, cardiovascular conditions in childhood, high cholesterol, congenital heart defects, diabetes, heart attack, heart failure, high blood pressure, HIV, heavy alcohol consumption, metabolic syndrome, obesity, pericarditis, peripheral artery disease (PAD), and stroke.[5]

A stroke occurs when the flow of blood to the brain suddenly stops, causing brain cells to die[102.] There are two types of stroke that occur, one caused by a blood clot which blocks the flow of blood to the brain (ischemic stroke) and another where a blood vessel breaks and bleeds into the brain (hemorrhagic stroke)[103]. Stroke is the leading cause of death in the United States[104]. Strokes can be prevented making healthier life choices including not smoking, eating a healthy diet, maintaining a healthy weight, staying physically active, and knowing your family history of stroke[105].

[102] National Institute of Health. MedlinePlus. Stroke. Bethesda, MD. Available at http://www.nlm.nih.gov/medlineplus/stroke.html#cat5. Accessed [August 2, 2016].

[103] National Institute of Health. MedlinePlus. Stroke. Bethesda, MD. Available at http://www.nlm.nih.gov/medlineplus/stroke.html#cat5. Accessed [August 2, 2016].

[104] U.S. Department of Health and Human Services. National Heart, Lung, and Blood Institute. What is a stroke? Bethesda, MD. Available at http://www.nhlbi.nih.gov/health/health-topics/topics/stroke. Accessed [August 2, 2016].

[105] U.S. Department of Health and Human Services. National Heart, Lung, and Blood Institute. How can a stroke be prevented? Bethesda, MD. Available at http://www.nhlbi.nih.gov/health/health-topics/topics/stroke/prevention. Accessed [August 2, 2016].

Statistical data

Cardiovascular Disease Indicators

Indicators	Year	Comparison		GAMC[6] Service Area	GMHHC[7] Service Area	USC VHH[8] Service Area
		Level	Avg.			
Heart disease prevalence[1]	20014	LAC	5.7%	3.6%	3.3%	4.5%
Heart disease management[1]	2014	LAC	55.5%	57.7%	58.7%	55.3%
Rate of heart disease mortality per 10,000 persons[2]	2012	CA	15.5	19.1	18.3	19.6
Rate of hospitalizations resulting from heart failure per 100,000 persons[3]	2012	LAC	366.6	447.9	430.4	422.7
Hypertension prevalence[4]	2015	LAC	23.5%	23.1%	22.9%	23.7%

[1] Data source: California Health Interview Survey (CHIS)
Data year: 2014
Source geography: SPA
[2]Data source: California Department of Public Health (CDPH)
Data year: 2012
Source geography: ZIP Code
[3]Data source: Office of Statewide Health Planning and Development (OSHPD)
Data year: 2012
Source geography: ZIP Code
[4]Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA
LAC=Los Angeles County
CA=California

Stroke Prevalence (Age 65+), 2012

Indicator	Year	Comparison		GAMC[9] Service Area	GMHHC[10] Service Area	USC VHH[11] Service Area
		Level	Avg.			
Stroke Prevalence	20012	LAC	7.1%	6.5%	19.1%	6.7%

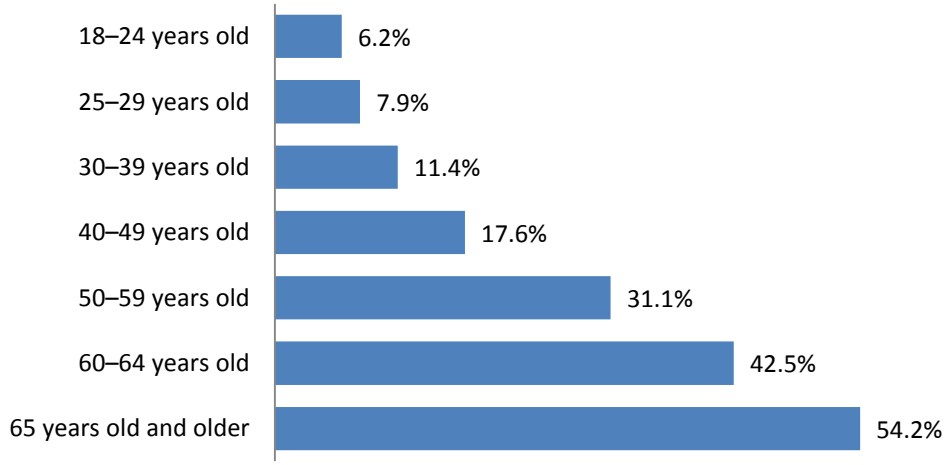
Source: California Health Interview Survey
Data Year: 2012
Source Geography: SPA

Geographic areas/subpopulations of greatest impact

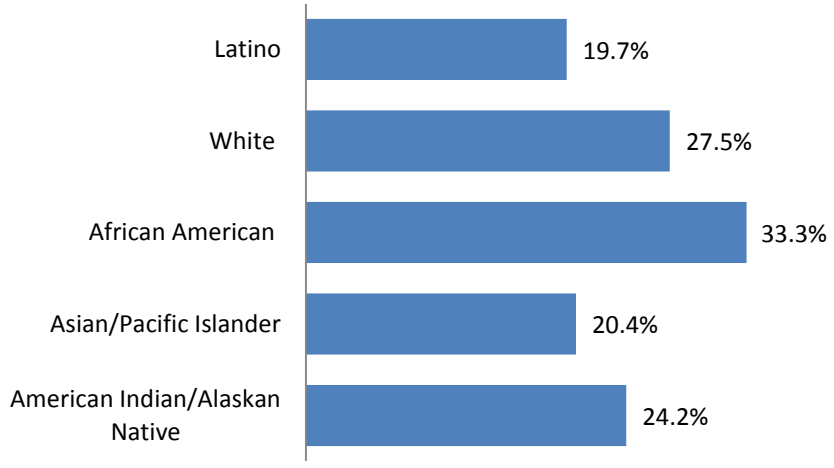
- Hospitalizations resulting from heart failure per 100,000 adults are highest when compared to California (339.0) in the ZIP codes shown below.

GAMC Service Area	GMHHC Service Area	USC VHH Service Area
91201—Glendale (510.3)	90027—Los Feliz (502.2)	91040—Sunland-Tujunga (540.8)
91204—Glendale (634.0)	91201—Glendale (510.3)	91201—Glendale (510.3)
91205—Glendale (678.1)	91204—Glendale (634.0)	91204—Glendale (634.0)
91206—Glendale (535.4)	91205—Glendale (678.1)	91205—Glendale (678.1)
91207—Glendale (567.8)	91206—Glendale (535.4)	91206—Glendale (535.4)
	91207—Glendale (567.8)	91207—Glendale (567.8)

Hypertension Prevalence by Age, 2015



Hypertension Prevalence by Ethnicity, 2015



Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

Associated drivers and risk factors

The leading risk factors for heart disease are high blood pressure, high cholesterol, smoking, diabetes, poor diet, physical inactivity, and overweight and obesity. Cardiovascular disease is closely linked with and can often lead to stroke.[12]

Community input

Stakeholders observed that overall, the service area population would benefit from additional outreach and education around the symptoms and underlying causes of cardiovascular disease. In clinical settings, providers observe that cardiovascular disease is linked to falls and shortness of breath, stroke and heart failure among the aging population in the service area.

[1] Glendale Adventist Medical Center

[2] Glendale Memorial Hospital and Health Center

[3] Verdugo Hills Hospital

[4] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at [http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=21]. Accessed [February 28, 2013].

[5] Ibid.

[6] Glendale Adventist Medical Center

[7] Glendale Memorial Hospital and Health Center

[8] Verdugo Hills Hospital

[9] Glendale Adventist Medical Center

[10] Glendale Memorial Hospital and Health Center

[11] Verdugo Hills Hospital

Communicable Diseases

About communicable diseases including sexually transmitted diseases (STDs)

Communicable diseases include hepatitis B, tuberculosis (TB), malaria, and HIV/AIDS, among others. Transmission is from person to person and even from animal to person, and spread is airborne or through contact with bodily fluids[106]. In 2013, the state of California was ranked 3rd among the 50 states in TB rates (5.7 per 100,000 persons). 77.89% of TB cases occurred in foreign-born persons.[107] Nationally, hepatitis B and hepatits C together account for more than 50% of new cases of chronic liver disease—a leading cause of death. In California between 2009 and 2013, reported rates of hepatitis B decreased by 43%.[108]

Sexually transmitted diseases (STDs) refer to more than 25 infectious organisms transmitted primarily through sexual activity. STD prevention is an essential primary care strategy for improving reproductive health. Despite the burdens, costs, and complications—and being preventable to a certain extent—STDs remain a significant public health problem in the United States, greatly under-recognized by the public, policymakers, and health care professionals. STDs have the potential to cause many harmful, often irreversible clinical complications, including having an impact on reproductive health, fetal and perinatal health problems and cancer, and the transmission of HIV.

Adolescents ages 15 to 24 account for nearly half of the 20 million new cases of STDs each year in the United States. Today, four in 10 sexually active teen girls in the United States have had an STD with the potential to cause infertility and even death. Regular screenings are critical, as STDs often have no obvious signs or physical symptoms. Also, certain racial and ethnic groups (mainly African-American, Hispanic/Latino, and American Indian/Alaska Native populations) have high rates of STDs compared with Whites. Race and ethnicity in the United States are correlated with other determinants of health status such as poverty, limited access to health care, fewer attempts to get medical treatment, and living in communities with high rates of STDs.[109]

[106] California Department of Public Health. Department of Communicable Disease Control. Research Highlights. Available at http://www.cdph.ca.gov/programs/dcdc/Pages/DCDCResearchHighlights.aspx. Accessed [September 1, 2016].

[107] Centers for Disease Control and Prevention (2015). California-2015 State Health Profile. Available at https://www.cdc.gov/nchhstp/stateprofiles/pdf/california_profile.pdf.

[108] Centers for Disease Control and Prevention (2015). California-2015 State Health Profile. Available at https://www.cdc.gov/nchhstp/stateprofiles/pdf/california_profile.pdf.

[109] Centers for Disease Control and Prevention. (2015). Sexually Transmitted Diseases. Washington, DC. Available at http://www.healthypeople.gov/2020/topics-objectives/topic/sexually-transmitted-diseases. Accessed [August 2, 2016].

Statistical data

Communicable Diseases

Indicators	Year	Comparison		GAMC[1] Service Area	GMHHC[2] Service Area	USC VHH[3] Service Area
		Level	Avg.			
More than one sexual partner in the past 12 months[1]	2012	LAC	13.2%	13.0%	12.8%	12.9%
Have ever been tested for HIV – Adults[2]	2014	LAC	72.9%	66.5%	70.8%	64.8%
Chlamydia Incidence per 100,000[3]	2013	LAC	512.9	435.4	474.9	376.5
Gonorrhea Incidence per 100,000[3]	2013	LAC	103.4	121.0	142.8	83.1
Hepatitis B Prevalence Rate per 100,000 Adults[4]	2013	LAC	0.6	0.3	0.5	0.5
Proportion of Tuberculosis Cases[5]	2013	LAC	30.5%	18.0%	18.0%	18.9%

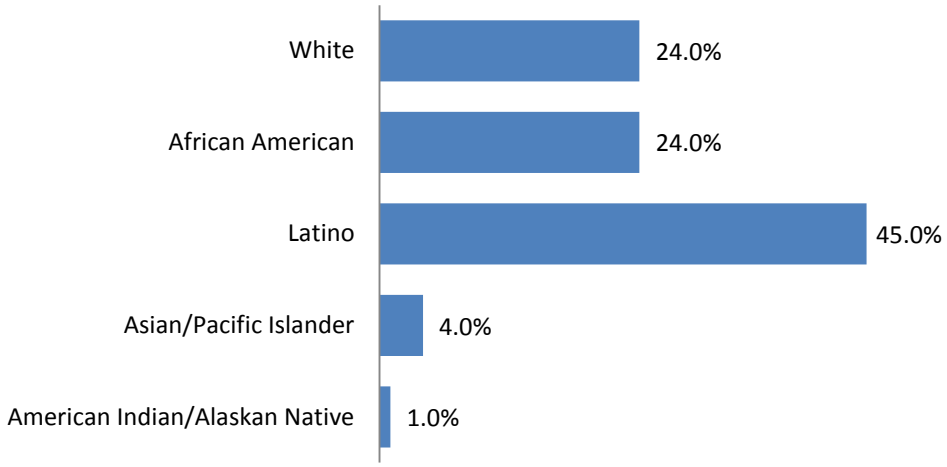
[1]Data source: Los Angeles County Health Survey
Data year: 2012
Source geography: SPA
[2]Data source: Office of Statewide Health Planning and Development (OSHPD)
Data year: 2014
Source geography: ZIP Code
[3]Data source: California Department of Public Health (CDPH)
Data year: 2013
Source geography: ZIP Code
[4]Data source: Los Angeles County Department of Public Health, Acute Communicable Disease Control Program, Annual Morbidity Report and Special Studies Report
Data year: 2013
Source geography: SPA
[5] Data source: Los Angeles County Department of Public Health, Acute Communicable Disease Control Program, Annual Morbidity Report and Special Studies Report
Data year: 2013

Geographic areas/subpopulations of greatest impact (disparities)

- The rate of HIV hospitalizations per 100,000 people were highest in each service area in the following ZIP codes.

GAMC Service Area	GMHHC Service Area	USC VHH Service Area
90041—Eagle Rock (18.2)	90026—Echo Park/Silverlake (33.9)	90041—Eagle Rock (18.2)
91201—Glendale (17.6)	90027—Los Feliz (55.4)	91201—Glendale (17.6)
91203—Glendale (15.1)	90029—East Hollywood (44.0)	91203—Glendale (15.1)
	90039--Atwater Village (35.1)	

HIV Diagnoses by Race/Ethnicity, 2013



Data source: 2014 Annual HIV/STD Surveillance Report
Data year: 2013
Source geography: County

Associated drivers and risk factors

Different ethnicities see different patterns of HIV infection. The largest proportion of HIV diagnoses reported in 2013 in Los Angeles County occurred among Latinos (45%), and almost half of Stage 3 diagnoses in 2013 occurred among Latinos. HIV diagnosis rates also increased among Asian males by nearly 20% from 2010-2012[110]. Other sexually transmitted diseases including chlamydia and gonorrhea can increase the spread of HIV through various biological mechanisms. [111]

The spread of STDs is directly affected by social, economic, and behavioral factors. Obstacles to STD prevention include access to and provision of care, willingness to seek care, and social norms regarding sex and sexuality. Among certain vulnerable populations, a historical experience with segregation and discrimination exacerbates the influence of these factors. Many studies document the association of substance abuse with STDs. The introduction of illicit substances into communities often can alter sexual behavior drastically in high-risk sexual networks, leading to the spread of STDs.[112]

Community input

Stakeholders stated that there are a growing number of community members with tuberculosis. Many tuberculosis patients do not seek treatment early on, accelerating the transmission of the disease to others.

[110] Los Angeles County Department of Public Health. (2014). 2014 Annual HIV/STD Surveillance Report. Available at: http://publichealth.lacounty.gov/dhsp/Reports/HIV-STDsurveillanceReport2014.pdf.

[111] Centers for Disease Control and Prevention (2015). California-2015 State Health Profile. Available at https://www.cdc.gov/nchhstp/stateprofiles/pdf/california_profile.pdf.

[112] Centers for Disease Control and Prevention. (2015). *Sexually Transmitted Diseases*. Washington, DC. Available at http://www.healthypeople.gov/2020/topics-objectives/topic/sexually-transmitted-diseases. Accessed [August 2, 2016].

Diabetes

About diabetes

Diabetes affects an estimated 23.6 million people and is the seventh leading cause of death in the United States. Diabetes lowers life expectancy by up to 15 years, increases the risk of heart disease by two to four times, and is the leading cause of kidney failure, lower-limb amputations, and adult-onset blindness.[4] A diabetes diagnosis can indicate an unhealthy lifestyle—a risk factor for further health issues—and is also linked to obesity.

Given the steady rise in the number of people with diabetes, and the earlier onset of Type 2 diabetes, there is growing concern about substantial increases in diabetes-related complications and their potential to impact and overwhelm the health care system. There is a clear need to take advantage of recent discoveries about the individual and societal benefits of improved diabetes management and prevention by bringing life-saving findings into wider practice, and complementing those strategies with efforts in primary prevention among those at risk for developing diabetes.[5]

In addition, evidence is emerging that diabetes is associated with other co-morbidities, including cognitive impairment, incontinence, fracture risk, and cancer risk and prognosis.[6]

Statistical data

Diabetes Indicators

Indicators	Year	Comparison		GAMC[7] Service Area	GMHHC[8] Service Area	USC VHH[9] Service Area
		Level	Avg.			
Percent of adults 18 and over ever diagnosed with diabetes (diabetes prevalence)[1]	2015	LAC	9.8%	9.7%	10.2%	9.0%
Rate of adult diabetes hospitalizations per 100,000 persons[2]	2012	CA	142.6	137.6	128.6	140.5
Rate of hospitalizations resulting from uncontrolled diabetes per 100,000 persons[2]	2012	CA	8.6	18.7	13.7	17.7
Rate of youth diabetes hospitalizations per 100,000 persons[2]	2012	CA	31.2	22.0	19.4	20.6
Rate of diabetes mortality per 10,000 persons[3]	2012	CA	2.1	2.1	2.1	2.3

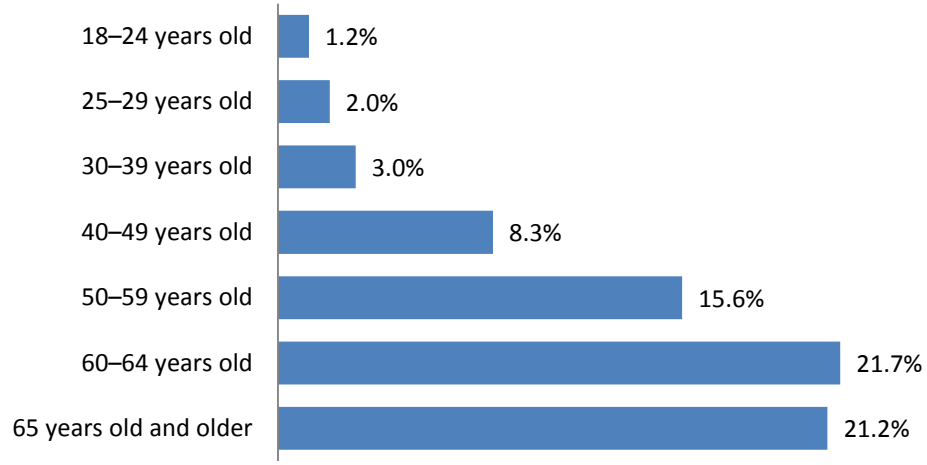
[1]Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA
[2]Data source: Office of Statewide Health Planning and Development (OSHPD)
Data year: 2012
Source geography: ZIP Code
[3]Data source: California Department of Public Health (CDPH)
Data year: 2012
Source geography: ZIP Code

Geographic areas/subpopulations of greatest impact

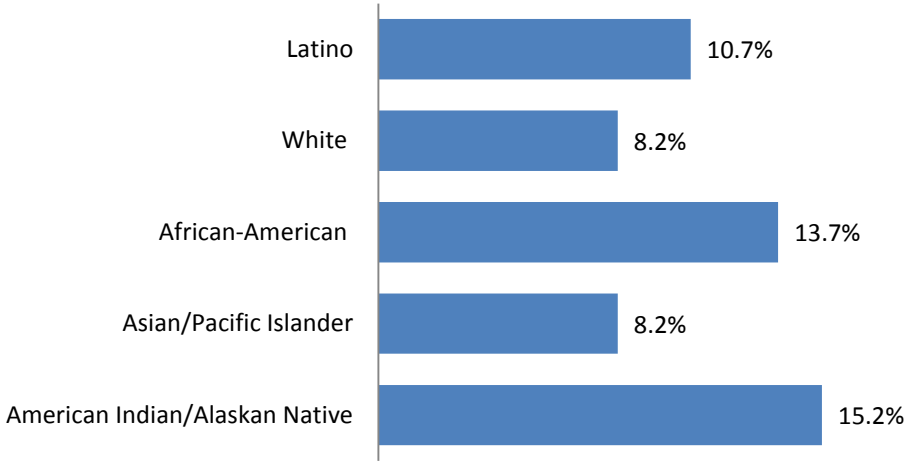
- Diabetes mortality rates per 10,000 persons were highest compared to the California average (2.1) in the ZIP codes shown below.

GAMC Service Area	GMHHC Service Area	USC VHH Service Area
91020—Montrose (5.8) 91201—Glendale (3.6)	90029—East Hollywood (3.2) 91201—Glendale (3.6)	91001—Altadena (3.3) 91020—Montrose (5.8) 91201—Glendale (3.6) 91342—Sylmar (3.4)

Diabetes Prevalence by Age, 2015



Diabetes Prevalence by Ethnicity, 2015



Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

Associated drivers

Factors associated with diabetes include being overweight, having high blood pressure, high cholesterol, high blood sugar (or glucose), physical inactivity, smoking, unhealthy eating, age, race, gender, and having a family history of diabetes.[10]

Community input

Stakeholders identified diabetes as one of the top three most important health problems in the Glendale community. They also added that outreach regarding available community resources and family-based intervention is important, especially among African American and Latino/Hispanic subpopulations. Care providers expressed that prevention and maintenance education, as well as expanded access to preventive and maintenance care, would support the communities most impacted by diabetes.

[1] Glendale Adventist Medical Center

[2] Glendale Memorial Hospital and Health Center

[3] Verdugo Hills Hospital

[4] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=32. Accessed [February 26, 2013].

[5] Ibid.

[6] Ibid.

[7] Glendale Adventist Medical Center

[8] Glendale Memorial Hospital and Health Center

[9] Verdugo Hills Hospital

Geriatric Support

About Geriatric Support

Older adults have special healthcare needs that can make their medical care more complicated. More than half of adults age 65 and older have 3 or more medical problems, such as heart disease, diabetes, arthritis, Alzheimer's disease, or high blood pressure.[113] Geriatric care requires a team approach to caring for older people and supporting their families and other caregivers, and often deals with medical, social, emotional, and other needs. Some of the health concerns common in older people include incontinence, falls, memory problems, and managing multiple chronic conditions and medications.

To maintain good health and reduce risk of disease and disability, it is important to engage in exercise, maintain good nutrition, receive regular health screenings, maintain vaccines, get enough sleep, and participate in activities of interest.[114]

Statistical data

Overview of Health Indicators for Adults over the age of 65

Indicators	Year	Comparison		GAMC Service Area	GMHHC Service Area	USC VHH Service Area
		Level	Avg.			
Pneumonia Vaccination[1]	2015	LAC	62.0%	65.3%	65.5%	64.3%
Influenza Vaccination[1]	2015	LAC	69.0%	67.8%	66.8%	70.0%
Hospitalized Due to Falls[2]	2015	LAC	28.0%	17.8%	16.5%	23.9%
Changed Daily Routines because of Fall in Past Year[2]	2015	LAC	33.5%	31.3%	31.7%	31.0%
Professional Recommended Physical Therapy/Exercise Due to Falls[2]	2015	LAC	83.9%	79.4%	76.9%	84.3%
Professional Reviewed Medication After Falls[2]	2015	LAC	40.2%	35.9%	34.3%	42.9%
Diagnosed with Osteoperosis[3]	2011	LAC	56.7%	58.0%	56.8%	56.7%

[1]Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County
[2]Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County
[3]Data source: Los Angeles County Health Survey
Data year: 2011
Source geography: County

[113] http://www.healthinaging.org/aging-and-health-a-to-z/topic:geriatrics/ Updated: September 2012. Accessed [August 2, 2016].
[114] https://www.nia.nih.gov/health/featured/healthy-aging-longevity. Accessed [August 2, 2016].

Community input

The proportion of the service area 45-64 and above 65 years is higher than the average for Los Angeles County. Stakeholders in the USC VHH observed that the aging population is often treated for acute incidents related to Alzheimer's and dementia, but lacks consistent ongoing care for these conditions. Similarly, providers observed that the aging population is susceptible to slips and falls at home resulting in injuries that bring them in to the healthcare system for acute treatment, but they are not always connected with ongoing care after such events. Aging individuals are often isolated and lack access to transportation to health care. Providers recommended targeted outreach and services to this population.

Homelessness and Poverty

About Homelessness and Poverty

Housing instability among poor families is the result of multiple overlapping factors ranging from number of income-earning adults in the home, education level of income-earning adults in the home, health of family members, domestic violence exposure, substance use patterns and access to social support and health care.[115] Families and individuals are much more likely to become unstably housed or homeless if they are shouldering a high housing cost burden, typically thought of housing costs that exceed 30% of monthly income. Within the service areas of GAMC, GMHHC and USC VHH, more than half of residents spend more than 30% of their monthly income on housing.

A homeless individual is defined as "an individual who lacks housing (without regard to whether the individual is a member of a family), including an individual whose primary residence during the night is a supervised public or private facility (e.g., shelters) that provides temporary living accommodations, and an individual who is a resident in transitional housing." More than 20 percent of the nation's homeless population is now living in California, an estimated 115,738 people. More than 43,000 of them live in Los Angeles County—the largest concentration in the United States [116][2].

Statistical data

Homelessness and Housing Indicators

Indicators	Year	Comparison		GAMC[1] Service Area	GMHHC[2] Service Area	USC VHH[3] Service Area
		Level	Avg.			
Percent of homeless who are classified as homeless individuals	2016	LAC	85.7%	21.1%	22.8%	16.7%
Percent of homeless who are classified as homeless families	2016	LAC	14.0%	19.3%	20.2%	16.5%
Percent of homeless who are classified as unaccompanied minors	2016	LAC	0.002%	22.4%	24.8%	16.0%
Percent of homeless who are mentally ill	2016	LAC	29.7%	23.4%	25.0%	18.9%
Percent of homeless who are diagnosed with substance abuse issues	2016	LAC	22.7%	24.2%	25.2%	15.5%
Percent of homeless with HIV	2016	LAC	1.4%	33.1%	36.2%	24.8%
Percent of homeless who are physically disabled	2016	LAC	16.9%	23.4%	24.6%	19.6%

Source: Los Angeles Homeless Services Authority,
Greater Los Angeles Homeless County Report, 2016, SPA

[115] A Secondary Analysis by ICPH utilizing data from the Fragile Families and Child Well-being Study.Institute for Children, Poverty & Homelessness. http://www.icphusa.org/index.asp?page=16&report=112&pg=110. Accessed: [September 2, 2016].
[2] County of Los Angeles. Office of Countywide Communications. Los Angeles, CA. Available at: http://priorities.lacounty.gov/homeless/. Accessed: [September 2, 2016].

Poverty Indicators

Indicators	Year	Comparison		GAMC[4] Service Area	GMHHC[5] Service Area	USC VHH[6] Service Area
		Level	Avg.			
Families Below Poverty[1] [117]	2015	LAC	14.9%	12.0%	13.6%	11.0%
Families Below Poverty with Children[1]	2015	LAC	11.7%	8.4%	9.6%	8.1%
Children Eligible for Free or Reduced-Price Lunch[2]	2015	LAC	66.6%	N/A	N/A	N/A
Percentage of residents whose monthly housing cost exceeds 30% of income		LAC	56.0%	57.2%	57.0%	55.6%

[1] Data source: Nielsen Claritas
Data year: 2015
Source geography: ZIP Code
[2]Data source: California Department of Education (CDE)
Data year: 2015
Source geography: County
LAC=Los Angeles County
CA=California

Geographic areas/subpopulations of greatest impact

- Average estimated household income in Los Angeles County is $78,309. The following geographies in each service area have average estimated incomes well below the average for Los Angeles County.

GAMC Service Area	GMHHC Service Area	USC VHH Service Area
90042—Highland Park ($68,120)	90026—Echo Park ($63,307)	90042—Highland Park ($68,120)
90065—Glassell Park ($69,684)	90029—East Hollywood ($46,135)	91201—Glendale ($65,734)
91201—Glendale ($65,734)	90027—Los Feliz ($69,942)	91203—Glendale ($61,605)
91203—Glendale ($61,605)	90042—Highland Park ($68,120)	91204—Glendale ($53,876)
91204—Glendale ($53,876)	90065—Glassell Park ($69,684)	91205—Glendale ($50,806)
91205—Glendale ($50,806)	91201—Glendale ($65,734)	
	91203—Glendale ($61,605)	
	91204—Glendale ($53,876)	
	91205—Glendale ($50,806)	

Associated drivers and risk factors

In Los Angeles and Orange Counties, where 32.8% of renters spend more than half their income on housing[118], homelessness is linked to lack of affordable housing/eviction and loss of a job. Although Los Angeles is home to the largest health and social services system available to homeless people, given the size of the homeless population it faces significant challenges to provide cost effective integrated care.[119]

[117] United States Census Bureau. How the Census Bureau Measures Poverty. Available at http://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html. Accessed [August 31, 2016]
[118] Harvard University's Joint Center for Housing Studies, last accessed August 30, 2016: http://harvard-cga.maps.arcgis.com/apps/StorytellingTextLegend/index.html?appid=18d215ddb20946a4a16ae43586bf0b52
[119] Guerrero, E., Henwood, B. and Wenzel, S. (2014). Service Integration to Reduce Homelessness in Los Angeles County: Multiple Stakeholder Perspectives. *Human Service Organizations* 38(1):44-54.

Community input

Stakeholders associated homelessness in the service area with lack of affordable housing and poverty. They have observed that the only consistent source of care for the homeless population is emergency (911) service, which puts a burden on emergency services. Because the homeless population suffers disproportionately with mental health concerns, the reliance on emergency services fails to meet this long term health care need. The high cost of living puts an undue burden on low-income families that spend a large proportion of their incomes on rent (vs. greater investment in healthy food or recreation). Stakeholders have also noted an increase in the homeless population and a lack of shelters. Homeless families face unique challenges in accessing education and health care, and there are insufficient social service providers in place to connect these families with homeless services. In focus groups, stakeholders noted as well that veterans are an ever increasing proportion of the homeless population.

Mental Health

About mental health

Mental illness is a common cause of disability. Untreated disorders may leave individuals at risk for substance abuse, self-destructive behavior, and suicide. Additionally, mental health disorders can have a serious impact on physical health and are associated with the prevalence, progression, and outcome of chronic diseases.[7] Suicide is considered a major preventable public health problem. In 2010, suicide was the tenth leading cause of death among Americans of all ages, and the second leading cause of death among people between the ages of 25 and 34.[8] An estimated 11 attempted suicides occur per every suicide death.

Research shows that more than 90% of those who die by suicide suffer from depression or other mental disorders, or a substance-abuse disorder (often in combination with other mental disorders).[9] Among adults, mental disorders are common, with approximately one-quarter of adults being diagnosable for one or more disorders.[10] Mental disorders are associated not only with suicide, but also with chronic diseases, a family history of mental illness, age, substance abuse, and life-event stresses.[11]

Interventions to prevent suicide include therapy, medication, and programs that focus on both suicide risk and mental or substance-abuse disorders. Another intervention is improving primary care providers' ability to recognize and treat suicide risk factors, given the research indicating that older adults and women who die by suicide are likely to have seen a primary care provider in the year before their death.[12]

Statistical data

Mental Health Indicators

Indicators	Year	Comparison		GAMC[13] Service Area	GMHHC[14] Service Area	USC VHH[15] Service Area
		Level	Avg.			
Unhealthy Days Resulting from Poor Mental Health Reported by Adults[1]	2015	LAC	2.3	2.6	2.6	2.5
Adults with Serious Psychological Distress in the Last Year[2]	2014	LAC	9.6%	10.1%	9.9%	9.9%
Adequate Social and Emotional Support[3]	2015	LAC	64.0%	65.3%	64.0%	65.3%
Anxiety Prevalence[4]	2011	LAC	6.4%	7.3%	7.3%	6.9%
Depression Prevalence[5]	2015	LAC	8.6%	9.2%	9.6%	8.3%
Alcohol- and Drug-Induced Mental Illness Rate per 100,000 Adults[6]	2012	CA	102.5	145.2	139.4	162.6
Needed Help for Mental, Emotional, or Alcohol/Drug Issues[7]	2011	LAC	18.0%	17.5%	18.6%	15.7%
Mental Health Hospitalization Rate per 100,000 persons, Adults[8]	2012	CA	540.9	774.5	629.6	846.5
Mental Health Hospitalization Rate per 100,000 persons, Youth[8]	2012	CA	294.8	267.9	257.1	396.2
Suicide Rate per 10,000 Persons[9]	2012	CA	1.0	1.0	0.8	0.9

[1]Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA
[2]Data source: California Health Interview Survey (CHIS)
Data year: 2014
[3]Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA
[4, 5]Data source: Los Angeles County Health Survey
Data year: 2011, 2015
Source geography: SPA
[6]Data source: Office of Statewide Health Planning and Development (OSHPD)
Data year: 2012
[7]Data source: Los Angeles County Health Survey
Data year: 2011
[8]Data source:Office of Statewide Health Planning and Development (OSHPD)
Data year: 2012

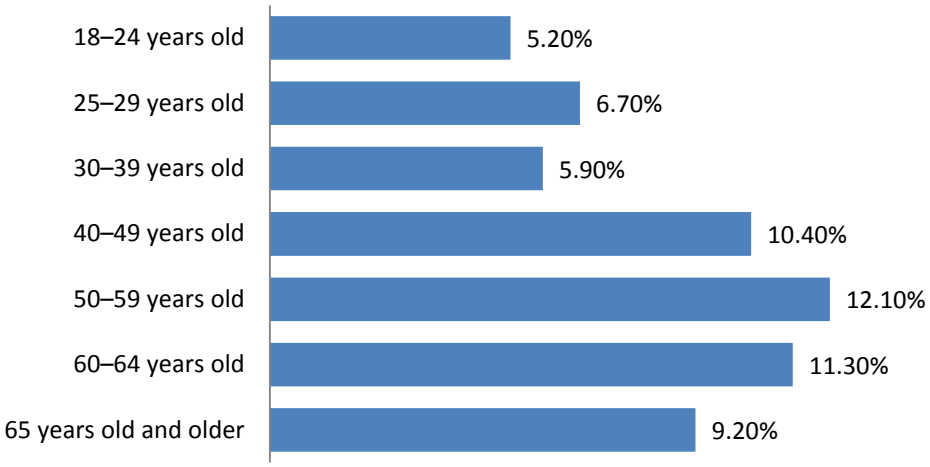
Geographic areas of greatest impact (disparities)

- The ZIP codes most impacted by mental health hospitalizations per 100,000 persons are listed below for each service area.

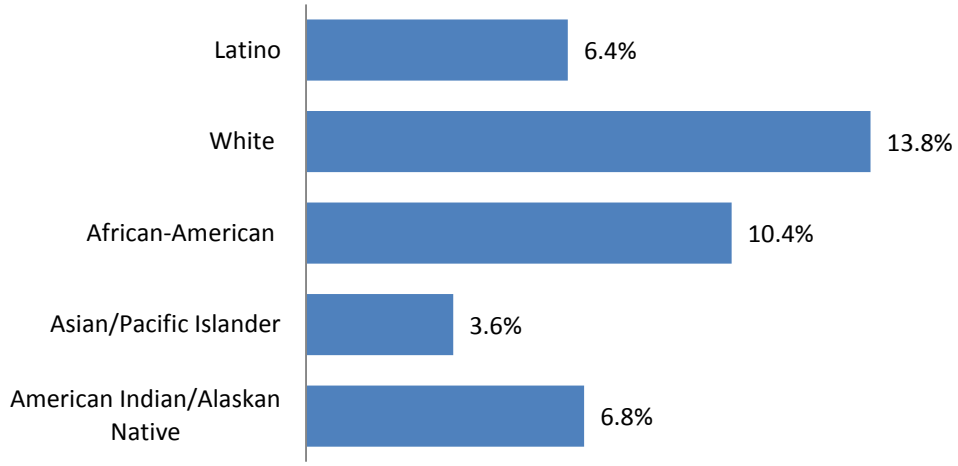
GAMC Service Area	GMHHC Service Area	USC VHH Service Area
91020—Montrose (2,209.0) 91205—Glendale (1,138.1) 90041—Eagle Rock (912.6)	90041—Eagle Rock (912.6) 91042—Tujunga (774.2) 91205—Glendale (1,138.1)	90041—Eagle Rock (912.6) 91001—Altadena (845.3) 91020—Montrose (2,209.0) 91040—Sunland (1,130.8) 91042—Tujunga (774.2) 91103—Pasadena (1,742.7) 91105—Pasadena (1,299.8) 91205—Glendale (1,138.1)

Data source[1]: Office of Statewide Health Planning and Development (OSHPD)

Depression Prevalence by Age, 2015



Depression Prevalence by Ethnicity



Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

Associated drivers and risk factors

Mental health is associated with many other health factors, including poverty, heavy alcohol consumption, and unemployment. Chronic diseases such as cardiovascular disease, diabetes, and obesity are also associated with mental health disorders such as depression and suicide.[16]

Community input

Stakeholders identified poor mental health as one of the top health concerns in the Glendale community, adding that it affects everyone, regardless of age. There is a serious need for mental health to be integrated into primary care for a more cohesive service delivery model. Stakeholders emphasized a need for the prevention of mental health episodes like stress, PTSD, and other issues "to avoid

tragedies." More specifically, stress is on the rise in the Glendale community because of job-related demands and neighborhood safety. Also, people often avoid seeking treatment because of the stigma attached to mental health, therefore providers need to find a way to share information in a way that mitigates the stigma and is culturally sensitive.

Obesity/Overweight

About obesity/overweight

Obesity, a condition in which a person has an abnormally high and unhealthy proportion of body fat, has risen to epidemic levels in the United States; 68% of adults age 20 years and older are overweight or obese.[17]

Excess weight is a significant national problem and indicates an unhealthy lifestyle that influences further health issues. Obesity reduces life expectancy and causes devastating and costly health problems, increasing the risk of coronary heart disease, stroke, high blood pressure, diabetes, and a number of other chronic diseases.

Findings suggest that obesity also increases the risks for cancers of the esophagus, breast (postmenopausal), endometrium, colon and rectum, kidney, pancreas, thyroid, gallbladder, and possibly other cancer types.[18]

Obesity is associated with factors including poverty, inadequate fruit/vegetable consumption, breastfeeding, and lack of access to grocery stores, parks, and open space.

Statistical data

Obesity/Overweight Indicators

Indicators	Year	Comparison		GAMC[19] Service Area	GMHHC[20] Service Area	USC VHH[21] Service Area
		Level	Avg.			
Percent of adults who are overweight[1]	2015	LAC	35.9%	35.9%	35.5%	36.2%
Percent of adults who are obese[1]	2015	LAC	23.5%	20.8%	20.8%	20.9%
Percent of children who are overweight for age[2]	2012	LAC	13.3%	11.5%	12.7%	10.6%
Percent of teens who are overweight and obese[2]	2012	LAC	54.8%	51.8%	52.0%	15.9%

[1]Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA
[2]Data source: California Health Interview Survey (Accessed at www.healthycity.org)
Data year: 2012
Source geography: SPA

Geographic areas/subpopulations of greatest impact

- More people are overweight and significantly over the Los Angeles County average (29.7%)in the ZIP codes shown below.

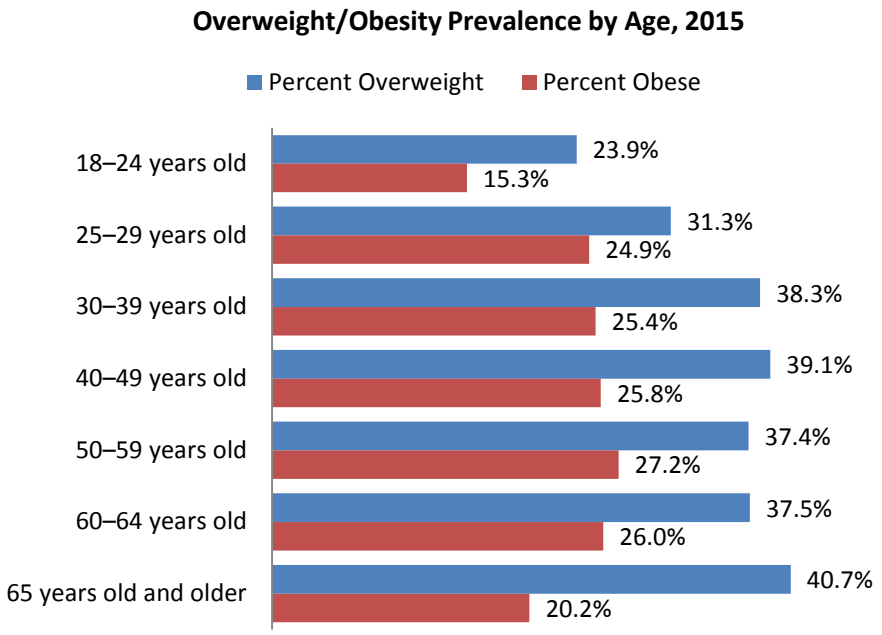
GAMC Service Area	GMHHC Service Area	USC VHH Service Area
91208—Glendale (34.1%) 91020—Montrose (33.5%)	91042—Tujunga (35.7%) 91208—Glendale (34.1%) 91214—La Crescenta (33.0%)	91020—Montrose (33.5%) 91040—Sunland-Tujunga (35.4%) 91042—Tujunga (35.7%) 91208—Glendale (34.1%) 91214—La Crescenta-Montrose (33.0%) 91342—Sylmar (36.8%)

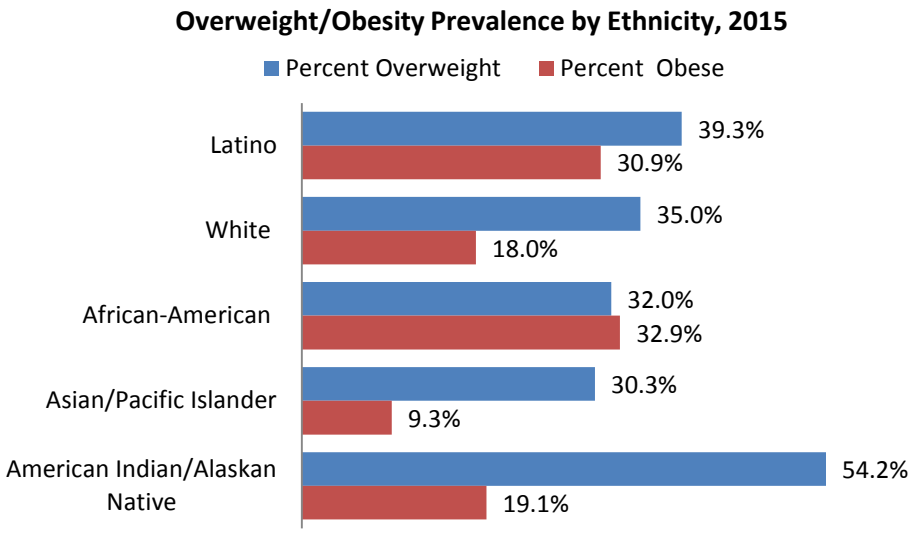
Data source: Healthy Cities
Data year: 2009
Source geography: ZIP Code

- More people are obese and over the Los Angeles County average (21.2%) in the ZIP codes shown below.

GAMC Service Area	GMHHC Service Area	USC VHH Service Area
90065—Glassell Park (22.3%) 90042—Highland Park (22.3%)	90029—East Hollywood (21.5%) 90042—Highland Park (22.3%) 90065—Glassell Park (22.3%)	90042—Highland Park (22.3%) 91001—Altadena (21.8%) 91103—Pasadena (24.4%)

Data source: Healthy Cities
Data year: 2009
Source geography: ZIP Code





Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

Associated drivers and risk factors

Obesity is associated with factors such as poverty, inadequate consumption of fruits and vegetables, physical inactivity, and lack of access to grocery stores, parks, and open space. Obesity increases the risk of coronary heart disease, stroke, high blood pressure, diabetes, and a number of other chronic diseases. The condition also increases the risks of cancers of the esophagus, breast (postmenopausal), endometrium, colon and rectum, kidney, pancreas, thyroid, gallbladder, and possibly other cancer types.[120]

Community input

Stakeholders highlighted the economic challenges associated with accessing healthy food. A focus group participant explained, “The rent is extremely high and there is not a lot of affordable housing, so you have a lot of families that spend more money on trying to pay rent and are not able to pay for food.” In the focus groups, stakeholders focused on the impact of obesity on youth in the community, pointing out that healthier food options should be served in schools.

[120] National Cancer Institute. Obesity and Cancer Risk. Available at http://www.cancer.gov/cancertopics/factsheet/Risk/obesity. Accessed [August 2, 2016].

Substance Abuse

About alcohol and substance abuse

Substance abuse (defined as use of alcohol, tobacco, prescription or illicit substances) has a major impact on individuals, families and communities. Substance abuse is considered both a driver of poor health outcomes and an outcome in and of itself. Key determinants—or drivers—of alcohol and substance abuse and tobacco use outcomes include biological, social, economic and environmental factors. Drivers of individual and population substance use and abuse outcomes include gender, race and ethnicity, age, income level, educational attainment and sexual orientation. Substance abuse is also strongly influenced by interpersonal, household, and community dynamics including access to alcohol and drugs. Among adolescents, family, social networks, and peer pressure are key influencers of substance use.[121] Understanding the relationship between key substance abuse drivers in the USC VHH service area and substance use and abuse patterns is important in improving substance abuse outcomes indicators.

Substance use and abuse are key determinants of a number of downstream additional poor health outcomes. The effects of substance abuse contribute significantly to costly social, physical, mental, and public health problems, including teenage pregnancy, HIV/AIDS, STDs, domestic violence, child abuse, motor vehicle accidents (unintentional injuries), physical fights, crime, homicide, and suicide.[122] Heavy alcohol consumption is an important determinant of future health needs, including cirrhosis, cancers, and untreated mental and behavioral health needs.

Tobacco use is known to cause cancer, heart disease, lung disease (such as emphysema, bronchitis, and chronic airway obstruction), premature birth, low birth weight, stillbirth, and infant death.[123]

[121] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/lhi/substanceabuse.aspx?tab=determinants. Accessed [August 1, 2016].

[122] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at https://www.healthypeople.gov/2020/topics-objectives/topic/substance-abuse. Accessed [August 2, 2016].

[123] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=41. Accessed [August 1, 2016].

Statistical data

Alcohol and Substance Abuse Indicators

Indicators	Year	Comparison		GAMC[22] Service Area	GMHHC[23] Service Area	USC VHH[24] Service Area
		Level	Avg.			
Percent of adults 18 and older who reported drinking at least once in the past month[1]	2015	LAC	51.9%	51.7%	50.5%	53.0%
Percent of adults 18 and older who engaged in binge drinking in the past month[1]	2015	LAC	15.8%	15.7%	16.2%	15.1%
Number of alcohol outlets per 1,000 persons[2]	2016	LAC	0.6	1.4	1.5	0.5
Adults Who Reported Misusing Any Form of Prescription Drugs in the Past Year[3]	2015	LAC	5.5%	5.2%	5.7%	4.6%
Adults Who Reported Using Any Form of Marijuana in the Past Year[3]	2015	LAC	11.6%	12.8%	13.4%	11.3%
Teens Who Have Ever Tried Marijuana, Cocaine, Sniffing Glue, Other Drugs[4]	2012	LAC	14.7%	13.2%	14.5%	11.2%
Percent of adults 18 and older who reported they needed or wanted treatment for an alcohol or drug issue (excluding tobacco) in the past five years[5]	2011	LAC	2.5%	3.2%	3.2%	3.0%
Percentage of the service area population currently smoking[6]	2015	LAC	13.3%	13.4%	13.6%	11.6%

Data source[1]: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA
Data source[2]: California Department of Alcoholic Beverage Control (ABC)
Data year: 2016
Source geography: ZIP Code
Data source[3]: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA
Data source[4]: California Health Interview Survey
Data Year: 2012
Source geography: SPA
Data source[5]: Los Angeles County Health Survey
Data year: 2011
Source geography: SPA
Data source[6]: Los Angeles County Health Survey
Data year: 2015
Source geography: SPA

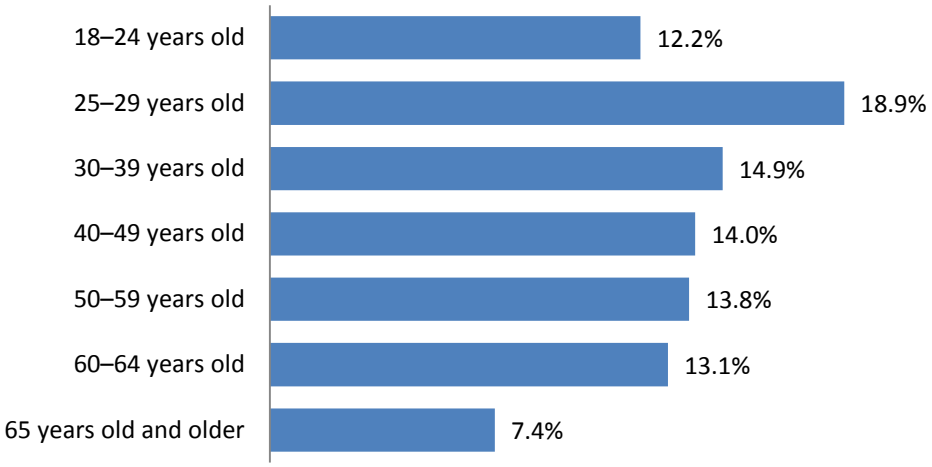
Geographic areas/subpopulations of greatest impact

- Rates of alcohol/drug-induced mental illness per 100,000 adults were highest in the ZIP codes shown below.

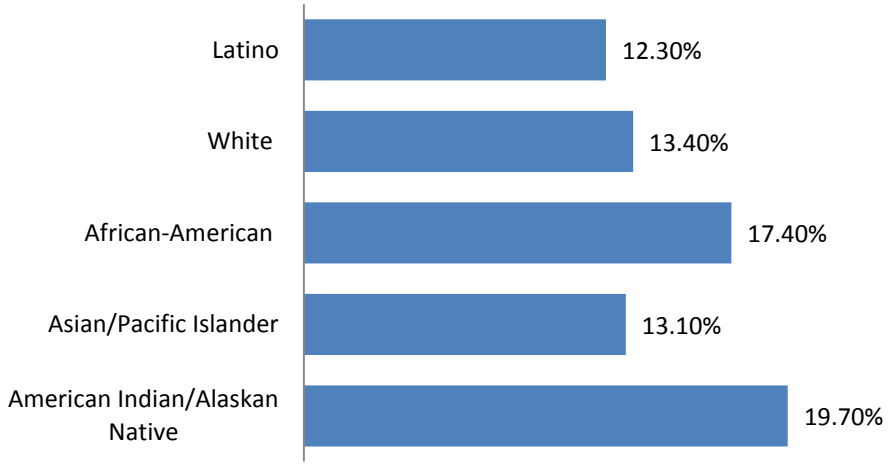
GAMC Service Area	GMHHC Service Area	USC VHH Service Area
91204—Glendale (181.1) 91206—Glendale (179.4)	91204—Glendale (181.1) 91206—Glendale (179.4) 91214—La Crescenta (183.5)	91011—La Canada/Flintridge (192.4) 91040—Sunland-Tujunga (191.4) 91103—Pasadena (227.2) 91105—Pasadena (314.3) 91206—Glendale (179.4) 91214—La Crescenta-Montrose (183.5)

Data source: Office of Statewide Health Planning and Development (OSHPD)
Data year: 2012
Source geography: ZIP Code

Tobacco Use by Age, 2015



Tobacco Use by Ethnicity, 2015



Data source: Los Angeles County Health Survey
Data year: 2015
Source geography: County

Associated drivers and risk factors

Several biological, social, environmental, psychological, and genetic factors are associated with alcohol and substance abuse. These factors may include gender, race and ethnicity, age, income level, educational attainment, and sexual orientation. Substance abuse is also strongly influenced by interpersonal, household, and community factors. Family, social networks, and peer pressure are key influencers of substance abuse among adolescents.[25] As mentioned above, teenage pregnancy, HIV/AIDS, STDs, domestic violence, child abuse, motor vehicle accidents (unintentional injuries), physical fights, crime, homicide (intentional injuries), and suicide can be attributed to alcohol and substance abuse.[26]

Community input

Stakeholders identified areas of heavy smoking throughout the central and southern parts of Glendale and among members of the Armenian population. Stakeholders observed that the teen population was drawn to both vaping and hookah smoking in addition to smoking cigarettes. Additionally, stakeholders discussed concerns about the abuse of over-the-counter drugs and prescription drugs, as well as alcoholism.

[1] Glendale Adventist Medical Center

[2] Glendale Memorial Hospital and Health Center

[3] Verdugo Hills Hospital

[4] Glendale Adventist Medical Center

[5] Glendale Memorial Hospital and Health Center

[6] Verdugo Hills Hospital

[7] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=28. Accessed [April 30, 2013].

[8] Centers for Disease Control and Prevention. *10 Leading Causes of Death by Age Group, United States – 2010*. Available at http://www.cdc.gov/injury/wisqars/pdf/10LCID_All_Deaths_By_Age_Group_2010-a.pdf. Accessed [March 12, 2013].

[9] National Institute of Mental Health. *Suicide in the U.S.: Statistics and Prevention*. Available at http://www.nimh.nih.gov/health/publications/suicide-in-the-us-statistics-and-prevention/index.shtml. Accessed [March 12, 2013].

[10] National Institute of Mental Health. *Any Disorder Among Adults.* Available at http://www.nimh.nih.gov/statistics/1ANYDIS_ADULT.shtml. Accessed [March 12, 2013].

[11] Public Health Agency of Canada. *Mental Illness*. Available at http://www.phac-aspc.gc.ca/cd-mc/mi-mm/index-eng.php. Accessed [March 12, 2013].

[12] National Institute of Mental Health. *Suicide in the U.S.: Statistics and Prevention*. Available at http://www.nimh.nih.gov/health/publications/suicide-in-the-us-statistics-and-prevention/index.shtml. Accessed [March 12, 2013].

[13] Glendale Adventist Medical Center

[14] Glendale Memorial Hospital and Health Center

[15] Verdugo Hills Hospital

[16] Centers for Disease Control and Prevention. *Mental Health and Chronic Diseases*. Available at http://www.cdc.gov/nationalhealthyworksite/docs/Issue-Brief-No-2-Mental-Health-and-Chronic-Disease.pdf. Accessed [May 1, 2013].

[17] National Cancer Institute. *Obesity and Cancer Risk*. Available at http://www.cancer.gov/cancertopics/factsheet/Risk/obesity. Accessed [March 10, 2013].

[18] Ibid.

[19] Glendale Adventist Medical Center

[20] Glendale Memorial Hospital and Health Center

[21] Verdugo Hills Hospital

[22] Glendale Adventist Medical Center

[23] Glendale Memorial Hospital and Health Center

[24] Verdugo Hills Hospital

[25] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/lhi/substanceabuse.aspx?tab=determinants. Accessed [February 27, 2013].

[26] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=32. Accessed [February 26, 2013].

Violence/Injury/Safety

About Violence, Injury and Safety

Injuries can result from many unintentional or intentional events including motor vehicle accidents, falls, job-related accidents, gunshot and blast wounds and sports injuries. Common diagnoses include brain injury, spinal cord injury, amputation, anoxia, and muscular-skeletal injury. Injuries affect everyone, regardless of age, gender, ethnicity, or economic status. Although injuries are often unavoidable, there are steps that can be taken to lessen the consequences of injuries, including wearing seat belts, violence prevention education, ignition interlock and in-car breathalyzers to prevent drunk driving, pro-active job site safety precautions and regular physical activity.

Statistical data

Teens Perception of Neighborhood and School Safety, 2012, 2014

Indicators	Year	Comparison		GAMC[1] Service Area	GMHHC[2] Service Area	USC VHH[3] Service Area
		Level	Avg.			
Received threats of violence or physical harm from peers in past year[1]	2012	LAC	14.7%	14.2%	16.1%%	10.2%
Feared of being attacked at school in the past year[1]	2012	LAC	17.1%	20.3%	19.9%	20.0%
Felt unsafe in nearby park or playground during the day[2]	2014	LAC	11.7%	3.0%	4.0%*	N/A

[1]California Health interview Survey, 2012, SPA
[2]California Health interview Survey, 2014, SPA
*Data for SPA 2 unavailable—Not included in GMHHC estimated calculation

Geographic areas/subpopulations of greatest impact

The ZIP codes with the highest rates of unintentional injuries leading to death, as a percentage of all deaths, compared to the Los Angeles County average (3.5%), are listed below:

GAMC Service Area	GMHHC Service Area	VHH Service Area
90041—Eagle Rock (4.4%) 91203—Glendale (8.1%)	90041—Eagle Rock (4.4%) 91203—Glendale (8.1%)	90041—Eagle Rock (4.4%) 91203—Glendale (8.1%)

Community input

In focus groups, stakeholders expressed concerns about safety largely linked to transportation and pedestrian access. Distracted drivers causing pedestrian accidents as well as dangerous conditions for bicyclists (tied to a shortage of bike lanes) are principal among the concerns for physical safety, particularly in the more congested areas of South Glendale. Stakeholders also discussed the need for additional services for victims of domestic violence and sexual assault, as budget cuts often impact these services.

Appendix F—Evaluation of Impact

In 2013, USC Verdugo Hills Hospital conducted a Community Health Needs Assessment in partnership with Glendale Adventist Medical Center and Glendale Memorial Hospital and Health Center. The complete Community Health Needs Assessment and the sources of data can be accessed at http://uscvhh.org/about-vhh/community-benefit.

Health Needs

USC Verdugo Hills Hospital developed and approved an Implementation Strategy to address significant health needs identified in the 2013 Community Health Needs Assessment. Based on the results of the primary and secondary data collection, the hospital identified four priority health needs to address in the Implementation Strategy:

- Obesity/overweight
- Diabetes
- Cardiovascular disease
- Mental health

The hospital addressed these needs through a commitment of community benefit programs and resources.

Health Education Seminars

Throughout the three-year period, the hospital provided a number of health education sessions available to the public. Topics included: anxiety, depression, stress reduction, tips for a healthy heart, stroke prevention, senior wellness, fall prevention, sports injuries, maternal and infant health, breast cancer, nutrition, hip and knee replacement, glaucoma awareness, spine care, and cardiovascular disease risk factors. Health education reached over 1,950 persons.

Stroke Prevention

In an effort to raise stroke awareness, the Roxanna Todd Hodges Stroke Foundation and USC Verdugo Hills Hospital offered education events on stroke prevention. The seminars included educational information on stroke prevention and blood pressure guidelines. More than 165 individuals participated in the education events.

Community CPR

As a sponsor of the Glendale Sunrise Rotary Club's "Not Even for a Minute" safety campaign, USC VHH - an American Heart Association training center - offered free CPR, infant CPR, and CPR renewal training classes to the community. More than 500 individuals attended the classes offered hands-on instruction.

Support Groups

Nearly 25 support group programs encompassing a variety of health-related issues, including chronic disease and mental health, met regularly at the hospital.

Glendale Health Festival

USC Verdugo Hills Hospital participated in the 5th Annual Glendale Health Festival Building a Healthier Community Together. This free health fair was a community service event held by the Armenian American Medical Society. This event was held in conjunction with the Glendale Unified School District and provided health information on diabetes, cardiovascular disease and overweight/obesity. The event served 2,000 individuals.

USC Verdugo Hills Hospital Health and Wellness Fair

Over the past three years, USC Verdugo Hills Hospital has held community-wide health and wellness fairs. Community members received free health check-ups. Cholesterol and glucose screenings were administered by USC School of Pharmacy students. Balance testing and blood pressure screenings were provided by USC-VHH clinical staff. Car seat safety, hands-on CPR training and infection control methods were among the educational activities offered at the health event. More than 2,000 community members were served.

Breastfeeding Support Group

Breastfeeding in early life is proven to reduce overweight and obesity among children as they age. As part of the hospital's Family Education Program, this support group offered breast-feeding advice and support to new mothers. The support group was facilitated by a lactation specialist. Open free to the public, babies in arms were welcomed. A total of 1,099 individuals were served.

Bariatric Support Meeting

USC VHH offered free monthly support meetings to help community members learn about ways they can improve their quality of life through reaching their weight-loss goal, and decrease health risk factors that lead to obesity. The support group included a live chat for off-site participants. This program has served over 145 individuals.

American Red Cross Blood Drives

The hospital coordinated various community blood drives by recruiting donors and scheduling appointments in collaboration with the American Red Cross. By supporting the blood drives, participants helped residents in the community when there is a need for blood. A total of 335 units were collected, which helped the lives of over 578 individuals.

Jet Propulsion Laboratory (JPL) Safety Fair

USC Verdugo Hills Hospital participated in JPL's annual health/safety event and distributed educational information. Free blood pressure and balance screenings were offered. More than 600 individuals were served.

Glendale – Crescenta Valley Chapter of the American Red Cross

USC Verdugo Hills Hospital donated six automated external defibrillator (AED) units to the Glendale-Crescenta Valley Chapter of the American Red Cross. The AEDs are used at the American Red Cross site for community education.